5.5. 'STAGE' STRUCTURE - 69R TEA TREE RD, DIWAN - REPAIR OR DEMOLITION

REPORT AUTHOR(S): Susanna Andrews, Property Officer
GENERAL MANAGER: Darryl Crees, General Manager Corporate Services
DEPARTMENT: Governance

That Council:

1. **resolves to undertake all necessary steps to repair the 'stage' structure on land located at 69R Tea Tree Road, Diwan, also described as Lot 45 on RP739764. The repairs will include, but are not limited to:**

    a. **the supply and installation of new steel columns and beams with appropriate protective coating; and**

    b. **core filling and reinforcement of masonry walls if loads are to be fixed.**

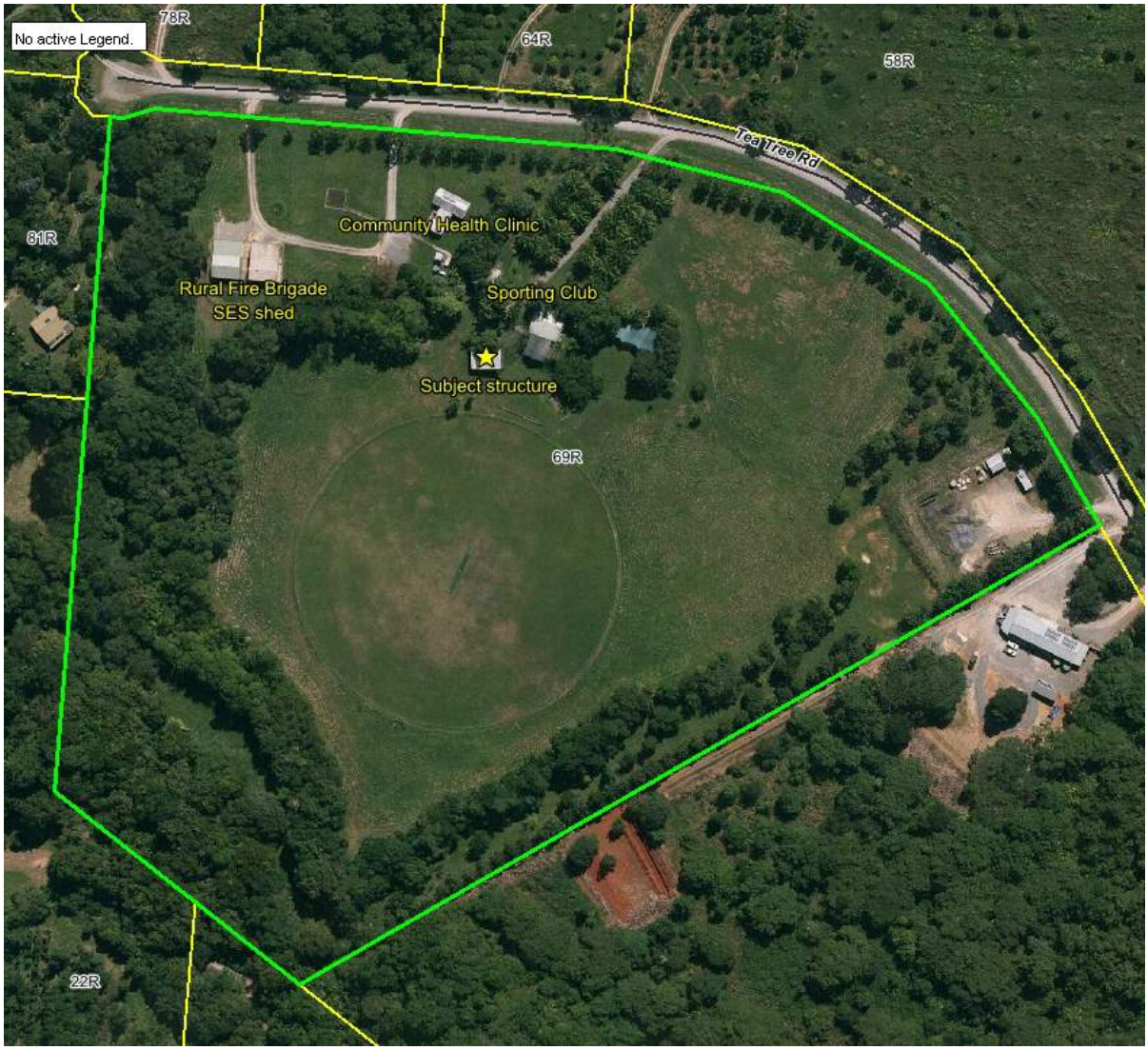
2. **delegates authority to the Chief Executive Officer, in accordance with section 257 of the Local Government Act 2009, to determine and finalise all matters associated with this restoration work.**

