

CYCLONE CHRISTINE (31/12/2013)



DAMAGE SUMMARY REPORT

FOR




SHIRE OF ROEBOURNE

OLD COUNCIL DEPOT SITE

005013-5000-G01-175-0005

Signed: 	Date: 11/02/14
HERMINIO B. CANASA STRUCTURAL ENGINEER B.E. MIE (AUST) MEMBERSHIP No. 804965	
	



0	ISSUED FOR USE					Operations	11/02/2014
A	ISSUED FOR INTERNAL REVIEW	CB				Operations	07/02/2014
Rev	Description	Author	Checked	Approved	Client	Custodian	Date

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1.0 PURPOSE

This Damage Summary Report has been developed to summarise the extent of damage visually evident at the Shire of Roebourne's Old Council Depot.

The Report has been prepared for OCA to assist with the assessment of remediation works required.

2.0 SCOPE

The report details the site inspection undertaken by an engineer, the infrastructure visibly damaged at the property, the description of damage caused and the photographic evidence of the damage. The engineer has provided recommendations for remediation works and breakdown of possible causes of the damage.

3.0 DEFINITIONS

Client	OCA
Asset Owner	Shire of Roebourne
Nominated Inspector	Person or Company authorised to represent Outback Constructors for specific Quality Control work
QC	Quality Control
SOW	Scope of Work
OCA	Outback Constructors of Australia Pty Ltd
Punch List	A list of non-critical discrepancies to be corrected
Scope Australia	Engineer

4.0 PRELIMINARY DESKTOP DAMAGE ASSESSMENT

A preliminary desktop damage assessment was carried out, based on a supplied photograph (Appendix A Preliminary Damage Assessment Photograph), and issued on 14th January 2014 by OCA.

5.0 DETAILED DAMAGE ASSESSMENT

5.1 Site Assessment

A site inspection was undertaken by a certified structural engineer on Thursday 16th January 2014 to assess the extent of damage to the Old Council Depot building and to determine if the recent Cyclone Christine had caused damage to the property.

The Structural Engineer that undertook the site inspection was Hermino B. Canasa who is an employee of Scope Australia.

6.0 DAMAGE REPORT

REFERENCE DATA	ITEM NO.	DESCRIPTION OF DMAGE	LIKELY CAUSE OF DAMAGE	RECOMMENDATIONS
Preliminary Desktop Damage Assessment				
OSD 001	1	Clean-up site, debris to be cleared before any repairs take place.		General Clean-up
	2	Bus within building to be relocated.		Bus to be removed
	3	Electrical cables in affected areas to be made safe, cables and electrical system to be tested and made good.	High Winds	Replacement/ repairs if necessary
	4	Electrical cables above Gate to be made safe, cables and electrical system to be tested and made good.	High Winds	Replacement/ repairs if necessary
	5	Cladding to external walls damaged.	The overall damage of this end wall may have been caused by high wind velocity which resulted to an excessive positive pressure during the said cyclone. As shown on the photos there is an evident that some part of the walls had corroded which can be susceptible for weakening under bending	Needs repairs/ replacement

REFERENCE DATA	ITEM NO.	DESCRIPTION OF DMAGE	LIKELY CAUSE OF DAMAGE	RECOMMENDATIONS
			due to excessive pressure.	
	6	Cladding to external walls completely detached from columns and supports.	As per 5. above, there is also a sign of deterioration's to those timber purlins being detached to the columns cleats have also corroded including bolts. The bases of the two mid-columns are only resting on a timber without fixing or holding down bolts.	Needs repairs/ replacement
	7	Cladding above Gate.	As per 5. above	Needs replacement
	8	Cladding to roof at rear.	As per 5. above	Needs repairs/ replacement
	9	2 x columns have to be straightened and structural integrity assessed	As per 6. above	Needs repairs/ replacement
	10	2 x column base plates to be assessed	As per 6. above	Needs repairs/ replacement
	11	Purlins associated with 2 x Columns to be assessed and replaced if necessary	As per 6. above	Needs repairs/ replacement
	12	Purlins associated with the damaged cladding on roof of building to be assessed and replaced if necessary	As per 6. above	Needs repairs/ replacement
	13	Gate damaged, needs replacement/repair	As per 5. above	Needs repairs/ replacement

