MINISTRY OF EDUCATION
TE TĀHUHU O TE MĀTAURANGA

Model Project Specific Quality Assurance Plan

Weathertightness Remediation

Project title:	**Weathertightness Remediation works to Block <xxxx> at <xxxxx> School**
Prepared by (company name):	
Revision number / date:	
Property Address:	
Building consent number (if applicable):	

Purpose

This Project Specific QA Plan provides a breakdown of key work stages and inspection points that are important to ensuring that the weathertightness failures have been addressed and that the remedial works are compliant with the construction documents and New Zealand Building Code. When completed with site observation aspects, this QA Plan will also provide a record of the work stages that have been visually inspected and recorded on site.

This QA Plan is prepared and led by the designer. The QA Plan is also used by all designated parties including the main contractor, sub-contractor, building surveyor and any other identified specialists to observe and record key inspection points.

Guidance Notes

1. This Project Specific QA Plan (this QA Plan) is to be kept onsite by the main contractor to enable all designated parties including the designer and any other specialists to observe and record the key inspection points.
2. The designer is to initially prepare this QA plan determining the key inspection points, remediation works locations and scopes, and other requirements in this template.
3. The QA plan should focus on high risk details and common failure points such as head flashing upstands, ground clearance, air seals, saddle junctions, apron kick-outs, scupper outlets, inadequate internal gutters and proprietary support bars for windows etc.
4. After the contractor is appointed, the designer shall review the QA plan in consultation with the contractor to re-confirm the sequencing of works, key inspection points and the responsible individuals for completing and signing off the various inspection points.
5. The QA Plan is to be printed in A3 or A4 size such that all text and diagrams are legible with adequate space to sign and hand write comments on site.
6. The designer shall specify the level of construction monitoring to be able to undertake sufficient site inspections of the remediation works including critical inspection points so they can recommend or approve the certificate of practical completion or equivalent provision under the form of contract.
7. Adequate written and photographic records shall also be taken before, during and after completion of remediation works to enable the Ministry to be satisfied that the remediation works have been carried out in accordance with the construction documents. Site visit notes and associated photos to be held in this QA Plan under Appendix A.
8. Any variation to remediation works to the construction documents shall be covered by a written instruction, including supporting drawings, specifications and photographs as necessary, to the contractor to accurately describe the extent of remediation work. This shall be recorded in or appended to this QA plan under Appendix A.
9. Similarly, any required Building Consent Amendment/ Minor Variations that have been submitted and approved by the Building Consent Authority (BCA) are to be recorded in or appended to this QA plan under Appendix A.
10. This QA Plan does not replace Council Inspections where a building consent process is being followed.

Document Control Records

Document Prepared by:
< Full Legal Company Name >
< Company Address >
Telephone: < Company Phone Number >
Email: < Company Email >

Revision History

Revision No.	Prepared By	Description	Date
0		Draft for review by MoE	
1		Final	

Document Acceptance

Action	Name	Signed	Date
Prepared by:			
Reviewed and Approved by:			

Key Personnel

Site Position	Name and Company	Registration Number (e.g. NZIA, CPENG, NZIBS, LBP etc)	Sample Signature
Architect / Designer			
Timber Remediation Expert			
Building Surveyor			
Main Contractor			
Site Supervisor			
Metal Roofing Contractor			
Membrane Applicator			
MoE Representative			
Other			

Level of Construction Monitoring (CM1-5)

The required level of construction monitoring for this project is CM4.

(Example project)

Brief Building Description	
Existing Building:	Two classroom block; 1 storey classrooms with two storey toilet/lobby/store block in centre. 1986 – northern relocatable classroom on to site, with upgrades (unknown scope) in 1990. 1999 – southern relocatable classroom on to site, with centre block for toilet, lobby, and store, and decks and verandas built
Foundation/flooring system:	Timber piles with timber floor joists and particle board flooring
Wall/Cladding/System:	Asbestos sheet and ply sheet
Roof System:	Long run Colorsteel
Roof slope:	> 10 degrees
Wind zone:	EH & SED, based on Council on-line map data
Exposure zone:	D

(Example project)

