Jack's Mill School

Kotuku

CONSERVATION REPORT

For the Department of Conservation

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Report Prepared by

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for the

DEPARTMENT OF CONSERVATION
Greymouth / Mawheranui Area Office
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View of the school grounds, from the roof of the school.

Front cover photo: Jack's Mill School from the west, 2005.

Back cover photo: Fire surround in the bungalow, 2005.

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Peter Pan fountain in the middle of the school grounds.

1.0 INTRODUCTION

1.1 *Commission*

This report is the result of a commission from Nia Rowlands, Programme Manager Historic, Greymouth / *Mawheranui* Area Office, Department of Conservation, West Coast Conservancy. The Department required a conservation report for the two main buildings at Jack's Mill School (the school building itself and the bungalow), to include a background history and description of the place, an assessment of its significance and condition, with a schedule of repair work and an annual maintenance plan.

1.2 *Site Visits*

A visit was made to Jack's Mill School on 26 August 2005, and a survey of the buildings, including measurements and photographs, was undertaken.

Present was Marilyn Smithem, Secretary of the Kotuku Heritage Society, who showed me the buildings and the archives of the Society.

1.3 *Location*

Jack's Mill School is located at Kotuku, just off the road between Stillwater and Inchbonnie, near the northern end of Lake Brunner. It is approximately 30 kms from Greymouth.

Map reference is NZMS 262 Sheet 10 385 850.

1.4 *Ownership and Status*

Jack's Mill School Kotuku Historic Reserve, including land and buildings, is owned by the Crown and is administered by the Department of Conservation under Section 18 of the Reserve Act 1977 as an Historic Reserve. The legal description is Reserve 698 Block II, Brunner Survey District.

The Kotuku Heritage Society has been appointed as the administering body to control and manage the reserve under Section 29 of the Reserve Act.

The school grounds are registered by the New Zealand Historic Places Trust under the Historic Places Act 1993, while Jack's Mill School and the Bungalow are listed as heritage buildings on the operative Grey District Plan (registration number 7232) . Section 4.2 deals with the implications of these registrations.

2.0 HISTORY

2.1 *Outline History*

Jack's Mill School was opened in the small West Coast saw-milling settlement of Kotuku in c.1909.[1] Little distinguished Jack's Mill from any other small, rural school until 1935 when Edward Darracott was appointed headmaster.[2] He was an advocate of a new approach to education in New Zealand, which emphasised experiential learning tailored to the needs of individual children.[3] Darracott also believed the environment in which children were situated played an essential role in their personal and educational development.[4] Jack's Mill provided him with an opportunity to implement these philosophies.

According to Darracott, the school did not present an attractive proposition when he arrived. Its setting was comprised of "shingle pits, swamps and barren hillocks [with] an atmosphere gloomy and despondent." He described the school's modest garden – small square plots edged with timber – as resembling "nothing so much as a cemetery." The pupils, numbering 50 at this time, fared little better, expressing in his words "a complete lack of co-operation and of loyalty to the school – the latter especially being a fundamental to success." Darracott set about changing this situation by transforming the environment of the school. Though he clearly occupied a strong leadership role, hardly surprising given his strong views and position as headmaster, the children were encouraged to join him in this role and propel the learning in a direction that suited them.

Making over the garden was the first task, and a carnival was held in Kotuku to raise funds.[5] Not only did this achieve its immediate aim, it also drew the local community into the project. Another of Darracott's concerns was the positive involvement of parents and the wider community in schools, and events like this helped to foster such participation. He did have to work hard to secure the support of parents, and not all understood or approved of his teaching methodology, at least during this early career at Jack's Mill.[6]

Once the gardens had been completed and the centrepiece, a statue of Peter Pan, installed and lit with a floodlight at night, Darracott and the children turned their minds to a new project. In 1938 Darracott's philosophy of experiential learning was realised on a much more ambitious scale by the design, construction and furnishing of a small bungalow, a scaled-down version[7] of a conventional dwelling, by the senior pupils.[8] Much of the learning of traditional subjects taught at the school – English, mathematics, drawing and home economics – was subsumed into this project, which was intended to give the children the opportunity to use the skills derived from these subjects in a real life situation.

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1 Kotuku Heritage Society, 'Background Information of Jack's Mill School at Kotuku', (nd).

2 Edward Darracott, 'Jack's Mill School, Kotuku, 1935-1932', preface (nd).

3 Jack's Mill School Historic Area Assessment, New Zealand Historic Places Trust, 1998, p.4.

4 Darracott, 'Jack's Mill School', preface.

5 Darracott, p.4.

6 Ibid, pp.3, 7.

7 The bungalow was to be half-size, but when it was realised that one wouldn't be able to stand up inside, height dimensions were made three-quarter scale. Information from Bob Smithem, 17 Oct 2006, as told to him by Tom O'Brien.

8 Ibid, p.13.

The design for the bungalow, by a twelve year-old girl Rosemary O'Brien, was selected. Local businesses, and some further a-field, were approached to supply materials and fittings. The boys were responsible for constructing the house, while the girls designed and made the soft-furnishings such as carpet and curtains.[9] The children were also responsible for managing the financial accounts, all correspondence relating to the project, and arranging insurance for the building. Through contact with a Christchurch architect, appropriately sized bathroom fittings were acquired. The building, finished in 1940, appears to have been a sound structure, and is a remarkable testament, not only to Darracott's teaching style and approach to learning, but also the skills and ability of the children. No financial assistance was received from the government, aside from funding concrete for the garden paths in 1939.[10]

Darracott's educational philosophy yielded positive results. In 1936 all those who sat the national proficiency examinations passed, while one boy obtained a Christ's College scholarship.[11] Increasing numbers of people visited the school, including those in the educational profession.[12] Darracott was asked to write an account of the projects undertaken at the school by the Prime Minster Peter Fraser, while a display on the school was mounted at the 1940 Centennial Exhibition in Rongotai, Wellington.[13] The bungalow itself, once completed, was used for home economics lessons.[14]

Darracott left Jack's Mill in 1942 (to become principal at Tahuna Normal Intermediate in Dunedin [15]), and the school was closed in 1955.[16] The population of Kotuku was in decline, which naturally affected pupil numbers. The buildings and grounds were transferred to the Department of Education in 1968, and the school was used for accommodation when the Christchurch Teachers' Training College made fieldtrips in the area.[17] The College transferred other buildings onto the site, built the toilet block, and installed showers in the wing attached to the school building.

The College decided to relinquish their interest in the school in 1994, and the Ministry of Education accepted resposibility for the property in March 1995. It was then transferred to the Ngai Tahu Landbank managed by the Office of Treaty Settlements.[18] In August 2003, the Department of Conservation, in consultation with the Kotuku Heritage Society, investigated the possibility of securing the site in public ownership; in June 2004 it was purchased by DOC for $41,000, [19] and in July it was gazetted as an Historic Reserve to be managed by the Society.[20]

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9 Ibid, pp.13-17.