REFERENCE DATA	ITEM NO.	DESCRIPTION OF DMAGE	LIKELY CAUSE OF DAMAGE	RECOMMENDATIONS
Detailed Site Inspection Damage Assessment				
OSD 002	14	Fascia damaged – replacement/repair required	As per 5. above	Needs repairs/ replacement
	15	Electrical damage		
OSD 003	16	Refer notes 3 & 12	High Winds	
OSD 004	17	Refer note 13	As per 5. above	Needs repairs/ replacement
OSD 005	18	Electrical Damager refer note 3	High Winds	Replacement/ repairs if necessary
OSD 006	19	Damaged Water Services	High Winds	Replacement/repair required
OSD 007	20	Refer note 5	As per 5. above	Needs repairs/ replacement
OSD 008	21	Rear storm cover missing	High Winds	Replacement required
OSD 009	22	Refer note 5	As per 5. above	Needs repairs/ replacement
OSD 010	23	Refer note 4	High Winds	Replacement/ repairs if necessary
OSD 011	24	Bolt connection damaged		Replacement required
OSD 012	25	Refer Item 8	As per 5. above	Needs repairs/ replacement
OSD 013	26	Debris clean-up	High Winds	Remove offsite
	27	Wall failure		Repair required

REFERENCE DATA	ITEM NO.	DESCRIPTION OF DMAGE	LIKELY CAUSE OF DAMAGE	RECOMMENDATIONS
	28	Flashing damaged	High Winds	Replacement required
OSD 014	29	Debris clean-up	High Winds	Remove offsite
	30	Refer note 24		Replacement required
OSD 015	31	Refer note 24		Replacement required
	32	Bus to be removed	N/A	N/A
OSD 016	33	Flashings missing	High Winds	Replacement required
OSD 017	34	Wall failure	High Winds	Replacement/repair required
OSD 018	35	Existing Column Detail	High Winds	Replacement/repair required
OSD 019	36	Column Base Plate Detail	High Winds	Replacement/repair required
OSD 020	37	Fascia Failure	High Winds	Replacement required
OSD 021	38	Fascia Failure	High Winds	Replacement required