General scope of work	
Site / drainage:	• Excavation for, and installation of, new surface water drainage channel to prevent run-off under building. New sump to South end of drainage channel to connect to existing stormwater drain. • Removal of existing short downpipe currently discharging with no spreader onto the East side of Room 4 roof area. • Installation of new downpipe to link to existing stormwater drain. Adjustment of existing spouting to fall to new downpipe. • Removal, or partial removal, of exterior timber stair and landing to East side of Room 4 – allow for repair/rebuild to the stairs and balustrade as necessary.
Subfloor:	• Removal of debris and installation of vapour barrier and underfloor insulation to entire extent of accessible subfloor area.
Cladding:	• Removal and replacement of plywood cladding sheets to selected areas. • Removal and replacement of existing timber horizontal and vertical battens where shown. • Removal and replacement of horizontal 'Z' flashings, head flashings and vertical corner flashings to selected areas.
Roofing:	• Removal and replacement of all ridge, barge, saddle and apron flashings. • Removal of metal roofing, underlay, netting and bracing straps to veranda roof areas. Installation of new stainless steel bracing straps, underlay and safety mesh. Re-installation of existing metal roofing over. • Removal of metal roofing, underlay and any insulation to part of the roof over Room 4 (refer to architectural drawings). Installation of new roofing underlay and insulation and re-installation of existing metal roofing to this location.

Note: A General Scope of Work and Project Specific QA plan is to be prepared for each individual building to be remediated.

Existing building

A general overview image of the building is provided below (note: the descriptions of activities in the various following sections of this Model plan are examples only and specific to a now completed project).

Fig. 1 Image of Block X (West Elevation)