10 Secretary, Jack's Mill School Committee, to Minister of Public Works, 21/2/1939; Minster of Education to Minister of Public Works, 3/7/1939. AAQB w4073 291 31/847: Jack's Mill School – General, 1939-1967. Archives New Zealand (ANZ). Note that all government files relating to this building, aside from this one, are held by Archives New Zealand in Christchurch or Auckland, and for this reason were not able to be viewed.

11 Ibid, p.8; Keith Tonkin, 'Character Building', *North and South*, September 2002, p.23.

12 Darracott, pp.9, 21; *The Nelson Mail*, 23/2/1999, p.13.

13 This is the report used as a reference source here; Tonkin, 'Character Building', p.23.

14 *The Nelson Mail*, 23/2/1999, p.13.

15 Darracott, cover page.

16 *The Nelson Mail*, 23/2/1999, p.13.

17 Memorandum, 'Education Department: School Site, Kotuku', 31/8/1967. AAQB w4073 291 31/847 (ANZ); *New Zealand Gazette* 25/1/1968, p.76.

18 DOC file HHA-11-01-29 WC-3.

19 Ibid.

20 DOC file HHA-11-01-29 WC-1.

Over time the original school building and the bungalow had deteriorated. Ex-pupils, including the designer of the bungalow Rosemary O'Brien (now Knalmann), visited the school in 1990 and were prompted to take action to arrest its decline.[21] With the formation of the Kotuku Heritage Society, restoration work got underway in January 1994.[22]

Today the Society, as the administering body, manages the reserve, carrying out maintenance of the buildings and grounds. They formally open the place to visitors on Sundays and take guided tours, and when not open during the week, visitors are still welcome to inspect the grounds.

2.2 Sources

AAQB w4073 291 31/847: Jack's Mill School – General, 1939-1967. Archives New Zealand (ANZ).

DOC files HHA-11-01-29 WC-1 and WC-3

Darracott, Edward, 'Jack's Mill School, Kotuku, 1935-1932', (nd).

Jacks Mill School Historic Area Assessment, New Zealand Historic Places Trust, 1998

McGill, David, and Grant Sheehan, *Landmarks: Notable Historic Buildings of New Zealand* (Phantom House, Wellington, 2005)

New Zealand Gazette

The Nelson Mail

The Press

Tonkin, Keith, 'Character Building', *North and South*, September 2002

21 *The Nelson Mail*, 23/2/1999, p.13.

22 Ibid; *The Press*, 17/5/2004, p.A4.

View of the school from the road intersection to the north-west.

3.0 DESCRIPTION

3.1 *Description*

The historic site known as Jack's Mill School Kotuku Historic Reserve covers an area of approximately four acres. There are five buildings in the school grounds, as well as a number of mature trees, paths and statues.

The **School** is a timber-framed building, with corrugated iron roof and sheathing of rusticated weatherboards. It is rectangular in plan, with a gable roof running in the east-west direction. It contains two classroom spaces under the main roof, while a lean-to roof on the south side contains the entrance, cloakroom and the teacher's office at the western end. This lean-to was apparently a later addition, since the south elevation of the classroom block is clad in weatherboarding indicating that it was once an outside wall, and it has weatherboards of a different profile; the lean-to had been built by 1926.[23] The overall dimensions of the classroom block and lean-to are approximately 12.3 by 8.5 metres. A wing stretching out to the south contains storage spaces and shower rooms; this is a later building, now joined to the main school building.

The classrooms are lit by large double-hung windows (W6 in classroom 2 has been replaced with louvres, and two louvre windows have been installed in the east wall of classroom2). There are also windows (W21 to W26) opening into the lean-to

23 See the drawing in Appendix II of 1926 which shows the lean-to.

Main entrance, on the west boundary.

(cloakroom) area; these are quite different in design, having pivoted sashes above hopper-type sashes below. It appears that they were installed in 1926. There are also casement windows to the teachers room and the link.

The door to classroom 1 (D3) is an original four-panelled door, with a square panel above three tall narrow ones; that to classroom 2 (D1) has three by three glazed panes in the top panel. The door between the classrooms (D2) does not show on the drawing of 1926; this is a framed door, hung upside down, while the teacher's room door (D4) is ledged and boarded. The whole of the interior is lined in tongue and groove boarding, generally 150mm wide.

Heating was by open fire, with a fireplace in the north-east corner of each room. That in classroom 1 is still intact, as is the brick chimney; in classroom 2, the fireplace was replaced with a cast iron wood-burning stove, but this has now been removed. Water was collected from the roof and stored in tanks on the east side, as it is today.

Jack's Mill School appears to have survived in reasonably authentic form from the time of its construction, or at least since 1926. Its form at this time is shown in the G Penlington drawing of 1926, included in Appendix II. The service wing to the south was built later, and this in turn was joined to the school, with a portion of the south wall of the cloakroom taken out. This wing contains two shower rooms and a third (small space with a stove and hot water cylinder; it is of basic construction, with concrete floor and hardboard wall linings.

See the measured drawings in Appendix II for the layout and principal dimensions of the building as it is today.

View from the south-west, with entrance porch on the right.

Detail of windows, west elevation.

South and east elevations.

North elevation.

Staff room.

Cloakroom, looking west.

Cloak room, looking north-west.

Classroom 1:

looking north-west

looking north-east

looking south-east

looking south-west.

Classroom 2:

looking north-west

looking north-east

looking south-east

looking south-west.

Main Materials

Foundations	Split timber blocks
Cladding	Weatherboards, rusticated profile, 172mm cover (machined out of 200 × 25) Bevel-back weatherboards on south elevation, 105mm cover Cover boards 140 × 20mm
Roof	Corrugated galvanised iron Pvc gutters and downpipes (original would have been galvanised iron)
Flooring	Lino and carpet on tongue and groove boarding
Interior lining	Tongue and groove and V boarding, 150 and 170mm cover, some with edge bead Scotia moulding Sheet hardboard in cloakroom area in link to service wing (not part of the original building)
Windows	Double-hung windows Some louvre windows in classroom 2 Casement windows in link to service wing
Doors	Some framed, some ledged doors
Fireplace Classroom 1	Brick fireplace and chimney

Bungalow

The bungalow is set amongst trees towards the south side of the school grounds, a very neat little building and in good condition. It has an unusual plan: two doors open from the verandah on the east side, one at the end of the verandah opens into the bedroom which leads through to the bathroom (with bath and handbasin); while the other opens into the living room, which leads through to the dining area and kitchen. The dining room has a glazed door back to the outside. The facilities are almost complete, with everything a small cottage would need for living with the exception of a toilet. Dimensions and sizes are reduced to the three-quarter scale for the heights and half scale for the plan dimensions, appropriate for young children.

Architecturally, it is a very good example of the bungalow style, exhibiting many of the distinctive features of the style. These include bevel back weatherboards and casement windows; the flared skirt of the building around the foundations has been replaced.[24] Inside, the tapestry brick fire surround, glazed cupboard doors, rimu joinery and panelled doors are distinctive features of the period, and are executed to a high standard. It is

24 The bungalow was repiled (in the 1990s) by Tommy O'Brien. It is presumed that the present baseboards were fixed at that time.

stylistically very much up to date with house design in New Zealand at the time.

