

Energy Queensland

Business Case: Townsville Training Facility



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Executive Summary

EQL is proposing to refurbish the existing Townsville Training Facility located at 4 - 28 Hartley Street Garbutt in order to ensure that it is a fit for purpose facility capable of supporting the Training Team in effectively training field staff in how to safely operate and maintain the electricity network. The project will consolidate existing training rooms on-site, improve asset optimisation and utilisation and allow for future growth and innovations in Training Delivery. The proposed project is forecast to cost \$6.88 million in capital investment during the 2020-2025 regulatory period.

The existing facility is over 30 years old with the original buildings in poor condition, requiring significant capital investment. There are several non-compliance issues with the site and the main buildings need full roof and ceiling replacements with drainage upgrades. The training rooms themselves are no longer fit for purpose for training the modern EQL workforce and the rooms need to be consolidated and upgraded. The amenities are not only not compliant but were also not designed for the modern diverse workforce and need to be upgraded accordingly. The HV Switching training yard is considered fit-for-purpose and is a state of the art training facility. The electrical equipment utilised for training purposes exceeds industry standards.

In order to address the site issues three options were considered and assessed. Scenario 1, refurbish existing site was identified to being the preferred option as it will address problems associated with the site including dilapidation, not fit-for-purpose classrooms, improve utilisation and remove site safety and environmental hazards where possible. Scenario 1 is preferred over Scenario 2, rebuild at new site because it involves less risk associated with sourcing a suitable and affordable location with a reduced amount of capital investment.

Key benefits to our customers:

- Increased community and staff safety through the rectification of non-compliances associated with aged facilities that do not meet legislative and regulatory requirements
- Reduction in ongoing operational and maintenance expenditure associated with the maintenance of aged facilities which puts downward pressure on customer costs
- Reduction in lease and rental costs associated with hired demountable buildings onsite
- Flexibility to meet the changing needs of customers and improve the ability to accommodate flexible training delivery methods

1. Objective

EQL aims to support Queensland communities and customers by ensuring EQL has fit-for-purpose facilities in the right locations to provide critical training to maintain a skilled and competent workforce that constructs and maintains the Network in a safe and reliable manner. This strategy aims to support the Technical Training & Apprentices (TT&A) group to assess workforce competencies and to develop and deliver training programs to ensure a knowledgeable workforce that will deliver secure, affordable and sustainable energy solutions.

The existing Townsville facility provides specialist training to the workforce that maintains the network in a safe and efficient manner when responding to disaster events, network outages and general maintenance and upgrade works, whilst ensuring the safety of EQL customers and the wider community.

Property Services aims to provide a professional state-of-the-art training facility that reflects the high level of training provided by EQL's Technical Training and Apprentice Group. The Northern Training Facility Strategy

is to reconfigure and refurbish the existing facilities at the Hartley Street site in order to provide safer, more efficient operations, as well as delivering greater opportunities and options for the site in the future.

2. Background

The main purpose of EQL training facilities is to provide a training environment suitable for practical training and assessment activities for electrical tradespersons and apprentices. Both Energex and Ergon Energy are Registered Training Organisations (RTOs) with nationally recognised courses and qualifications. This enables both internal and external electrical apprentices to gain their electrical qualifications through EQL.

EQL currently has a total of nine training facilities across Queensland located in Brisbane, Cairns, Townsville, Rockhampton, Pandoin, Mackay, Maryborough, Toowoomba and Dalby. Townsville, Brisbane and Rockhampton are considered major training centres while the remainder are minor facilities. Three different types of training yards can be found across all training facilities; these are Practical, Live Line and HV Switching Yards. Specialised training is undertaken within the Live Line and HV Switching Yards located at Townsville, Pandoin, Brisbane and Dalby.

The existing Townsville site is a major and specialised training facility located at 4-28 Hartley Street Garbutt. This training facility was constructed in the 1980s and is located almost directly opposite the Garbutt Depot on Dalrymple Road which makes it easily and quickly accessible for operational and field staff. Travel to the site from the Townsville Airport is approximately 5 minutes via private vehicle or taxi. The site sits on 15,950m² and comprises of a large specialised training yard, office accommodation and a number of separate buildings consisting of classrooms, specialist training workshops and amenities. The northern area of the property that lies outside the fenced training yard consists of critical spares storage.