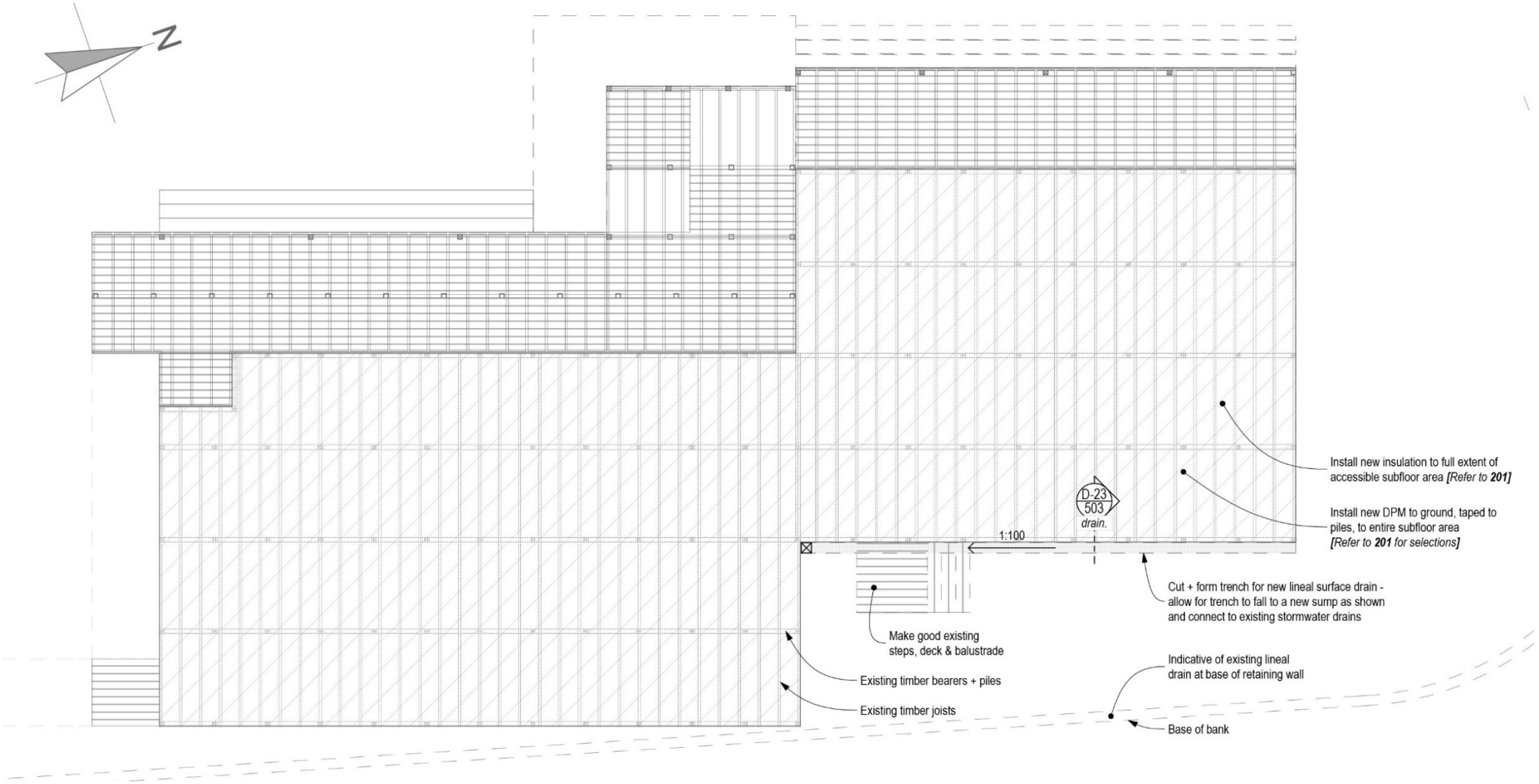

Fig. 2 Proposed subfloor plan – *refer 100 series Architectural drawings*

Subfloor Remediation

Key Inspection Points	Typically Contractor / Sub-contractor		Typically Architect / Designer / Specialist		Comments (if required)
	Completed by (Name & signature)	**Date**	**Checked by** (as required) (Name & signature)	**Date**	
Pre-commencement meeting					
Removal of existing external timber stair and landing					