Water was collected from the roof and discharged to a tank, on a tank stand, on the south side. The original tank would have been galvanised iron, and is now modern pvc. There is a hot water cylinder tucked in beside the fireplace (accessible from the bathroom), but whether this was heated from the fire I couldn't ascertain. Hot and cold water was piped to the kitchen and bathroom fittings. Cooking was provided for with a scaled down electric cooker, but the alcove for this on the west side (protruding beyond the line of the wall) is presently empty.

With the exception of the baseboards and the water tank, there appears to have been very little external alteration of the bungalow. Internally, new wallpapers were hung in 1994, although according to Marilyn Smithem, the wallpaper in the lounge is about 35 years old.

Main Materials

Foundations	Treated timber blocks
Cladding	Weatherboards, bevel back profile, 125mm cover (machined out of 150 × 25) Corner boards, 95 × 22mm, with scribers Facings, 90 × 20mm, with scribers
Roof	Corrugated galvanised iron Pvc gutters and downpipes (original would have been galvanised iron)
Flooring	Rugs on 135 × 20mm tongue and groove boarding
Interior lining	Sheet material (hardboard?) with wallpaper Vertical tongue and groove boarding Skirtings, 140 × 22mm, bevelled top edge Architraves, 67 × 20mm Quarter round cornice moulding
Windows	Casement sashes
Doors	Panelled doors
Kitchen	Timber bench top Plywood bins
Fireplace	Tapestry brick, plain brick chimney Tiled hearth
Electrical	Electrical wiring throughout (has not been in use since 1990)
Plumbing	Water collection pipework in pvc Hot and cold water plumbing not functioning

North elevation.

East elevation, with verandah and front door.

View from the south-west.

Detail of fireplace, built in tapestry bricks.

Built-in seat in the living room.

Folding table and stools in the dining area.

Bathroom.

MAJOR DONATIONS OF MATERIALS FOR THE MINIATURE BUNGALOW IN 1938/40.

Timber for project.	Jack Bros.Ltd. Sawmillers Kotuku.
Galvanised spouting.	Jackson and McGirr.Plumbers. Greymouth.
	Mr. Tom McKay Hardware Merchants. "
Downpipe. Galvanised.	Mr Frank Costello Plumber. Greymouth.
Galvanised iron for roof.	Ashby Bergh Ltd. Hardware Merchants. Greymouth.
Lead Head Nails and Lead flashing for around the chimney. and lead edge flashing.	N.Z. Pipe Co. Gladstone.
Bricks for chimney.	Sullivan and Murphy Brickworks. Christchurch.
Silver pine posts for foundation.	Mr. Martin. Farmer. Kotuku.
White firebricks.	Mr. Jack .Jack Bros. Sawmill. Kotuku.
Tapestry bricks for Fire surround.	Murphy and Goy Christchurch.
Irom Arch for fïresurround.	Mr. NestorBlacksmith Jack Bros Mill.
Outside doors.	C McCulley & Co Christchurch.
Inside doors.	Pennicuick and Brain. Christchurch.
Windows.	Butler Timber Co. and Keighley & Co. Christchurch.
Lead Head nails.	Mrs. Mcdougall. Greymouth.
Plaster Wall Board.	Mr. Jack Porter. Greymouth.

Brick Layers. Jack Johns. Tom O'Brien and Albert Rowse.
Fire surround brick work. Albert Rowse.
Chimney designer. Mathew Joseph.
Senior boys carpenters. Tom O'Brien and Albert Rowse. assisted by Form1 and 2
Supervising carpenter. Mr. Osker Hay. Mill carpenter Jack Bros. Kotuku.
Supervising architect. Mr. Trengrove. Christchurch.
Headmaster in charge. Mr. E.R. Darracott.

All interior fittings. Electrical and Plumbing plus blinds, curtains wall paper. paint for interior and exterior,kindly donated by various firms in Greymouth and Christchurch. Custom built wash hand basin, sink, stove hot water cylinder, Hot back fire grate, bath,and miniature bed and duchess as well as small table and chairs, ornaments, telephones, cooking utensils crockery, knives forks spoons etc etc. All donated by parents, visitors and firms. At no stage was the Canterbury Education Board involved with financial help or with the upgrading of the school grounds from a gravelpit. Every item donated.

MINIATURE BUNGALOW. CARPET PROJECT.

Living -room carpet. winning design .Rosemary O'Brien. Form 11.
Mr. Ewen Manager of Sargood Son and Ewen donated the wool.

Bed-room carpet. winning design . Helen Mears. Form 11.
Mr Lyons. Manager of Mosgiel Woollen Mills donated the wool.

The carpets were made with a hollow brass needle, five inches long through which we threaded a single strand of wool through the sugar bag sacking. Sacking was sewn together by one of the parents, Mrs.J.Jack and supported on frames made up by the boys. All girls and boys in the senior room aged between 9 and 13 years helped over two terms to complete both carpets.
The living-room carpet was 7ft by 6ft and the bed-room carpet 2ft 9ins by 2ft 5ins.
The large carpet was put on display at the I940 Centennial exhibition in Wellington, along with the miniature bed and photos of the Miniature bungalow project.

It is a shame the large carpet was water damaged in the bungalow. However we are delighted that these still exist as all other furniture and fittings including the custom built stove were removed over the years.

All replacement furniture supplied by expupils Tom O'Brien and Rosemary Knalmann(O'Brien) architect for the original bungalow design.

Three Other Buildings

There are three other buildings on the site. The first is the **toilet block,** a basic structure of timber framing clad in lapped weatherboards, with a single-pitched roof in corrugated iron. It has girls and boys entrances at either end, with two toilets and handbasin for the girls, and two toilets, stainless steel urinal and handbasin for the boys. The floor is concrete, the overall footprint being 8.6 × 2.950 metres. Effluent discharges to a septic tank to the east.

A modern teaching **schoolroom** is further to the south. It measures 14.9 × 6.4 metres, and is built of timber framing with folded metal 'weatherboards'. It has a trussed roof, of gable form, with corrugated iron cladding. There is one large space inside, with a kitchen partitioned off at the east end. This building was moved onto the site by the Teacher's Training College.

Finally, there is an old **shed,** roughly framed in timber and clad on walls and roof in corrugated iron. It was the tool shed, added to the shelter shed in the late 1930s and used for the storage of gardening tools. The corrugated iron from the shelter shed, which had collapsed by the 1990s, was used to close in the east end of the tool shed.[25] This building should be looked after (simply repaired and painted as the need arises) as a part of the historic school complex.

The Grounds

The grounds are notable for a number of mature trees, six of them listed on the Grey District Plan. These are set within a formal layout of paths that form a geometric pattern in the main part of the grounds between the school and the western boundary fence at the road edge. A square with a low hedge is the centrepiece of the layout, with a flagpole and Peter Pan statue forming the focus of the grounds.

3.2 Condition

The condition of both the school and the bungalow is generally good, although there are some repairs needed to both buildings. Recommended repair work is set out in Section 5.

School

Observed defects are as follows:

Foundations

Foundations are timber blocks, some now rotted below ground level.