The Ergon RTO operates out of the Hartley Street facility as a centre of excellence and can facilitate specialised training to all EQL employees under a combined Energex and Ergon training portfolio following the 2016 merger. Training was delivered to 1270 internal and 180 external participants in the 2017 calendar year.



Image 1: Aerial view of the Townsville Training Facility

3. Problem Statement

The facility has been identified as not being fit-for-purpose and is not achieving asset optimisation. The low utilisation of the facility can be attributed to many factors including; redundant and dilapidated buildings onsite, classroom numbers exceeding trainer numbers and reduced utilisation of some classrooms that are not fit-for-purpose due to age, size and layout. A recent condition assessment report has identified the main office accommodation and training classroom structures to be in a significant state of disrepair.

Critical repairs necessary include the following;

- Full roof, gutter & soffit replacements, including downpipe reconfigurations to reduce damage to footings
- Full internal ceiling replacements to repair damages caused by roof issues
- Structural engineering assessment and reinforcements applied to damaged cyclone rated concrete bond beams including recertification following repair works.

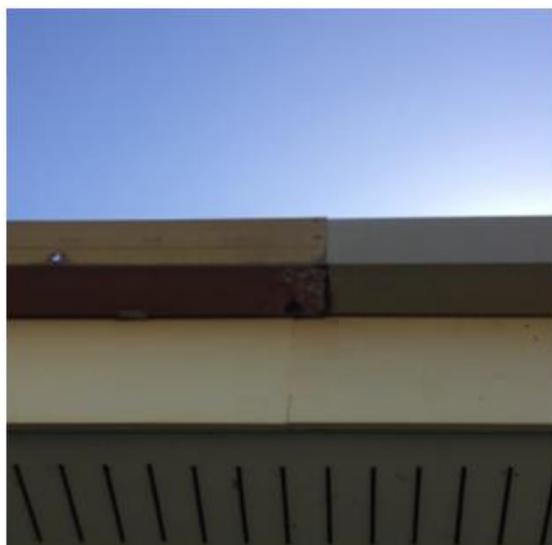


Image 2: Previous gutter repairs

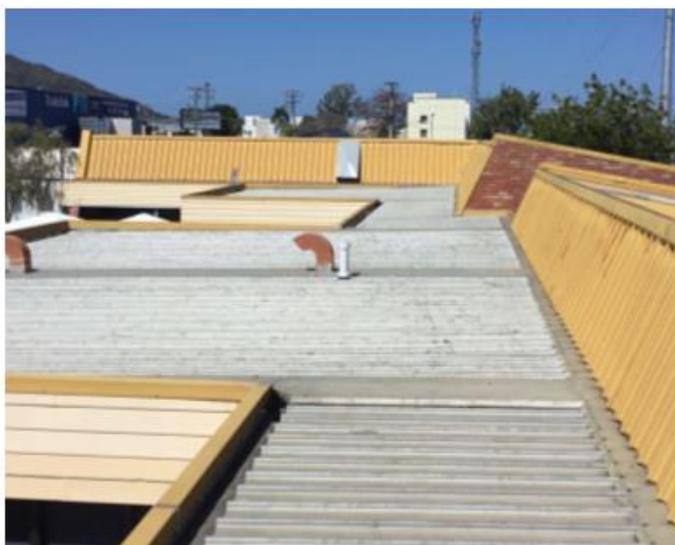


Image 3: Roof Condition & ACM Fascia

Due to the age of the site there have been numerous works completed including repainting, roof patching, installation of demountable buildings and lunch room upgrade. Most of the work has been directed at maintaining the site with only minor refurbishment works undertaken on an ad-hoc basis. The site is anticipated to incur major expenses in relation to; ensuring it meets Australian Standards and Building Code compliances, significant repairs and recertification to bond beams and a complete roof, gutters and ceiling replacement;.



The site currently contains approximately 200m² of asbestos containing materials (ACM), refer Site Asbestos Register in List of References for further detail. Whilst all ACM is currently encapsulated in a safe manner significant site works are required to remove ACM where possible in order to achieve an asbestos free portfolio as per EQLs Non-Network Asbestos Removal Program. Any removal works would greatly impact current site operations due to the multitude of locations across the site containing ACM. Removal of ACM would best be conducted in conjunction with site redevelopments to minimise disruptions to site operations. The issues with drainage mean that the ACM will need to be removed as areas such as the soffits on the building are continuing to get water damage, impacting on the ACM.