Removal of debris to full extent of accessible subfloor					
Installation of new drain and sump					
Installation of DPM to full extent of accessible subfloor					
Installation of insulation to full extent of accessible subfloor					
Rebuilding of timber stair, incl. balustrade over new drain					
Work completed as per plans					

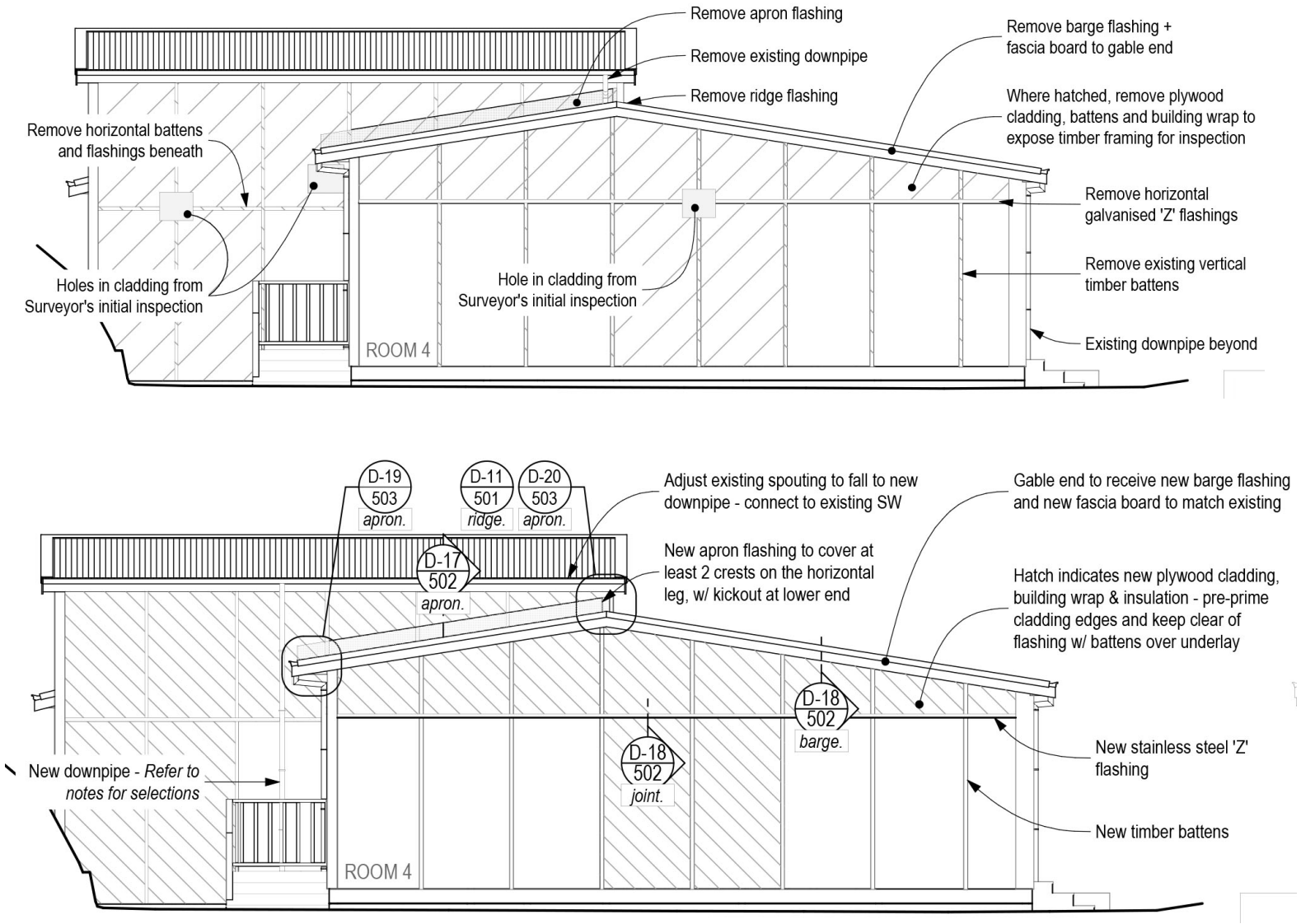

Fig. 3 North Elevation existing and proposed works – *refer 200 series Architectural drawings*