Exterior Cladding

West elevation, rough patches to weatherboarding, also metal soakers and flashings, reasonably sound but would benefit from some repairs.

South elevation, rotted weatherboarding (see drawings). (The valley gutter above has clearly been the source of timber decay in this area; it should be checked and cleared regularly.)

25 Information from Bob Smithem, 17 Oct 2006.

Toilet block, from the south.

Toilet block, from the east.

Classroom, north elevation.

Interior of classroom, looking east.

Corrugated iron shed, from the east.

Remains of the original boys' toilet.

East and north elevations, rough patching of weatherboarding but reasonably sound.

Exterior paintwork in reasonable condition; repainting not required for say five years.

Joinery

In good condition, although sashes in need of easing.

The louvre window W6 on the north wall is not original and could be replaced with a matching one. (Louvre windows on the east wall are less visible and could be retained.)

Roofing

Corrugated iron roof sound, but in need of cleaning and painting

Interior Finishes

Perhaps in need of redecoration, but not urgent.

Electrical

Electrical installation appears sound, but should be checked by a registered electrician if this hasn't been done within the last three years.

(Also, the Peter Pan light in the garden is not functioning.)

Plumbing

Showers, wash handbasins etc, have been unused for some time, and appear to be in need of overhaul.

The condition of the water heater is not known; it should be checked by a plumber.

Fire Protection

There is no provision for fire protection.

Heating

Classroom 2 has lost both its original fireplace and chimney, and the later (Romesse?) wood-burning stove.

Bungalow

Observed defects are as follows:

Foundations

Foundations are timber blocks, apparently replaced in the 1990s and now sound.

Exterior Cladding

Original baseboards (vertical boards with an outward flare) have been replaced with horizontal boards set flush. The original shape can be seen in profile in the concrete steps. The original detail of these boards should be re-instated.

Exterior paintwork in good condition; repainting not required for say five years.

Joinery

Windows, and drawers in the kitchen need easing so that they open/slide easily.

Roofing

Corrugated iron, flashings etc in good condition, but valley gutters blocked by leaves (a constant problem given the overhanging trees).

Interior Finishes

Perhaps in need of redecoration, but at present recommend cleaning only of paintwork to preserve the existing finishes and colours. When the time comes to re-wallpaper, papers matching the original designs should be used.

Borer observed inside, in door frames, architraves, kitchen cupboards etc.

Electrical

Electrical wiring has not been in use since 1990, and is deemed unsafe.

Stove in the kitchen missing, very unusual in being a three-quarter size model.

Plumbing

Hot and cold plumbing to bathroom and kitchen fittings is not functioning.

The water tank is presently a modern pvc tank; the original would probably have been corrugated iron.

Fire Protection

There is no provision for fire protection.

Grounds

The grounds were not specifically included in the survey, but some comments on possible work are included in Section 5.13. The grounds are generally very neat and tidy.

3.3 *Assessment of Significance*

This section summarises the cultural heritage values of the Jack's Mill School. Assessment criteria are those used in the Historic Places Act, but are grouped under the four headings of historic, social, aesthetic and scientific value as recommended in *Guidelines for Preparing Conservation Plans* (NZHPT, 2000).

Jack's Mill School has important historic and social significance in the context of its time and place, and scientific and aesthetic values are also significant. This is confirmed by the registration of the place under the Historic Places Act, by the listing of two buildings on the Grey District Plan, and by its designation as an historic reserve by the Department of Conservation.

Historic Value

Values associated with particular events or uses that happened at the place, and which have importance for their impact on the community.

Jack's Mill School, the buildings and the grounds, have historic significance for their evocation of a remote country school from the first half of the 20th century. More

particularly, they are important because of the educational principles espoused by Edward Darracott ,a headmaster of the 1930s, whose energy and innovative educational ideas led not only to the creation of landscaped grounds, which endure today, but also the construction of a unique building in New Zealand, a three-quarter size bungalow.

The place has some national significance as an exemplar of the educational innovations of the late 1930s, after the election of the first Labour Government in 1935, with Edward Darracott being asked by the Prime Minster Peter Fraser for an account of the projects undertaken at the school, and with a display on the school being mounted at the 1940 Centennial Exhibition in Wellington. Of further interest is the fact that such innovation came from this small and remote West Coast timber mill school.

The use of the buildings by the Christchurch Teachers Training College adds another, although small, dimension to the historic value of the place.

The buildings two most important buildings are on their original sites, and the setting helps in an understanding of typical educational buildings of the first half of the 20th century, and of the special circumstances of the teaching at the school in the 1930s. The place has a high level of authenticity.

Social Value

Values associated with the use of the place; what it means to people, and the spiritual, artistic, traditional or political values that the place may embody.

The buildings have social significance for the role they have played in the lives of the children of the district through nearly 50 years. Many former pupils are now scattered around the country, and remember fondly their time at the school. For those at the school in the 1930s, and who helped with the development of the grounds and the construction of the bungalow, the place is very special, as these people were part of a daring and innovative educational programme. As one former pupil said: 'Mr Darracott changed us. Instead of a forgotten country school we became right up to date. Visitors came from throughout the world to see the bungalow and the educational lessons it taught us.'[26]

The wider community was also involved in the bungalow project, in donating time and materials, so that the social value of the place extends well beyond the interests of former pupils.

The place serves a useful social purpose today, in being opened as an historic site for people to visit and learn from, and for local functions. 'When the elm is in leaf, locals hold weddings and family reunions in the grounds. It's much more to this small community than just an old schoolhouse'.[27]

Aesthetic Value

Values associated with the formal qualities of the fabric of the place and its setting; with style, form, scale, colour and texture, and with ones emotional response to the aesthetic qualities.

The school building has some architectural and aesthetic significance as a building fit for its purpose, typical of its period and use. The high ceilings, the light from the large

26 Mrs Knalmann, quoted in the *Nelson Mail*, 23 February 1999.

27 Robert Smithem, Chairman of the Kotuku Heritage Society, quoted in Independent Newspapers, 10 June 1999.

windows, the controllable natural ventilation, and the all-timber construction are features that lift the building above the ordinary, and give it some modest architectural distinction.

The bungalow has very special architectural significance, being a small scale version of a typical house of the 1930s, complete in all its details. Built by the school pupils themselves, it displays ingenuity, care and innovation, and it remains today with very little modification over its 65 year life. It is the manifestation of an innovative educational programme that flourished at Jack's Mill School in the 1930s.

Scientific Value

Values associated with building materials and technology, with structure and services, and with evidence of past use, especially as may be revealed using archaeological techniques.

Jack's Mill School has important technical value, as a study of its fabric can reveal all the details of its original materials and construction. This in turn provides knowledge of building technology in remote locations at the beginning of the 20th century. Window and door joinery are elements of particular technical interest. The school is an authentic building of the period, retaining a significant amount of original fabric.

The bungalow has the same technical value, enhanced somewhat by the most unusual circumstance of it being designed and built by young school children, and by all elements being at three-quarter scale from the normal. The building is unique because of its scale (as far as is presently known) and this adds rarity value to its special attributes.