EXECUTIVE SUMMARY

Council owns land located at 69R Tea Tree Road, Diwan, also described as Lot 45 on RP739764, which is the location of the Cow Bay Community Health Clinic and a range of other community land uses. A structure on the land which is used as a 'stage' for community events has deteriorated over the years to the extent that it requires repair. In its current condition the structure has the potential to pose a risk to users of the facility and it is recommended to Council that the structure be repaired.

BACKGROUND

The subject land is located at 69R Tea Tree Road, Diwan, also described as Lot 45 on RP739764. The land is freehold with Douglas Shire Council the registered owner. The land is developed for community purposes, and is home to the Cow Bay Community Health Clinic, SES, Rural Fire Brigade and the Alexandra Bay Sporting and Social Club Inc. A variety of community, not-for-profit and fund raising events are held on the land including regular sports matches, community group meetings (eg Senior Citizens), Council meetings, annual family fun day etc.



Council officers have become aware that a structure on the land has deteriorated over the years to the extent that it is now in need of repair. The structure is used as a 'stage' for community events and has a small lockable room at the rear for storage purposes, which is accessed by a roller door on the side of the building. At the rear of the stage is a large mural painted by a local aboriginal artist, which is of significance to the local community. Users of the land are well aware of the deterioration in the structural integrity of the building, but wish to retain the stage structure and protect the mural. Council understands the stage is used on a regular basis.

Council officers are not able to locate building records for the structure, but it appears to have been constructed prior to at least 1995.

Council is the responsible entity for the repair and maintenance of the building. It is not owned by or leased to a third party.

Council had a building inspection conducted by a Registered Professional Engineer of Queensland (RPEQ) on 14 May 2016 to determine the condition of the structure, if it could be repaired and the extent of work required to repair it. The ensuing report is attached and some of the key observations are:

- extensive corrosion is evident in the majority of steel members in the structure;
- there is significant 'pitting' and overall loss of thickness from the steel columns;
- column base plates and fixings are extensively corroded; and
- corrosion is evident in most roof cleats and brace rods.

The RPEQ report states that as the masonry cladding and footings are in reasonable condition, the main area of remediation will be the superstructure steel frame.

The report also advises that short-term remedial options such as the installation of MS steel plates to act as 'stiffener' plates over pitted areas to avoid stress corrosion cracking, and removal and replacement of corroded steel sections by splicing and installation of stiffener / connector plates, are unlikely to be cost effective due to the labour and material components.

In the past, efforts have been made by Council officers to treat the rust and corrosion on the main support members by removing the rust and using a protective paint, with little, if any, success.

In the long term, the current community purpose use of the land is intended to continue and may likely expand. Council's Property Unit and the user groups are working towards the establishment of leases over the land to develop clarity, transparency and responsibility for user groups.

Should Council decide to proceed with repairs to the structure, RPEQ-approved plans will be drawn up for the works and any necessary building approvals obtained prior to commencement of works. Council officers estimate the cost of the work will be a maximum of $25 000 as a worst-case scenario.

COMMENT

While the Engineer's Inspection Report does not conclude that the structure is wholly unsafe for use, there is a visually obvious risk to users of the structure in regard to its integrity. In the event of a cyclone it could be severely damaged, resulting in the loss of the mural and necessitating complete replacement of the entire structure.

Council is the owner of the structure and is responsible for its maintenance and repair. Because the damage to the building is quite evident, and Council is now fully aware of the extent of the damage as detailed in the report provided by the REPQ, it is advisable for Council to either repair the structure or demolish it to limit the potential risk of injury to persons or property and liability for Council.

Utilisation of the 'stage' structure is pivotal to the community's continued use of the land and the enjoyment of many social and cultural events in an area of the shire with little external entertainment available, as would be in the towns of Mossman or Port Douglas. The location is an important gathering place for many local community groups, including Council itself, which also holds meetings there. It is recommended that Council repairs the structure rather than demolishes it so the community can continue to use it.