Cladding – North Elevation

Key Inspection Points	Typically Contractor / Sub-contractor		Typically Architect / Designer / Specialist		Comments (if required)
	Completed by (Name & signature)	**Date**	**Checked by** (as required) (Name & signature)	**Date**	
Removal of cladding, building wrap and insulation to selected areas, as well as horizontal 'Z' and relevant corner flashings					
Framing evaluation and mark up by Building Surveyor					
Timber replacement if necessary					
Installation of new wall insulation to exposed areas					
Installation of new building wrap and all laps fully taped, no wrinkles and all terminations and junctions taped off					
Installation of sill wraps, flashing tape as necessary					
Installation of new horizontal 'Z' & relevant corner flashings					
Installation of new cladding to selected areas as per drawings					
Installation of new vertical battens					
Paint finish					
Work completed as per plans					

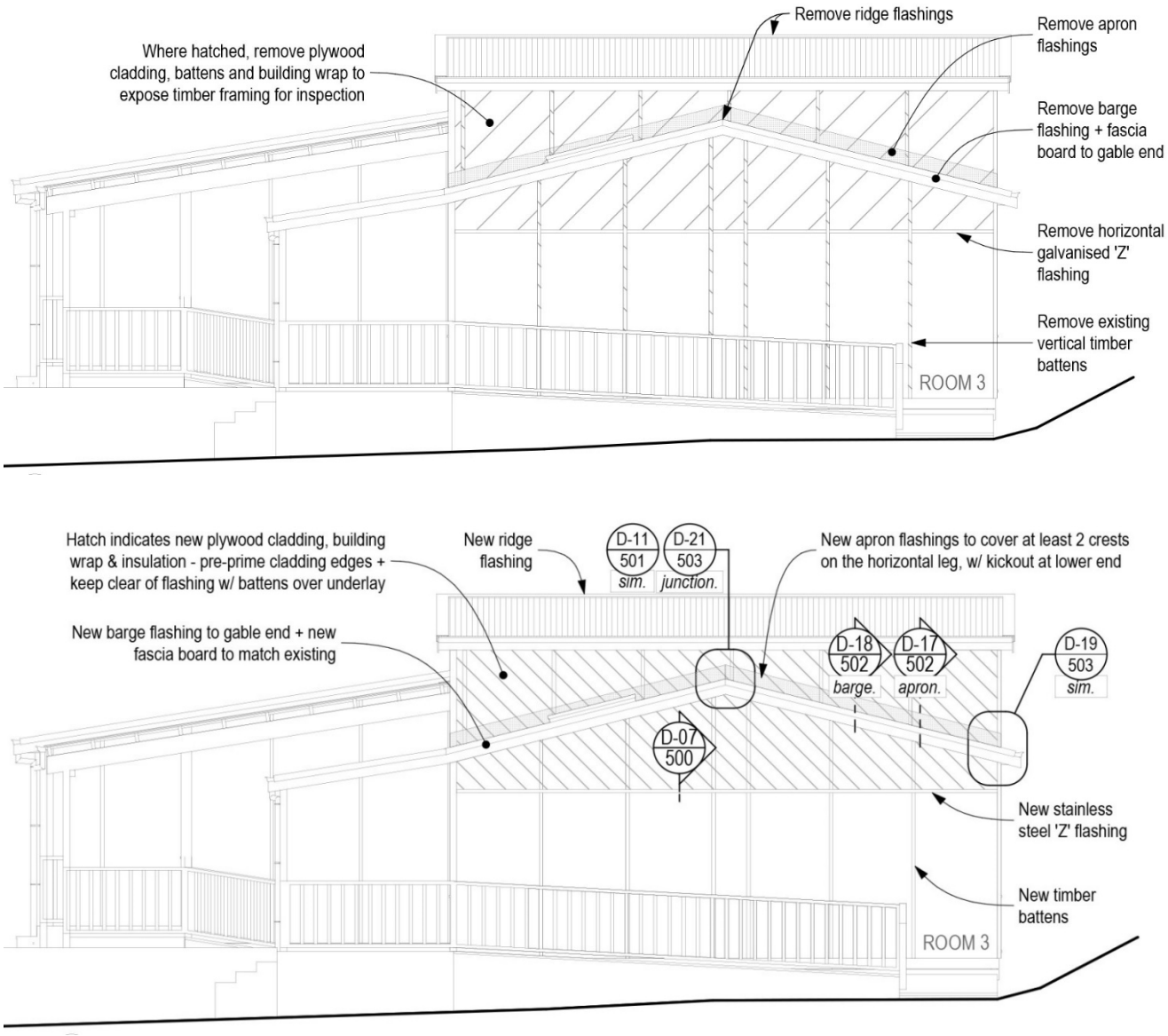

Fig. 4 South Elevation existing and proposed works – *200 series Architectural drawings*

South Elevation - Cladding

Key Inspection Points	Typically Contractor / Sub-contractor		Typically Architect / Designer / Specialist		Comments (if required)
	Completed by (Name & signature)	**Date**	**Checked by** (as required) (Name & signature)	**Date**	
Removal of cladding, building wrap and insulation to selected areas, as well as horizontal 'Z' and relevant corner flashings					
Framing evaluation and mark up by Building Surveyor					
Timber replacement if necessary					
Installation of new wall insulation to exposed areas					
Installation of new building wrap and all laps fully taped, no wrinkles and all terminations and junctions taped off					
Installation of sill wraps, flashing tape as necessary					
Installation of new horizontal 'Z' & relevant corner flashings					
Installation of new cladding to selected areas as per drawings					
Installation of new vertical battens					
Paint finish					
Work completed as per plans					