Particular Elements of Significance

Following is a list of original or early fabric, that which contributes most strongly to the cultural heritage value of the buildings. This fabric should be retained to the greatest extent possible in any repair work that is carried out.

Original or Early Fabric, School

Foundations and floor framing
Wall framing, all four walls.
Wall sheathing, door and window joinery.
Roof framing.
Corrugated iron roof cladding.
Chimney, fire surround, Classroom 1.
Interior linings.

Original Fabric, Bungalow

Floor framing.
Wall framing, all four walls.
Wall sheathing, door and window joinery.
Roof framing.
Corrugated iron cladding.
Chimney, fire surround, tiled hearth.
Interior linings.
All interior fittings – cupboards, window seat, folding table, stools etc.
Plumbing fittings – bath and wash hand basin.

4.0 FACTORS INFLUENCING CONSERVATION

Various factors will influence decisions as to how the Jack's Mill School Historic Reserve will be conserved and managed. These are set out below.

4.1 *Owner's Objectives*

The Department of Conservation has, among other functions, that 'to promote the benefits to present and future generations of the conservation of … the historic resources of New Zealand' (Section 6(c) of the Conservation Act 1987). The Department's Mission Statement is 'To conserve New Zealand's natural and historic heritage for all to enjoy now and in the future'.

The Kotuku Heritage Society manages the Jack's Mill School Kotuku Historic Reserve and the protection of heritage values is paramount in their management regime.

The Society aim to repair and restore the buildings to a high standard, and open them to the public so they can be visited and enjoyed.

4.2 *Heritage Value*

Jack's Mill School was registered on 29 August 1998 as Category I under section 22 of the Historic Places Act 1993. This means that the place is of 'special or outstanding historical or cultural heritage significance or value'.

Such registration is recognition of heritage significance, and it does not of itself impose legal obligations on an owner. Registration usually encourages listing of the building on the relevant District Plan, where some protection mechanisms are usually in place. (See below.)

There is provision in the Historic Places Act for heritage covenants to protect historic buildings (not just registered buildings). Covenants are agreed between the owner and the Trust, and they are registered on land titles. They bind future owners to abide by their conditions, which usually relate to maintaining and ensuring the long-life of the building being protected.

No such covenant is in place, nor is one relevant in the case of Jack's Mill School, since the Department is committed to its long-term conservation.

It is unlikely that the archaeological provisions of the Historic Places Act 1993 will be relevant in carrying out work on the site, since there is no pre-1900 activity known about. The Act defines an archaeological site as any place that was associated with human activity before 1900, that can be investigated by archaeological methods to provide evidence of the history of New Zealand. Any person intending to undertake work that may damage, modify or destroy an archaeological site must first obtain an authority from the Historic Places Trust for that work.

In terms of the District Plan, maintenance and repair are allowed, while alterations would require a resource consent application. This would be referred to the Historic Places Trust for assessment.

4.3 *Building Act 2004*

The Building Act 2004 came into effect on 31 March 2005, superseding the Building Act 1991. The following matters are of particular relevance in managing and using existing buildings.

Repair and Maintenance (Schedule 1 Exempt Building Work)

A building consent is not required for 'any lawful repair and maintenance using comparable materials'. However, all work is required to comply with the Building Code.

Principles to be Applied (Section 4)

Assessment of building work subject to the Act is required to take into account, amongst others things, 'the importance of recognising any special traditional and cultural aspects of the intended use of a building', and 'the need to facilitate the preservation of buildings of significant cultural, historical or heritage value' (sub-sections d and l); also 'the need to facilitate the efficient and sustainable use in buildings of materials and material conservation' (sub-section n).

Historic Places (Section 39)

When a territorial authority receives an application for a project information memorandum for a registered historic place, historic area or wahi tapu, it must inform the New Zealand Historic Places Trust.

Building Consents (Section 40 - 41)

It is an offence to carry out building work not in accordance with a building consent (except for exempted buildings in Schedule 1 of the Act). Section 41(c) allows for urgent work, such as emergency repairs, to be carried out without a consent, but such work is required to obtain a Certificate of Acceptance directly after completion.

Compliance Schedule and Warrant of Fitness (Sections 100 – 111)

A compliance schedule is required for a building that has specified systems relating to means of escape from fire, safety barriers, means of access and facilities for use by people with disabilities, fire fighting equipment and signage.

Such systems must be regularly inspected and maintained, and an annual building warrant of fitness supplied to the territorial authority. The purpose of the warrant of fitness is to ensure that the systems are performing as set out in the relevant building consent. A copy of the warrant of fitness must be on public display in the building.

Alterations to Existing Buildings (Section 112)

Alterations to existing buildings require a building consent, which will be issued by the consent authority if they are satisfied that after the alteration the building will 'comply, as nearly as is reasonably practicable and to the same extent as if it were a new building, with the provisions of the building code that relate to:

(i) means of escape from fire; and

(ii) access and facilities for persons with disabilities, and

continue to comply with the other provisions of the building code to at least the same extent as before the alteration'.

Alterations that do not comply with full requirements of the building code may be allowed by the territorial authority if they are satisfied that:

'(a) if the alteration were required to comply … the alteration would not take place; and

(b) the alteration will result in improvements to attributes of the building that relate to (i) means of escape from fire; or (ii) access and facilities for persons with disabilities; and

(c) the improvements referred to in paragraph (b) outweigh any detriment that is likely to arise as a result of the building not complying with the relevant provisions of the building code.'

Similar provisions apply to the change of use of a building.

Access (Sections 117 – 120)

In carrying out alterations to any building 'to which members of the public are to be admitted … reasonable and adequate provision by way of access, parking provisions and sanitary facilities must be made for persons with disabilities'.

Dangerous, Earthquake-prone and Insanitary Buildings (Sections 121 – 132)

A dangerous building is one likely to cause injury or death, whether through collapse or fire. An earthquake-prone building is one that will have its ultimate capacity exceeded in a moderate earthquake and would be likely to cause injury or death. An insanitary building is offensive or likely to be injurious to health because of its condition or lack of appropriate facilities.

A territorial authority can, if it judges a building to be dangerous, earthquake prone or insanitary, require work to be done to reduce or remove the danger or to render it sanitary.

4.4 *Appropriate Standards*

The most appropriate conservation standards for use in New Zealand are those set out in the *ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value*. (ICOMOS stands for the International Committee on Monuments and Sites.) The charter has been formally adopted by the Department of Conservation, the Historic Places Trust and a number of territorial authorities. It is recommended that all relevant requirements of the *Charter* be followed.

Important conservation principles contained in the charter are explained below. Note that some may not be fully relevant in the case of Jack's Mill School.

Carry Out Regular Maintenance

Regular maintenance is essential to the long life of heritage buildings. If maintenance is not carried out on a planned basis, repairs become progressively more difficult and expensive, and fabric of heritage value can be lost, thus diminishing the significance of the building. A well maintained building will survive the effects of earthquakes, storms and

other natural disasters better than one that is poorly maintained.

Repair Rather than Replace
When repairs are necessary, cut out and replace only decayed material. It is better to have fabric that is worn and carefully patched than modern replica material, however faithfully copied.