Other compliance issues associated with the facility include;

- No unisex or Person With Disability (PWD) amenities
- No PWD access to several training classrooms
- No firewall between rented demountable and neighbouring warehouse

A reconfiguration of the site layout is required to better meet training requirements and to improve asset optimisation of the facility. The overall poor state of the facility does not reflect the high level of specialised training provided by EQL from the Townsville Facility. Overall the facility delivers a high level of training and consists of state of the art electrical training equipment but operates out of a sub-standard property that is not considered fit-for-purpose. Table 1 summarises the compliance of the existing Townsville Training facility against Property's Guiding Principles of both the internal and external training facilities.

Property Group Guiding Principles	Internal Training Areas	External Training Yard
Safe and compliant	✘	✓
Commitment to Queensland communities	✓	✓
Fit-for-purpose	✘	✓
Asset optimisation	✘	✓

Table 1: Existing Townsville Training Facility Compliance



Image 6: Example of Ceiling Condition



Image 7: Aged amenities with confirmed ACM

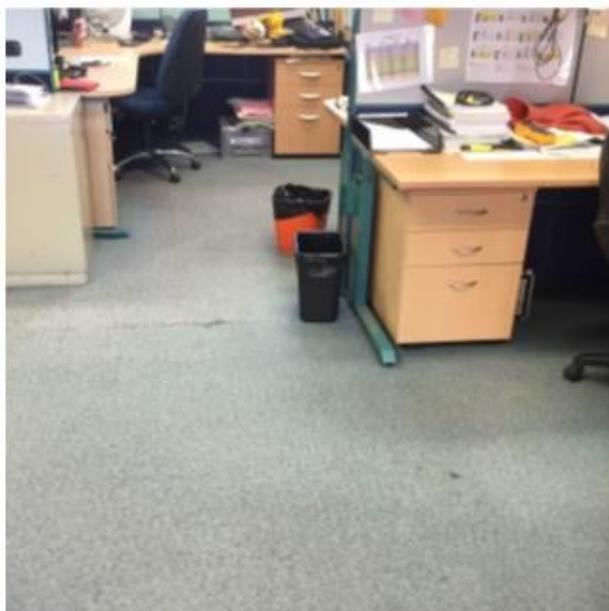


Image 8: Worn carpet in office area

4. Proposal

It is proposed to refurbish the existing facility and consolidate some training rooms in order to provide larger rooms with improved configuration options and technologies to better meet training requirements. Consolidation works will involve the removal of the rented demountable that houses training classrooms 7 and 8. This will improve utilisation and remove the need to install firewalls to ensure the site meets Building Code requirements which in turn will reduce initial capital investment and remove site safety hazards.

No works are required within the training yard as it is considered to be fit for purpose and of an acceptable standard.

Although there will be an overall reduction in BFA to assist with reducing operational expenditure and construction costs the refurbished facility will enable operational efficiency at current capacity whilst allowing for future growth of training programs delivered at the site.

In order to continue to meet current training requirements and reduce staging costs during construction the existing rented demountable would remain until construction completion. Construction and asbestos removal works will be undertaken in a planned staged approach to ensure developments do not impact on the safety and efficiency of normal operations.

The facility will be upgraded to meet current industry standards and address existing site compliance issues which in turn will assist to significantly reduce operational expenditure resulting from age and the poor condition of the facility.

4.1 Key Drivers & Benefits

Some key drivers identifying the requirement to address the issues have been identified in Table 2 below;

Risks	Description
Safe and compliant	Increased safety risks and hazards associated with non-compliance and aged facilities that do not meet legislative and regulatory requirements.
Commitment to QLD communities	Significant ongoing operational and maintenance expenditure associated with the maintenance of aged facilities could put upward pressures on electricity prices for consumers. Ongoing rental fees associated with hirer of demountable classrooms increases operational expenditure for the site.
Fit-for-purpose	Facility is not fit-for-purpose and will not allow for future growth in training delivery. Inability to meet the changing needs of customers and a reduced ability to accommodate flexible training delivery methods.
Asset Optimisation	Underutilised major training facility located within proximity to the Head Office, 420 Flinders Street Townsville