It is important for Council to maintain its facilities to extend their life, and more particularly to keep facilities repaired so they are safe for use. It is much more cost effective for Council to undertake necessary repairs now than to wait until the structure deteriorates further and the cost and complication of repairs significantly increases.

PROPOSAL

It is proposed that Council undertakes the repairs necessary to make the 'stage' structure safe for use and to prevent more significant damage occurring in the future.

FINANCIAL/RESOURCE IMPLICATIONS

Infrastructure envisages the maximum cost of the repair work to be approximately $25 000. A cost for demolition has not been provided as it is considered that the structure should be retained rather than be removed.

If the structure is not repaired, further deterioration will occur as time goes on, and the cost of repair will increase. There is also the risk that the structure may not be able to be repaired in the future, and Council will lose a useful facility that is valuable to the local community. It is likely the community would call for the replacement of the 'stage' structure should it be removed due to disrepair.

The structural works required were not known at the time of compiling the 2016/17 budget and the associated cost will be included in the future capital works budget review.

RISK MANAGEMENT IMPLICATIONS

Considering the current condition of the structure it is possible that a severe weather event such as a cyclone could cause substantial damage to the structure due to its weakened integrity. Attending to the proposed repairs will mitigate risks associated with this structure.

SUSTAINABILITY IMPLICATIONS

Economic: Should the structure not be repaired, further deterioration will occur. In the long term, repair of the structure now to prolong its life is a much more cost effective option, rather than its complete replacement should it fail completely.

Environmental: There are no environmental sustainability implications.

Social: Should the structure not be repaired, further deterioration will occur and it will no longer be able to be used. Eventually repair will not be an option, and the structure will require demolition. The community will lose the use of the facility for social and fund raising activities, and a much-loved significant artwork.

CORPORATE/OPERATIONAL PLAN, POLICY REFERENCE

This report has been prepared in accordance with the following:

Corporate Plan 2014-2019 Initiatives:

Theme 5 – Governance

5.2.1 – Provide Councillors and community with accurate, unbiased and factual reporting to enable accountable and transparent decision-making.

COUNCIL'S ROLE

Council can play a number of different roles in certain circumstances and it is important to be clear about which role is appropriate for a specific purpose or circumstance. The implementation of actions will be a collective effort and Council's involvement will vary from information only through to full responsibility for delivery.

The following areas outline where Council has a clear responsibility to act:

Asset-Owner	Meeting the responsibilities associated with owning or being the custodian of assets such as infrastructure.

CONSULTATION

Internal: Manager Infrastructure
Building Facilities Officer

External: RECS Pty Ltd
Alexandra Bay Sporting and Social Club Inc

ATTACHMENTS

Attachment 1 – Building Inspection Report

Attachment 2 – Structure photographed October 2011

Attachment 3 – Mural at rear of stage

Our ref: 51-2016/DSC19052016EIR

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Builder & Building Design

Subject Engineering Inspection – Alexandra Bay Recreation Club.
Vacant structure at 69R Tea Tree Rd, Diwan.

We, being "Professional Engineers", hereby advise we attended the site on Saturday 14 May, 20916 to inspect the vacant structure at the above location adjoining the Alexandra Bay Recreation Club on Lot 45 RP739764 at Tea Tree Road, Diwan.