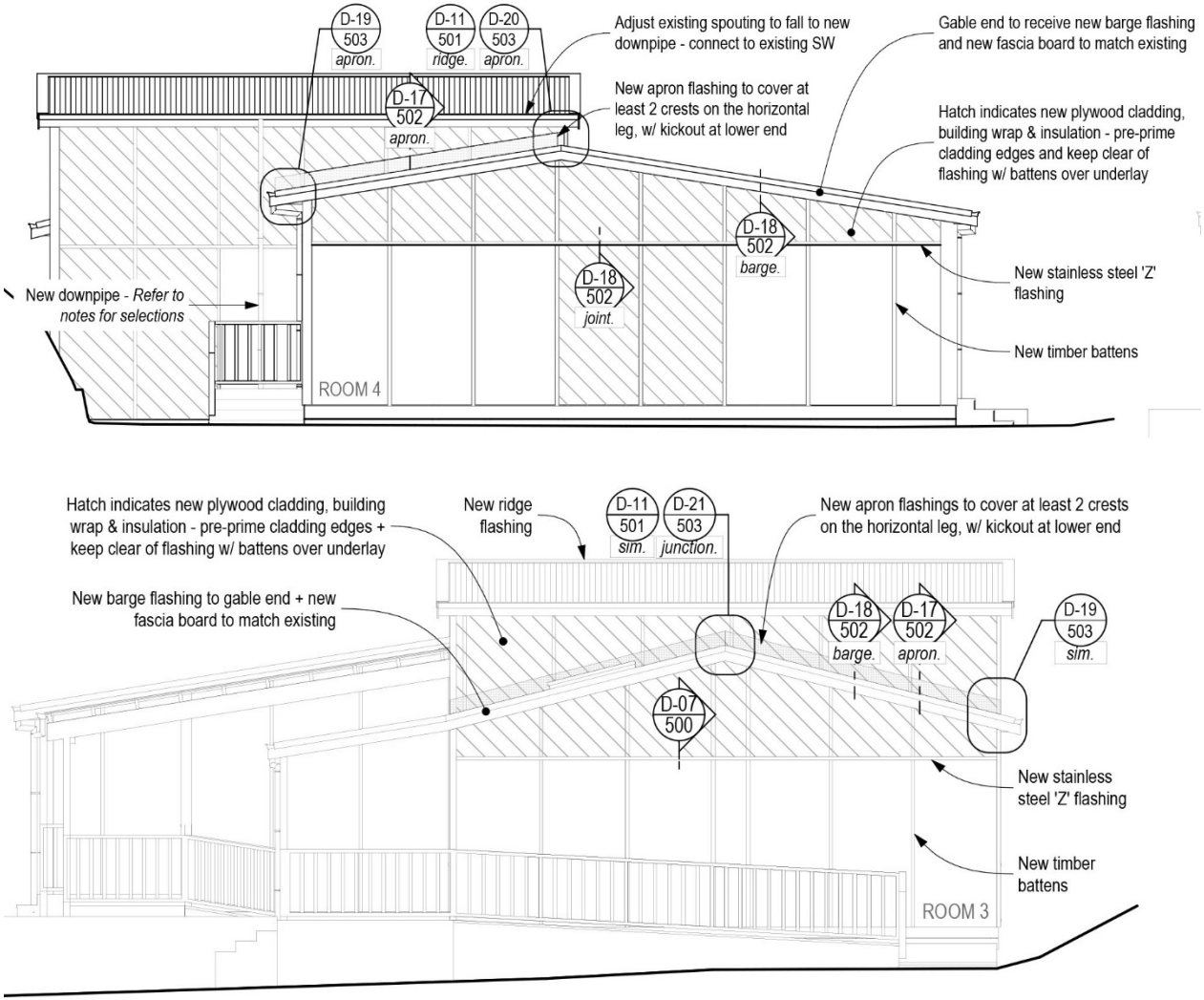

Fig. 5A Central Toilet Block – North, South, East Elevations respectively - proposed works – *200 series Architectural drawings*

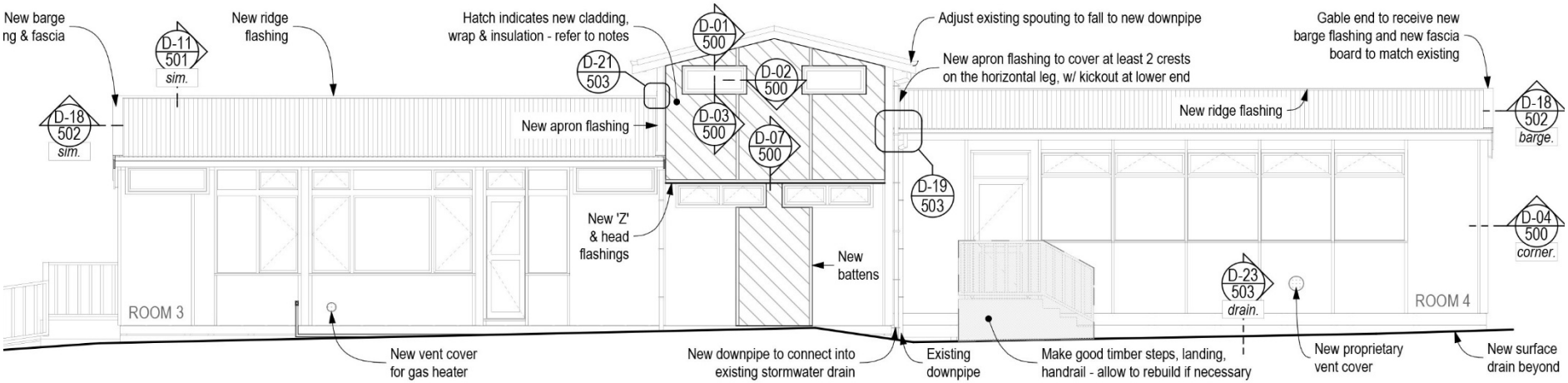

Fig. 5B Central Toilet Block – North, South, East Elevations respectively - proposed works – *200 series Architectural drawings*

Cladding – Central Toilet Block – N, E & S Elevations

Key Inspection Points	Typically Contractor / Sub-contractor		Typically Architect / Designer / Specialist		Comments (if required)
	Completed by (Name & signature)	**Date**	**Checked by** (as required) (Name & signature)	**Date**	
Removal of cladding, building wrap and insulation to selected areas, as well as horizontal 'Z' and relevant corner flashings					
Framing evaluation and mark up by Building Surveyor					
Timber replacement if necessary					
Installation of new wall insulation to exposed areas					
Installation of new building wrap and all laps fully taped, no wrinkles and all terminations and junctions taped off					
Installation of sill wraps, flashing tape as necessary					
Installation of new horizontal 'Z' & relevant corner flashings					
Installation of new cladding to selected areas as per drawings					
Installation of new vertical battens					
Paint finish					
Work completed as per plans					