Table 2: Summary of key drivers identified

The preferred option selected is required to meet all of the key benefits outlined in Table 3 below;

Benefits	Description
Safe and compliant	Facility will meet full compliance with legislative and regulatory requirements and reduce safety risks onsite. Improved site security with the installation of palisade fencing and louvre replacements.
Commitment to QLD communities	Significant reductions in operational and maintenance expenditure that may assist with electricity affordability for consumers. Suitably located in the Northern region and in close proximity to major roads and public transport enabling efficient travel times for training participants.
Fit-for-purpose	Refurbishes a facility that is in a state of disrepair and provides a fit-for-purpose specialised training facility. Flexible training delivery methods utilising new technologies and innovations to meet the ongoing changing needs of the EQL workforce and external customers to ensure value for money.
Asset Optimisation	Consolidation of training functions and a practical site layout that offers greater operational efficiencies and increases utilisation of the classrooms whilst allowing for future growth in training delivery programs.

Table 3: Summary of benefits of preferred option

5. Assessment Options

Three plausible options have been proposed to address the issues identified with the Townsville Hartley Street Facility. A list of assessment criteria has been developed in order to assess each possible option to ensure existing site issues would be resolved if implemented. Each option was then rated against the criteria and a more detailed cost assessment for the two most suitable options was conducted. This process is discussed in more detail below.

The three possible options have been proposed and described briefly below;

Base case - Continue Current Operations: this proposal assumes continuing to maintain the existing facility with minor alterations made in order to meet compliance standards. No facility upgrades will be undertaken.

Scenario 1 – Refurbish Existing Site: proposes implementing a reconfiguration and refurbishment of the Hartley Street site. This will enable the efficient and fit-for-purpose provision of training facilities for EQL and potentially other external parties by consolidating training functions within the site and upgrading facilities to compliance requirements.

Scenario 2 - Relocation to New Site: proposes the continual maintenance of the existing facility whilst the acquisition and construction of a Greenfield site is completed. The existing training portion of the Hartley Street facility will be demolished and utilised for critical spares storage for the Garbutt Depot following the completion and relocation to the new facility.

A qualitative assessment of each of the proposed options was undertaken against a list of operational and strategic objectives specific to the Northern Training Facility Strategy. These objectives assist with determining which of the options are viable and should be further considered in a financial analysis. The primary objectives to address the needs of this strategy include;

- Provide a fit for purpose training facility that upgrades structures and facilities to compliance standards
- Improves asset optimisation and utilisation
- Allows for growth in training delivered to both internal and external customers
- Removes known site safety and environmental hazards, including asbestos removal
- Enables flexible training delivery methods with the implementation of new technologies
- Maintains proximity and capacity to support the Northern region and wider EQL community
- Provides a cost effective solution

As per Table 4 below, Scenarios 1 and 2 would meet all or most of the objectives and are ranked first and second respectively. The base case will not resolve site issues and would address less than half of the objectives.

Objective	Option 1 CONTINUE CURRENT OPERATIONS	Option 2 REFURBISH EXISTING SITE	Option 3 RELOCATE TO NEW SITE
Provides a fit for purpose training facility that upgrades structures and facilities to compliance	1	5	5
Improves asset optimisation and utilisation	1	5	5
Allows for growth in training delivered to both internal and external customers	2	5	5
Removes known site safety and environmental hazards, including asbestos removal	1	5	5
Enables flexible training delivery methods with the implementation of new technologies	1	5	5
Maintains proximity and capacity to support the Northern region and wider EQL community	5	5	3
Provides a cost effective solution	1	5	3
TOTAL	12/35	35/35	31/35

Table 4: Assessment of options against strategic and operational criteria
 Note: Scale of 1 to 5, where 1 = does not meet objective and 5 = fully meets objective

A further detailed financial analysis will be undertaken on all options, with Scenarios 1 and 2 being preferred as these will best meet the requirements of the Northern Training Facility Strategy.

6. Financial Analysis of Options

An NPV analysis was conducted against all options to provide a comparison between the options considered for the Northern Training Facility Strategy. This analysis identifies the cost differences between the various schemes. Dollars are expressed in the year of project operational commencement. The table below outlines the individual cost impacts of the options and identifies that over the NPV model period that Scenario 1 requires an initial capital investment of \$6.88 million and produces the most favourable outcome providing a total cost saving benefit of approximately \$5.44 million over the less favourable Scenario 2, refer Table 5 below.

