Project Brief

Zone Building Refurbishment and Asbestos Removal

7523447

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Project Summary and Checklist

Project Deliverable	
Zone Building Refurbishment and Asbestos Removal	
Select Project Type	Network Asset - New or Replacement
Asset Management Project	Yes
Currently this spend is in RIVA	
Target or Schedule Defined with Reporting Tolerances	Choose an item.
Project Benefit	Other
Cost Estimate Completed & Attached	Yes
Risk Assessment Completed	No
Safety Risk Identified / Addressed and/or Safety Plan	No

Document Control

Version Control

Date	Version	Author	Description of Change
30/05/2014	1	Zoltan Tokaji	Initial Release

Related Documents

Document Title	DM5 Reference / Sharepoint Link / Location
RIVA	
ActewAGL Asbestos Management Plan	
Zone Substation Building Asbestos Surveys	
Fire Safety Audit Report	

Document Authorisation

Approved by (Signature)	Name	Role	Date
	Manoj Sivasane	Acting Manager Zone Substations	30/05/2014
	Dennis Stanley	Manager Asset Strategy & Planning	30/5/14
	Stephen Devlin	General Manager Asset Management	
	Steven Skourakis	Acting Chief Finance Officer	

Project Background

Project Definition

Objectives

Each of twelve ActewAGL Distribution Zone Substations have had compliance or legislation risks identified in the areas of fire safety, building structure, and asbestos management.

Fire

In February 2013 fire engineer Cyril McIvor visited each of these Zone Substations for the purposes of a fire safety audit. The report that was generated from this audit listed numerous specific fire safety risks and requirements for bringing the buildings up to code. In particular the report identified the following issues across all zone substations:

- Lack of emergency management and evacuation plans
- Lack of or inadequate emergency and exit lighting
- Smoke detection and block plan non compliance
- Five of the zone substations have non-compliant fire panels (Causeway, City East, Fyshwick, Telopea, Woden)
- Battery rooms are not enclosed in fire resistant enclosures
- Switch room and control room separation is not fire resistant

Access and Egress

With regards to the building structure, each switch and control room must have two means of egress. While there are enough doors in each substation to meet this requirement, almost all of the doors have non-compliant locking mechanisms, or are non-compliant and require replacement.

Asbestos

In September 2013 each of the twelve Zone Substations were visited for the purpose of an Asbestos Survey & Management Plan. The reports produced by these visits have identified bonded asbestos present in all Zone Substations. The management plan provided made recommendations for the removal of the asbestos included remove when found, remove when completing works that can free it, and otherwise remove whenever possible, seal and maintain.

Scope

The activities that are in scope are

- Asbestos removal in line with the ActewAGL Asbestos Management Plan
- For all works relating to compliance or legislation risks in fire safety, building structure, and asbestos management.
- Installation of emergency and exit lighting to standard
- Addition and relocation of smoke detection and updating of block plans to standard
- Installation of five new fire indicator panels to replace the five non-compliant panels
- Fire rating the battery rooms and the walls between the switch and control rooms to standard
- Removal of and replacement of non-compliant exit doors and replacement of the locking mechanisms
- Removal of bonded asbestos where possible

Exclusions

The following items are not in scope:

- Removal of Asbestos conduits and pits

Constraints / Assumptions

This project has the following constraints and assumptions:

Constraint / Assumption	Impact
Asbestos Removal	Maintaining operational access for AMNS during the removal process

Dependencies / Interfaces

This project will interface with the following projects or stakeholders:

Related Initiative	Description of Impact or Dependency
AMNS	Disruption to building occupants during the works
Networks Finance	Asset retirement and registration Project closure reports Capital Works Approvals

Project Approach

Business Case

Benefits

- Compliance with the relevant standards
- Compliance with the National Construction Code
- Asbestos removal in line with the ActewAGL Asbestos Management Plan
- For all works relating to compliance or legislation risks in fire safety, building structure, and asbestos management.
- Installation of emergency and exit lighting to standard
- Addition and relocation of smoke detection and updating of block plans to standard
- Installation of five new fire indicator panels to replace the five non-compliant panels

- Fire rating the battery rooms and the walls between the switch and control rooms to standard
- Removal of and replacement of non-compliant exit doors and replacement of the locking mechanisms
- Removal of bonded asbestos where possible