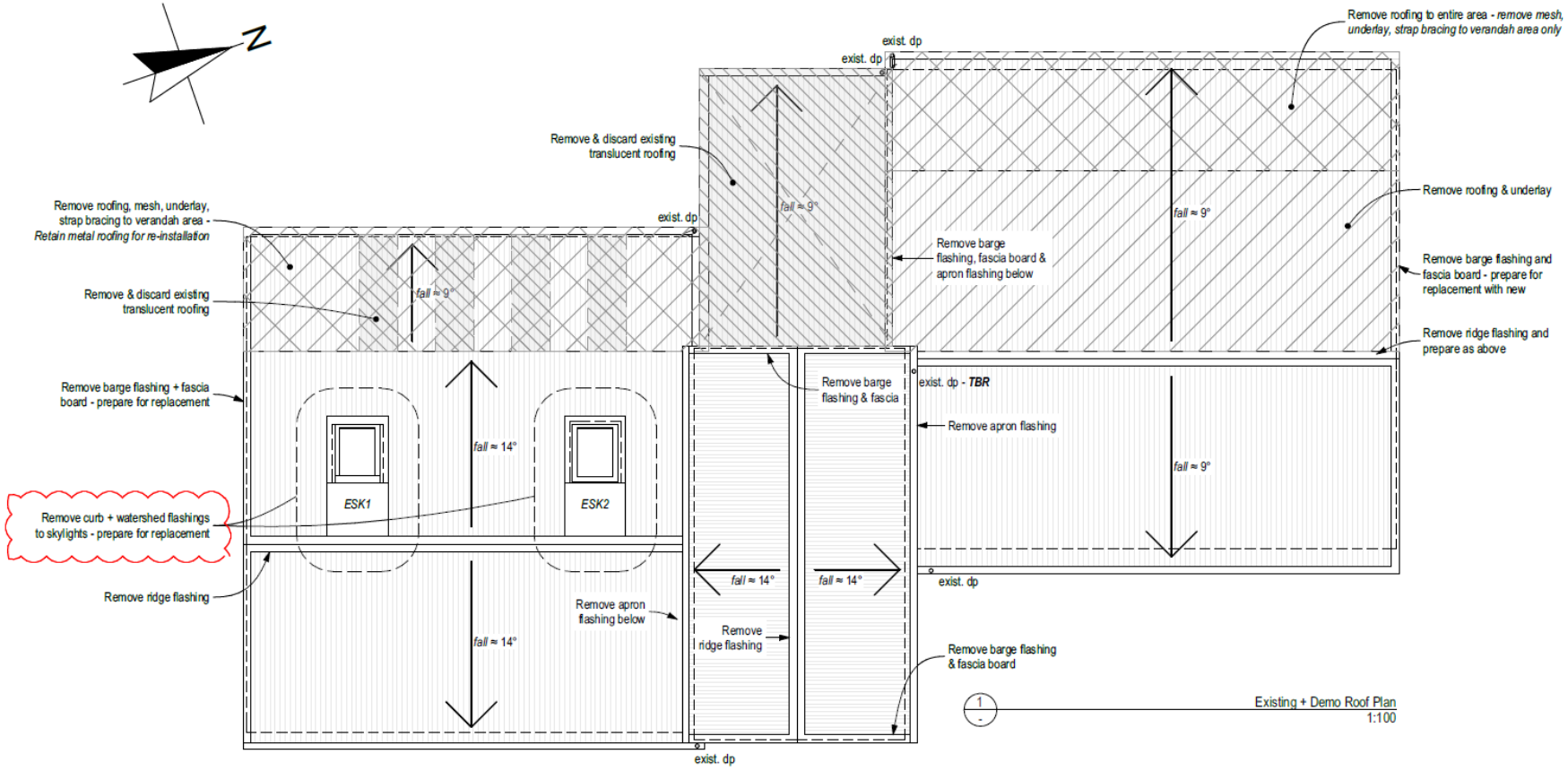

Fig. 6A Roof plans – Existing and proposed works – *120 series Architectural drawings*