APPENDIX A

PRELIMINARY DAMAGE REPORT

REFERENCED PHOTOGRAPHY



OSD 001

APPENDIX B

ENGINEERS DETAILED ASSESSMENT

REFERENCED PHOTOGRAPHY



OSD 002



OSD 003



OSD 004



OSD 005



OSD 006



OSD 007



OSD 008



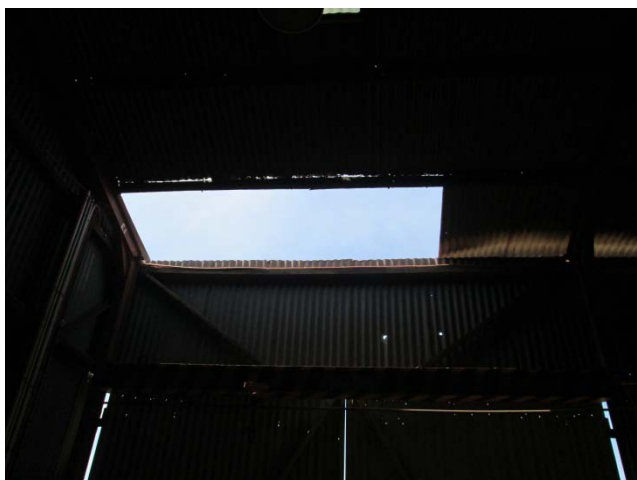
OSD 009



OSD 010



OSD 011



OSD 012



OSD 013



OSD 014



OSD 015



OSD 016



OSD 017



OSD 018



OSD 019



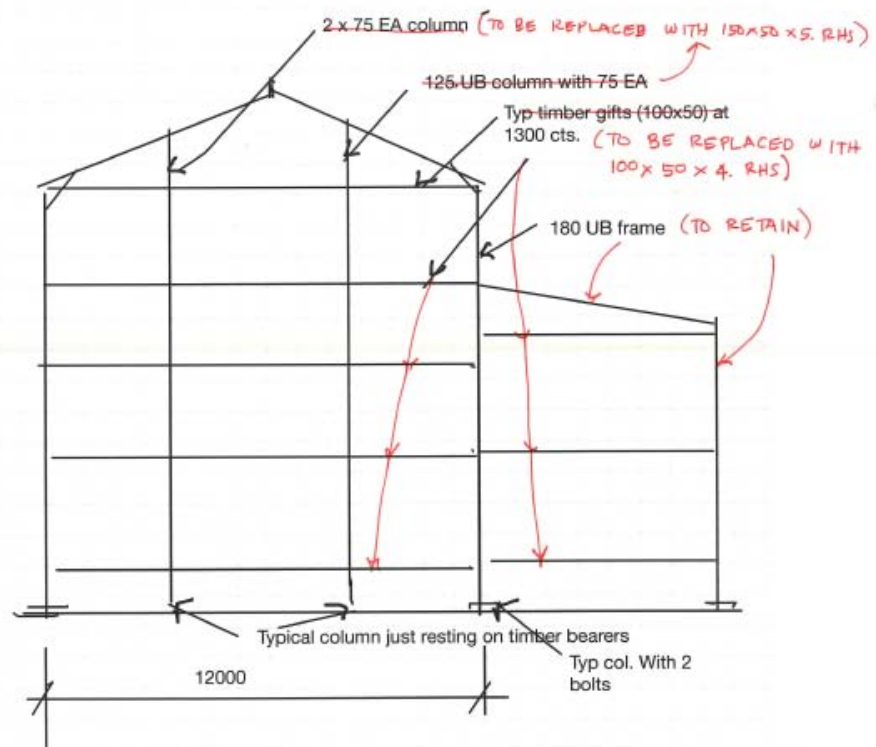
OSD 020



OSD 021

APPENDIX C

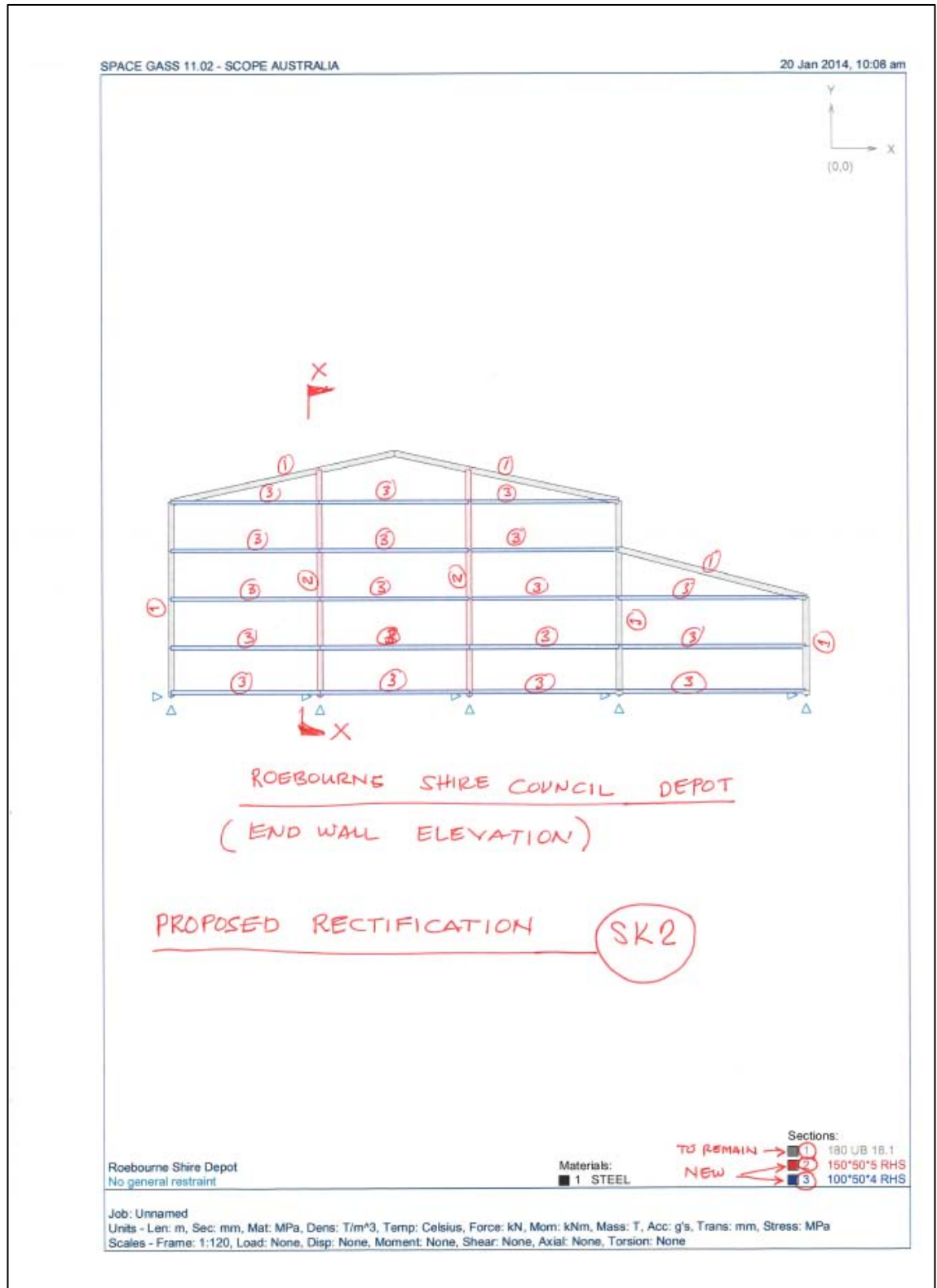
ENGINEERS' RECOMMENDATION SKETCHES



Council Depot
Damaged end wall

EXISTING ELEVATION

SK1





A4 CALCULATION SHEET

TASK:	PROJECT NO:
	DATE:

Re-attach Existing Roof and provide new Flashing

Existing Roof sheeting

Existing TIMBER PURLINS

Existing 180 UB FRAME