\$ Millions	Base Case	Scenario 1	Scenario 2
Capex	(1.45)	(6.88)	(10.58)
Opex	(8.37)	(3.15)	(4.82)
Direct Benefits	0.00	0.51	0.44
Commercial NPV	(9.82)	(9.52)	(14.96)
<i>Ranking</i>	2	1	3
Indirect/Risk	0.00	0.00	0.00
Commercial + Risk	(9.82)	(9.52)	(14.96)
<i>Ranking</i>	2	1	3

Table 5: NPV Analysis Results

A comparison of both qualitative and quantitative assessments can be found within Table 6 on the following page.

Table 6: Assessment of scenarios

Option	Description	Assessment	Ranking
<p>Option 1 Continue current operations</p>	<p>This proposal assumes that operations at the Garbutt site proceed as per current arrangements with only minor changes to meet compliance.</p>	<p>As many of the facilities on-site are aged besides upgrading them to compliance, no disrepair issues will be addressed by the implementation of Option 1.</p> <p>Significant expenses to meet compliance would be incurred due to the fire safety issues related to the rented demountable housing rooms 7 & 8. Ongoing rental fees will result without the removal of this building.</p> <p>Ongoing forced maintenance repairs will result due to the age of structures and no allowance will be made to severe weather event proofing with the recertification of cyclone rated bond beams. Maintenance costs are assumed to increase by 6.5%pa if no facility upgrades are conducted.</p> <p>This option does not allow for future growth in training delivery or any improvements in asset optimisation or utilisation. The site would continue to remain not fit-for-purpose with the implementation of Option 1.</p>	<p>Option 1 does not address the identified site issues and is not considered a viable solution.</p>
<p>Option 2 Refurbish existing site</p>	<p>This option proposes refurbishment of the existing Hartley Street facility with some site and internal building reconfigurations. Including the removal of the rented demountable building.</p>	<p>This option allows for the resolution of all items identified within the Problem Statement by addressing disrepair issues, removes safety and environmental hazards, increasing the optimisation of the existing asset and allows for future growth in training delivery whilst putting downward pressures on operational and maintenance costs.</p> <p>A direct financial benefit includes the removal of monthly rental fees associated with rooms 7 and 8.</p> <p>An overall BFA area reduction of 10% will result in an assumed 10% reduction in annual maintenance costs.</p> <p>The NPV of this option is \$9.52 million. This is the more cost effective solution that addresses all identified issues and provides the most beneficial and fit-for-purpose facility.</p>	<p>Option 2 is the preferred option as it meets all the strategic objectives and is the more cost efficient option.</p>
<p>Option 3 Relocate to new site</p>	<p>Option 3 involves the purchase of a Greenfield site and construction of a new training facility and training yard. The existing site would be demolished and utilised as a storage yard for the Garbutt Depot following relocation.</p>	<p>This option would resolve disrepair issues and provide a fit-for-purpose facility.</p> <p>However, the requirement to purchase a suitable site significantly adds to the cost of the project. At this stage no suitable or cost effective alternative site has been identified.</p> <p>The NPV of this option is \$14.96 million. This option addresses all of the issues and objectives but is the least cost effective.</p>	<p>Option 3 meets all of the required objectives but is not considered a cost effective solution due to the NPV results. This option is not preferred.</p>

7. Recommendation

From a financial and risk perspective it is recommended to proceed with Scenario 1. Based on the operational, strategic and financial reviews conducted it has been identified that Scenario 1 is the most prudent and cost effective option.

On the basis of the beneficial cost outcome and other safety and efficiency improvements as well as the creation of future training delivery opportunities, it is recommended that EQL proceed with Scenario 1 to refurbish the Townsville Training Facility located at 4-28 Hartley Street Garbutt.

8. List of References for further information

- Homeworthy Inspection Services, 6 October 2018, Draft Condition Assessment Report.pdf
- Ergon Energy, 19 November 2015, Asbestos Register EEN10103 Main Report – Version 3.pdf
- EQL, 22 June 2018, EQL Training Facilities Overview Report VER 2.pdf