SITE PLAN

Existing Building Materials

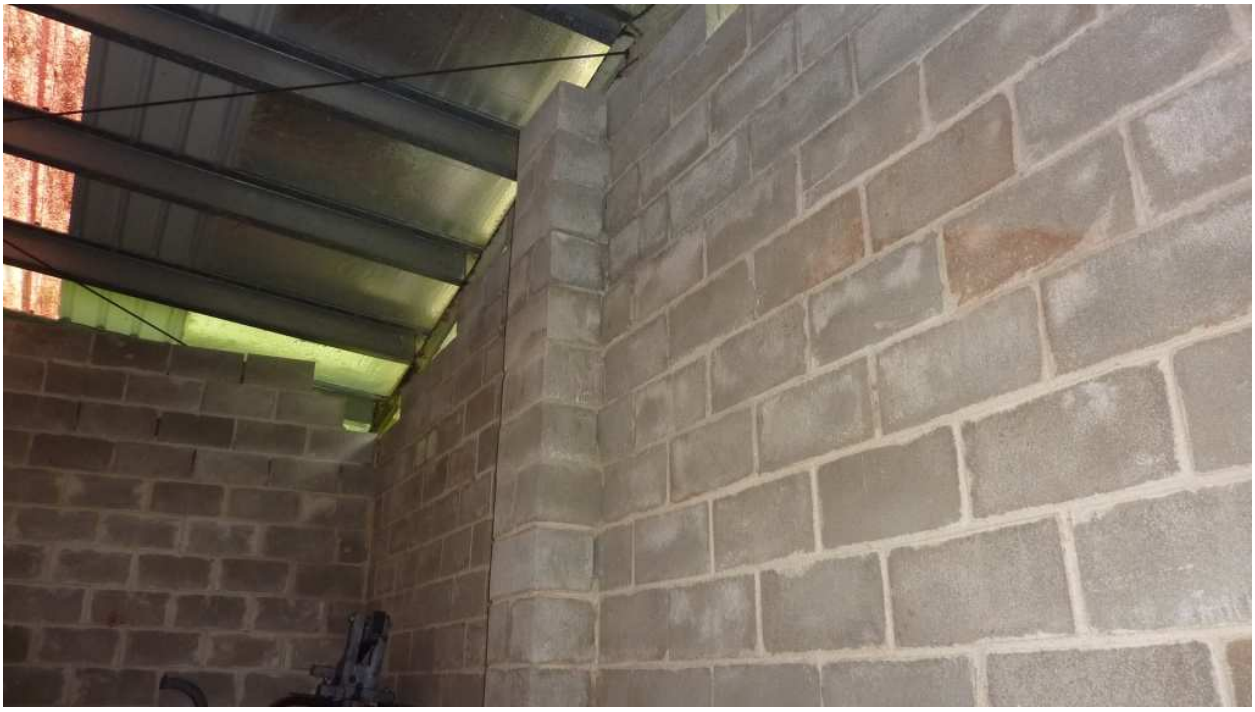
The building structure consists of a steel portal frame and roof with masonry walls. An open raised concrete slab on one ends acts as an elevated platform or stage area. Masonry walls are typically hollow and enclose a storage area to the rear of the building. The steel purlin roof is sloping towards the rear.

The building exterior walls and frame are painted. Concrete floors are bare.

The building foundations are likely to be in residual soils with reinforced concrete strip footings at the front and slab on ground at the rear. Steel columns are likely to be within concrete piers to depth.

Front View of Building

Side View of Building - showing storage area



Observations

- Extensive corrosion is evident in the majority of steel members in the structure.
- There is a significant ‘pitting’ and overall loss of thickness from the steel columns.
- The steel corrosion has been treated in the past by removing rust and applying a paint protective coating without reinstating steel thickness.
- Column base plates and fixings are extensively corroded.
- There are no cracks evident in the masonry walls.
- Corrosion is evident in most roof cleats and brace rods.
- Roof purlins and bracing are in reasonable condition.
- The building footings and masonry walls are in reasonable condition
- Building floors are reasonably level and no substantial cracking is evident.
- No subsidence or swelling is evident in building foundations
- Roof sheeting was not inspected.

Remedial Options

1. Install MS steel plates to act as ‘stiffner’ plates over pitted areas to avoid stress corrosion cracking.
2. Remove and replace corroded steel sections by splicing and install stiffner/connector plates or additional bracing at beam & column connections.
3. Full steel frame replacement

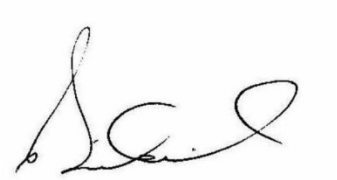
Recommendations

As the masonry cladding and footings are in reasonable condition the main area of remediation will be the superstructure steel frame.

- As a short term solution remedial options 1 or 2 could be considered however the labour and material component is unlikely to be cost effective.
- Supply and install new steel columns and beams with appropriate protective coating.
- Core fill and reinforce masonry walls if loads are to be fixed.

If you have any questions regarding this matter, please contact me to discuss.

Yours sincerely



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