Repair in Compatible Materials
In carrying out repairs, materials matching the original should generally be used if they are available. Work to a higher technical standard is good practice in some circumstances, and may be required by the Building Code.

Restore with Care
Restoration of lost features should be carried out only if there is clear evidence of the original form and detail. Such evidence could come from original drawings, early photographs or elements relocated to other parts of the building. Detailed examination of the fabric of the building can often reveal information that is not available from other sources.

Keep Change to the Minimum
Where additions and alterations are carried out to fit a building for a new use, change should be the minimum necessary to suit the new functional requirements. There should be the least possible loss of building fabric of heritage value.

Find a Compatible Use
Ideally, the original use of a heritage building should be continued. As this is often impracticable, a compatible and economically feasible use should be found. A compatible use is one that can be incorporated into the building without excessive change, and without significant reduction of heritage significance.

Make New Work Reversible
Where possible, new work should be reversible, so that change back to the present form remains a possibility should this be required in the future. This can sometimes be difficult, particularly with major work such as earthquake strengthening. Recycle or store early fabric that has to be removed, and make new junctions with the old fabric as lightly as possible.

Respect Alterations
Additions and alterations to heritage buildings can have historic or aesthetic significance in their own right. Returning a building to its original form is recommended only when the significance of the original structure is outstanding and later alterations have compromised its integrity.

Distinguish New from Old
Growth and change are natural parts of the life of any building. Major changes, especially additions, should be able to be seen as such so as not to confuse the new with the old.

Compatible design, where the new does not dominate or conflict with the old, should be the aim.

Document Changes

Changes should be fully documented in drawings and photographs, with the latter taken before, during and after conservation work. New materials should be identified by date stamping.

Respect the Patina of Age

Patina, the visible evidence of aging, is something to protect carefully. Buildings should look old as they mature, as age is one of the qualities we value them for.

Respect the Contents and Setting

The contents and setting of a heritage building can often have heritage value in their own right and both should be regarded as integral with the building.

5.0 REPAIR WORK REQUIRED

This section schedules the work required to put the school and bungalow in sound condition. Influences set out in the previous section are taken into account, and the repair work recommended meets the requirements of the *ICOMOS Charter*.

It should be noted that all accessible parts of the buildings were inspected, and that uninspected parts cannot be guaranteed to be free of defects. This applies particularly to the inner reaches of the sub-floor space of the school, and the timberwork of the roof. Inspection of these spaces may be possible when opening up for other work.

Some of the recommended work will require detailed documentation before it is carried out.

5.1 *Foundations*

The timber foundations of the school building should be replaced.

Where visible, the sub-floor framing timbers are in sound condition, at least partly due to good ventilation. However, sub-floor timbers would be checked and repaired as necessary when the repiling is undertaken.

Work Required

Open up the sub-floor space by carefully removing baseboards; lift floorboards to gain access to the sub-floor space only if absolutely necessary.

Carry out the repiling of the building, replacing the existing split totara piles with new treated timber foundations on concrete footings. Level the building, but only if this does not damage joinery or linings. All new work to be in accordance with NZS 3604 Code of Practice for Light Timber Framed Buildings.

Carry out repairs to sub-floor framing if any defects such as decay of timber is uncovered.

Carefully make good to all timberwork.

New Materials

Concrete	20mPa
Piles	Radiata pine, treated H5
Sub-floor framing	Radiata pine, treated H3.2, sizes and spacings to match existing

Repair specification, foundation plan and building consent is required for this work.

5.2 *Exterior Cladding*

Repairs are needed to the exterior cladding of the school. The bungalow cladding is in good condition, but it is recommended that the baseboards be re-instated to the original detail.

Work Required: School

Remove all galvanised iron patches from weatherboards and window facings.

Carry out repairs to the exterior cladding, as marked up on the drawings, revealed by the removal of the patches, and as may be found during further work on the building. Make tight butt joints with carefully aligned boards.

Wherever weatherboards are replaced, check the framing behind, treat timber and repair as necessary.

At the time of the next repainting, when scaffolding would be erected around the building, check all cladding, and carry out any necessary repairs.

Work Required: Bungalow

Remove baseboards.

Fix new baseboards according to the evidence on the building and early photographs.

New Materials

Weatherboards	Radiata pine, clears or finger jointed, treated H 3.1, profiles to match existing.
Baseboards	Radiata pine, clears or finger jointed, treated, H 3.1 200 × 25, 20mm gap between each board, fixed vertically, following the flared shape of the original boards as shows on the concrete steps.

Building consent not required.

5.3 *Joinery*

The doors and windows to both buildings are in good condition, with minor repair work needed to ease doors and windows.

Work Required

Ease, adjust and repair all doors and windows before the next painting. Remove window sashes as necessary, clean off old paint to ensure easy operation, and rehang on new sash cords or hinges as necessary.

Clean and oil all hardware to ensure easy operation.

Restoration

Window W6 in Classroom 2 could be replaced with a new matching window (to match W7) if desired.

Building consent not required.

5.4 Roofing

The roofing on both buildings, corrugated iron, is in condition. Cleaning and painting will be required in due course, and this is covered in Section 5.6 Painting.

The gutters and downpipes are galvanised iron and in good condition. The system of stormwater disposal is not known, but it is probably to soak pits, and there is no particular information that they do not work.

Work Required

A roofer to go over the whole of the roofs of both buildings, checking fixings, laps and flashings. Carry out any necessary repairs.

Clean and paint both the roofs, see Section 5.6 Painting.

Check the discharge of the stormwater to soak pits.

Restoration

Install new corrugated iron rain water tank to the bungalow, with new pipe from the gutter.

Building consent not required.

5.5 Interior Finishes

The interior linings of both the school and bungalow are in good serviceable order; surfaces are in need of re-decoration, but this is not urgent. Painting is covered in the following section 5.6.

It is recommended that the interior of the bungalow not be painted, so that the existing finishes and colours are preserved, and that it be simply cleaned.

Work Required: School

As the new use requirements dictate, paint the interior of the school; see section 5.6 Painting.

Colours are to chosen following investigation of the original or early colours.

Work Required: Bungalow

Clean interior surfaces. Use damp cloths on painted surfaces; if a cleansing agent is needed, use a mild detergent.

New Materials

Triton X 100, a mild non-ionic detergent available from:

Conservation Supplies
P O Box 646
WARKWORTH

Phone 09 425 7380
E-mail jamorrison@xtra.co.nz

Carry out borer treatment of affected timbers, see Section 5.10 Timber Treatment.

Building consent not required.

5.6 *Painting*

Exterior paint coatings are in reasonable condition, but allowance should be made to re-paint within the next 5 years. Interior painting of the school could be left longer if required, and as mentioned above, it is recommended that the interior of the bungalow not be painted.

Specification notes for the next repaint are provided below. The maintenance plan deals with regular washing and touch-up of the paint, to ensure that new coatings have as long a life as possible; a ten year cycle of exterior repainting should be achievable.

Work Required

Clean down and paint the whole of the exterior cladding and joinery of all buildings according to the requirements of *NZS 7703 : 1985 The Painting of Buildings.*

Preparation should be by washing and hand sanding only; machine sanding should not be used as this affects the surface finish of the timber.