10mm THICK 'I' Capping plate welded to the new column.

New 150x50x5 RHS Column

New 100x50x4 RHS Girts/Purlins

Provide New 65x65x5 EA Tek screw to exist. Purlins.

New wall sheeting to match existing

New 65x65x5 EA CLEATS 4 TEK SCREW (NO.14) to column and 2 TEK SCREW TO PURLIN

100x10 EA Both side 1 M20 CHEMSET BOLT EACH to exist. Slab.

EXIST. SLAB

300

SECTION X-X (SK3)

NOTE:
 ALL STEELWORK SHALL BE HOT DIP GALVANIZED
 SITE MEASURED BEFORE FABRICATION

SHEET: _____ of _____

SCOPE-5100-G01-203-0010_3

Custodian: Operations, 12th April 2014



A4 CALCULATION SHEET

TASK:

PROJECT NO:

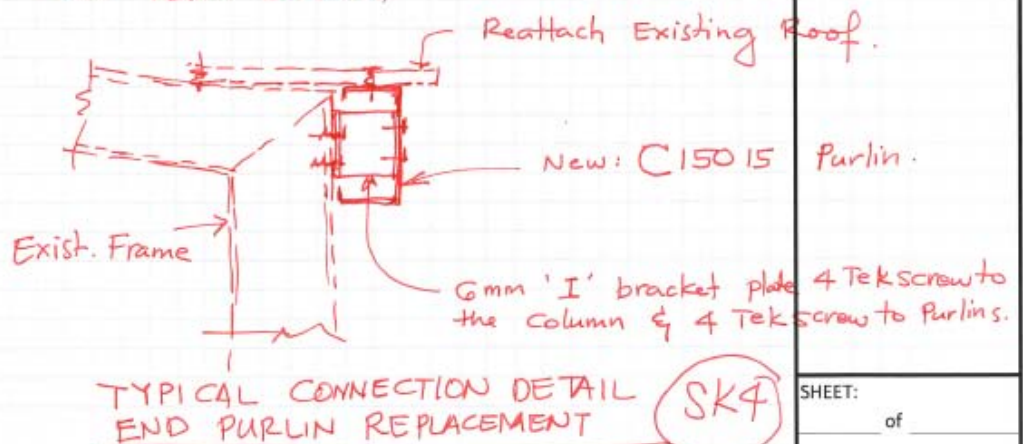
DATE:



EXISTING FRONT ELEVATION:

NOTE:

The end Fascia Purlin needs to be replaced with Steel Lysaght Purlins
 See below detail;



SHEET:

of