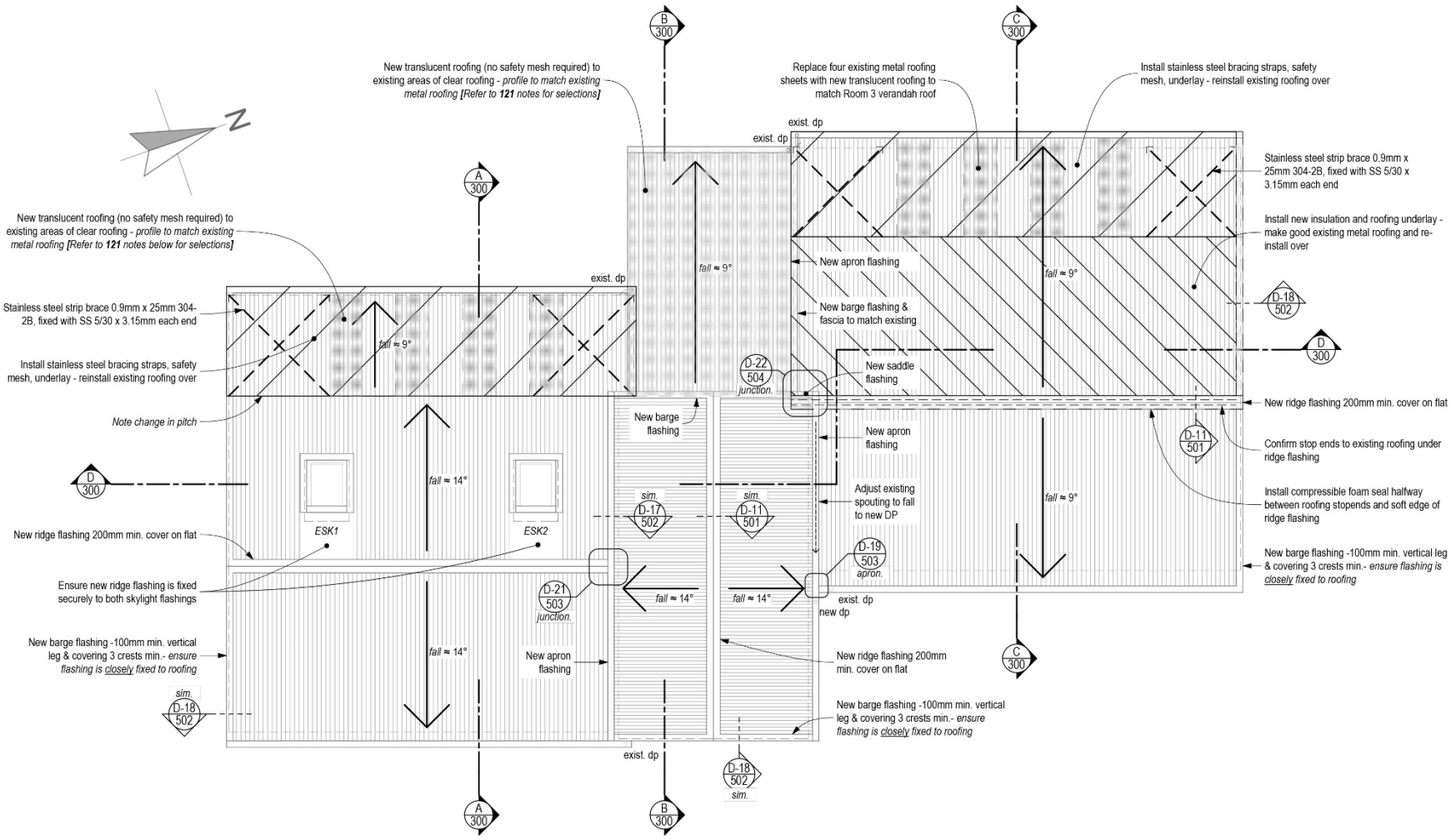

Fig. 6B Roof plans – Proposed works – *120 series Architectural drawings*

Roof plans – Existing and proposed remediation works

Key Inspection Points	Typically Contractor / Sub-contractor		Typically Architect / Designer / Specialist		Comments (if required)
	Completed by (Name & signature)	**Date**	**Checked by** (as required) (Name & signature)	**Date**	
Removal of all ridge, barge, apron and saddle flashings, including fascia/barge boards					
Removal of existing metal roofing, underlay, netting and straps to veranda areas					
Removal of existing metal roofing, underlay, insulation to part of Room 4					
Removal of cladding panel to upper North corner of Toilet Block West Elevation as drawn to expose and remove corner flashing at this junction					
Framing evaluation and mark up by Building Surveyor					
Timber replacement if necessary					
Installation of new insulation and underlay to affected Room 4 roof area					
Installation of new underlay, mesh, bracing straps to veranda areas					
Re-installation of existing metal roofing to affected Room 4 roof area					
Installation of new translucent roofing to existing and selected areas, and re-installation of existing metal roofing to remaining areas					
Installation of new cladding panel & new roof & apron flashings as per plans					
Work completed as per plans					

Appendix A

This section is used to hold copies of written and photographic records taken before, during and after completion of remediation works. The records comprise:

- Site visit notes and associated photos,
- Variations to remediation works including written instructions, supporting drawings, specifications and photographs, and
- Any required Building Consent Amendment/ Minor Variations that have been submitted and approved by the Building Consent Authority (BCA).