Naked flame or hot air stripping must not be used under any circumstances, as the fire risk associated with these methods is too great.

Note that in preparing surfaces for painting, old lead-based paint coatings may be disturbed. In this case, follow the safety measures promoted by the Department of Labour (see *Repainting Lead-Based Paint*, Department of Labour, May 1994). If lead is present, wet sanding is the preferred method of preparation.

New Materials

For **exterior weatherboarding and roofing**, prime and two coats of waterborne high gloss.

Resene spec 2e 1.1 or similar.

For **joinery** (doors and windows), prime, undercoat and finishing coat of high gloss enamel.

Resene spec 3e 2.1 or 3e 1.1 or similar.

For **interior timberwork,** prime and two finishing coats of waterborne semi-gloss.

Resene spec 2i 1.2 or similar.

Colours

Exterior colours should be carefully chosen, possibly copying original colours; these should be investigated before the nest re-painting is commissioned. All corrugated iron roofs, and the corrugated iron of the shed, should be red oxide, which is almost certainly the original colour.

Up to five exterior colours should be allowed for the school, demarcated as follows:

Colour 1 Red Oxide	Roof, and other corrugated iron
Colour 2	All weatherboarding
Colour 3	Corner boards, barge and cover boards, baseboards
Colour 4	Window and door frames incl sills
Colour 5	Doors and window sashes (moving parts)

Interior colours should be investigated too, and this may influence the choice of colours when interior spaces are due for painting.

The bungalow appears to retain its original colour scheme, and this should be followed with future painting of this building.

Investigation of original colours required; building consent not required.

5.7 Electrical

The electrical wiring throughout the school appears to be in sound condition, but should be checked, while in the bungalow it is presumed to be unsafe.

Work Required

Check the safety of the electrical installation, including the switchboard and wiring in all buildings on the site. External wiring to the Peter Pan statue should be included. (Repair of this may necessitate a new power supply cable from the main switchboard.)

This work must be carried out by a qualified electrician.

Carry out any upgrading work recommended by the electrician, so that the installation is in sound and safe condition.

Note that this work is very important in terms of the fire safety of the buildings, since electrical faults are a major cause of fires in buildings such as these.

If re-wiring is required, a brief for new power and/or light outlets etc should be provided to the electrician; building consent not required, but check with electrician.

5.8 Plumbing

Various plumbing matters require attention, but without any clear functional use at present, it is doubtful whether upgrading of the facilities in the shower rooms should be carried out. It is important however, that the toilets are functioning, since visitors and other current users of the place certainly require toilets.

It is recommended that a plumber inspect all pipework and fittings, and advise on the practicality of upgrading parts of the plumbing system.

Work Required: Toilets

Have a plumber check the pipework and fittings in the toilet block, and carry out any repair work needed to have the facility working efficiently.

Work Required: School

Have a plumber check the pipework and fittings in the shower rooms, and advise on the repair work needed to have the facility working efficiently.

This includes showers, wash hand basins, hot water boiler and hot water cylinder. (It appears unlikely that the boiler could be made functional again, in which case a new one could be sought.)

Work Required: Bungalow

Have a plumber check the pipework and fittings in the bungalow, and carry out any repair work needed to have the facility working efficiently. Note that materials, junctions, pipe runs etc should match exactly the original layout, as this is part of the heritage value of the building.

This includes hot and cold water to the bath, wash hand basin and kitchen sink, and should include the installation of a corrugated iron water tank as mentioned in Section 5.4 Roofing.

If significant re-plumbing is required, a brief for new or revised fittings should be provided to the plumber; building consent may be required, check with plumber.

5.9 *Fire Protection*

Fire protection is presently limited to fire extinguishers, and it is important that improvement be made to this important aspect of the preservation of the buildings.

It is recommended that an investigation be carried out as to the feasibility of installing an automatic fire sprinkler system and smoke detection system in the school and bungalow. In my view, a sprinkler system is justified because of the cultural significance of the buildings, and for the enhancement of life safety for those using them; the cost may, however, be prohibitive.

Such a system would be designed to meet the requirements of NZS 4517 : 2002 Fire Sprinkler Systems for Houses, with detailed design, construction and testing to the approval of Fire Protection Inspection Services.

Sprinkler heads would be located in positions carefully chosen in relation to the architectural form and detail of the buildings so as to minimise their visual impact. Pipework should be run in cavities wherever possible (for example in the ceiling spaces), and where this is not possible, it should be run in discreet and carefully chosen locations so as to minimise its visual impact.

The New Zealand Historic Places Trust booklet *Guidelines for Fire Safety* (NZHPT, 2000) provides a useful guide to the fire protection of heritage buildings. This publication, and two booklets from the New Zealand Fire Service, *Homeowner's Guide to Sprinklers for Houses* and *Protecting and Preserving What We Value,* are available from the Historic Places Trust.

Work Required

Install an automatic fire sprinkler system in the school and bungalow complying with NZS 4517 : 2002, Fire Sprinkler Systems for Houses.

Install a monitored smoke detection system complying with NZS 4512.

Detailed design to take account of the high architectural value of the buildings, and to ensure that the visual impact of the installation is minimised. The location of all sprinkler heads, pipe runs and valve installations must be approved before work is undertaken.

Note that this work, although expensive, would be high in priority for funding from the Lottery Grants Board.

ALTERNATIVELY

It is recommended that discussions be held with the local Fire Safety Officer to ensure that practicable steps are taken to lessen the risk of fire. The provision of fire extinguishers and smoke alarms would be the minimum.

Management Issues

Note that there are a number of management arrangements that can be put in place to lessen the risk of fire. Among these are:

Open Fire

The open fire in classroom 1 should not be used, unless a careful check is made of the brickwork (smoke test and visual inspection by a bricklayer), and very careful control is exercised over the fire. Use non-sparking firewood and a mesh fire guard.

Maintenance

Regularly check all fire fighting equipment such as fire extinguishers and smoke alarms.

Building Work

No naked flame processes should be used in any building, repair or maintenance work. Naked flame or hot air stripping of paint must not be used.

Smoking

Smoking should not be allowed inside or near any of the buildings in the grounds. Cigarettes are a significant source of fire risk.

Flammable Material

Ensure that all flammable material not required on site is removed for storage elsewhere.

Gardening

Garden rubbish should not be burnt on site, but should be mulched or taken off-site.

Evacuation Plan

There should be an evacuation plan for the quick evacuation of the buildings in the event of fire.

5.10 Timber Treatment

There is evidence of borer activity in the buildings, in particular in the bungalow.

Work Required

Borer–affected framing should be treated as repairs are carried out. For example, if weatherboarding is removed from the walls to effect repairs, the exposed framing and the back face of the lining boards should be treated before the new sheathing is fixed in place.

Framing timbers in the roof space and sub-floor space, should be fully treated where accessible.

Treatment should be with a liberal application of borerfluid, brushed or sprayed on, after the timbers have been well cleaned down. Interior lining timbers should be treated by injecting flight holes with borerfluid.