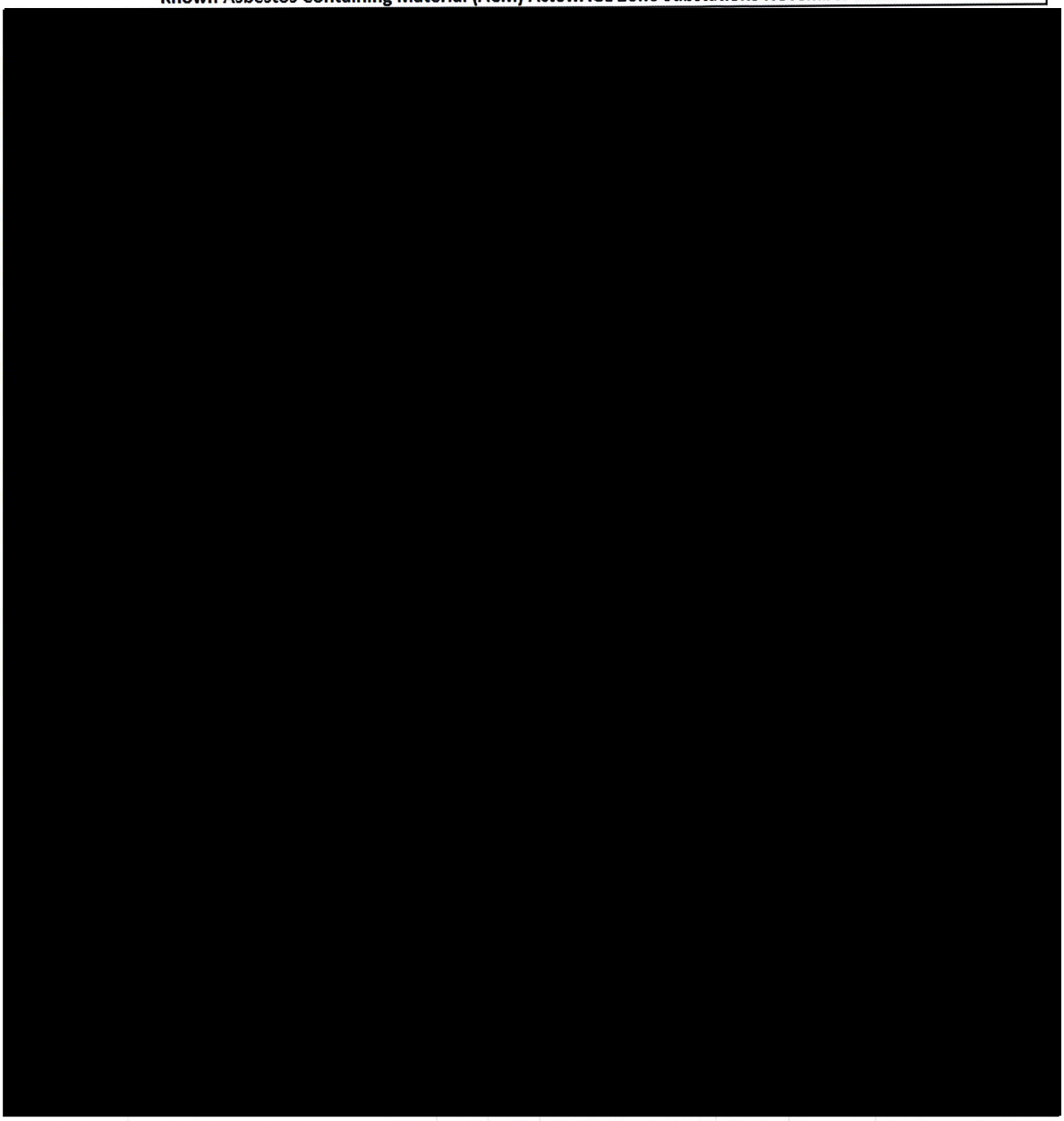
Costs

Items for all Zone Substations						
	2014/15 Full Year	**2015/16 Full Year**	**2016/17 Full Year**	**2017/18 Full Year**	**2018/19 Full Year**	**5 Year Total**
Site Specific Requirement and Contract Documentation	50,000	50,000	50,000	50,000	0	**200,000**
Emergency Lights with Design	125,000	125,000	125,000	125,000	0	**500,000**
Access and egress doors and locking mechanisms	150,000	150,000	150,000	150,000	0	**600,000**
Fire Detection Compliance Upgrades	62,500	62,500	62,500	62,500	0	**250,000**
Cable Sealing Penetrations	250,000	250,000	250,000	250,000	0	**1,000,000**
Fire Resistance in Battery Rooms and between Control and Switch Rooms	351,500	327,500	342,500	362,500	0	**1,384,000**
Asbestos pits removal and/or painting pits and conduits	62,500	62,500	62,500	62,500	0	**250,000**
Asbestos Ceiling removal and installation	75,000	75,000	75,000	75,000	0	**300,000**
Safety Supervision	37,500	37,500	37,500	37,500	0	**150,000**
Contingency	125,000	125,000	125,000	125,000	0	**500,000**
Total Expenditure	1,289,000	1,265,000	1,280,000	1,300,00	0	**5,134,000**

Project Plan

- Works will programmed through consultation with AMNS

Known Asbestos Containing Material (ACM) ActewAGL Zone Substations November 2013



Assumed ACM

A destructive survey under controlled conditions prior to any refurbishment which is likely to disturb possible ACMs in these areas must be undertaken. Until these areas are surveyed they should be presumed to contain asbestos. No access to unauthorised personnel should be given.

- Insulation/pipe lagging- Inaccessible ducts, risers and ceiling and wall space
- Asbestos millboard lining- Interior of air conditioning ductwork adjacent to heater
- Asbestos insulation and gaskets/joints- Within mechanical equipment concealed by outer metal cladding, structure or housing.
- Asbestos vinyl floor tiles and covering & cushioning underlay- Beneath carpets and
- Asbestos sheeting- Backing material to ceramic tiles (Roofs, floors and walls) and packers to building construction joints, such as gable end verge under cloaking
- Asbestos cement sheet formwork and electrical cable duct / water pipe-

Condition	Severity			
	D. Low	C. Medium	B. High	A. Very High
1. Severe	1D	1C	1B	1A
2. Poor	2D	2C	2B	2A
3. Normal	3D	3C	3B	3A
4. Good	4D	4C	4B	4A

High Risk	High Risk ACM remove as soon as practicable
Medium Risk	Medium Risk ACM, control exposure and monitor condition.
Low Risk	Low Risk ACM, monitor condition