This work should be carried out by a specialist firm. It should be carefully co-ordinated with the building work, so that maximum advantage is taken of framing timbers being exposed.

New Materials

Borerfluid, supplied by a pest control company such as Rentokil, or

Conservation Supplies
P O Box 646
WARKWORTH

Phone 09 425 7380
E-mail jamorrison@xtra.co.nz

5.11 *Access for the Disabled*

Access for the disabled is restricted by steps up to the front door of the school.

Since planned work is presently maintenance and repair, and not alteration, improving access to building code requirements is not strictly necessary. However, making the building accessible would be a requirement for a change of use. It is recommended that ramped access be provided to the main door of the school, and an accessible toilet be installed if possible.

Work Required

Install an access ramp to the front porch, gradient of 1 : 12 maximum.

Install an accessible toilet, perhaps in one of the service rooms attached or in the toilet block.

Design drawings and specification required for this work. A building consent would be required for this work.

5.12 *Other Matters*

Boy's Toilet

This is now just a relic, a part of a concrete wall, near the shed on the south side of the grounds. It is recommended that this be retained exactly as it is, and be kept weeded.

Stove

The three-quarter size Atlas electric stove that used to be in the kitchen of the bungalow is a very important artefact, and every effort should be made to locate and retrieve this, and return it to its purpose-made space.

Archive

The Society is the custodian of a very special and extensive archive, which includes photographs, drawings, letters and other documents. One very special item is an original version of Edward Darracott's report to the Prime Minister Peter Fraser.

I would recommend that advice be sought on the care and display of this material, and suggest that contact be made with National Archives in Christchurch, or the National Preservation Office in Wellington. Contact details are:

Jocelyn Cumming
National Preservation Officer
Alexander Turnbull Library
P O Box 12 349
WELLINGTON

Phone 04 474 3000

5.13 *Site Works*

The site is presently tidy, with the grass regularly mown and fences reasonably neat. Several matters relating to the grounds are mentioned below.

Maintenance

General maintenance of the grounds should continue to be carried out, including mowing the grass, keeping edges trimmed, etc. This is presently done to a high standard.

Adjacent to the buildings, grass should be kept cut to maintain the ventilation of the sub-floor spaces.

Fence, Paths and Trellis

These items were not specifically inspected. The general condition of the fence and paths appears to be good, with local repairs only needed. I would recommend that the existing fabric of the fences and paths be kept repaired, rather than be restored to an earlier design, although this would be quite feasible if funding was available.

Similarly with the trellis work, the photos that exist would enable the rebuilding of these structures if this was desired.

Trees

The trees that form such an important part of the setting of the buildings should

be maintained according to best horticultural practice. Some trees appear to be in need of attention (pruning, and removal of dangerous limbs for example), while several are shedding copious leaves that block valley gutters and downpipes on the buildings. (It is not suggested that the trees be removed, but that their effects on the buildings be minimised if possible.)

A report on the condition of the trees should be commissioned from a skilled arborist used to dealing with historic sites. Of particular concern would be any trees or limbs that posed a threat to the buildings.

The Department of Conservation may be able to do this survey, or may have knowledge of a suitably qualified person.

5.14 *Programme*

The work recommended in this report is repair and upgrading of the fabric, also fire protection, work which can be done regardless of any new uses of the buildings. The various items of work are separated below into urgent and desirable categories.

Urgent work, to be undertaken within one year :

Electrical check, see section 5.7
Plumbing check, see section 5.8
Fire protection check, see section 5.9

Desirable work, to be undertaken within the next two to five years :

Work resulting from the checks above, also
Foundations, see section 5.1
Exterior cladding and joinery repairs, roof repairs and painting, see sections 5.2, 5.3, 5.4 and 5.6
Interior work, see section 5.5
Timber treatment, see section 5.10
Access ramp and accessible toilet, see section 5.11
Site works, see section 5.12

6.0 MAINTENANCE

6.1 *General*

Planned maintenance is extremely important for buildings such as those at Jack's Mill School. A regular programme of maintenance means that minor faults are identified early, thus avoiding the need for major repairs in the future. A well maintained historic building is likely to be better used and enjoyed than one that is neglected; it will survive longer, and it is likely to suffer less damage in the event of a major storm.

It should be noted that the mature trees, which are such an important feature of the school grounds, are also the source of potential problems for the buildings. Their leaves block gutters! A vital requirement of the maintenance regime is therefore regular clearing of valley gutters, gutters, drains, and the up-slope side of chimneys etc that protrude through the roofs.

Maintenance and repairs should be carried out regularly and according to sound trade practice. There are five main principles to follow:

Minimise Damage

Establish and rectify the cause of any defects found.

In carrying out maintenance and repair work, the causes of any identified defects should be established, and action taken to eliminate or lessen the damage. To fail to do this is to invite a repetition of the problem.

Minimum Necessary

In carrying out repairs, replace the minimum amount of the original material.

Replace the minimum amount of the original material, that is, only the material which is decayed or no longer fulfilling its original role. It is better to have a carefully repaired element rather than a whole new one, however carefully copied.

Repair Materials

Use repair materials that match the originals as closely as possible.

Use materials that match adjoining fabric as closely as possible. Where the original material is not available (and this should always be the first choice) choose a material that has properties of strength, profile, texture and colour that are as close as possible to those of the original.

Use materials that have a life of at least 50 years, and a life at least as long as that of existing or adjacent work.

Trade Practices

Use appropriate trade methods and practices.

Building work should be carried out by qualified tradespeople. Match the standards of workmanship that are evident in the buildings and in particular in adjacent work. In some cases this will mean copying traditional trade practices.

Maintenance Log

Keep good records of maintenance and repair work.

A maintenance log should be kept with a description of all jobs, when they were done, by whom and the cost. Photos should be taken to record significant jobs. A sample maintenance log sheet is included.

6.2 *Maintenance Programme*

An outline maintenance programme for the buildings is set out below; this can be modified and extended as circumstances dictate. A separate regime for the grounds is in place.

MONTHLY CHECK LIST	
	tick
HOUSEKEEPING	
Carry out general housekeeping tasks as required	
Sweep / wash floors	
Clean basins and toilets	
Clean windows	
Replace light bulbs as necessary	
Oil door and window hardware (door hinges etc)	
Check for damage, broken windows, fallen limbs from trees etc	
ROOF	
Check and clear all gutters and downpipes	

ANNUAL CHECK LIST	
	tick
HOUSEKEEPING	
Carry out general housekeeping tasks as for monthly checks	
ROOF	
Check roofing iron, ridging and flashings	
Check cover boards and barge boards	
Check chimneys and chimney flashings	
As necessary, touch up defective paintwork (say every 5 years)	
EXTERIOR WALLS	
Check weatherboarding and all exterior cladding	
As necessary, wash exterior paintwork (say every 2-3 years)	
As necessary, touch up defective paintwork (say every 5 years)	
FOUNDATIONS	
Check foundations	
Check sub-floor framing	
Clear growth around foundations to ensure good ventilation	
INTERIOR SPACES	
Check flooring	
Check wall and ceiling linings	
Check doors and windows, ensure easy operation	
FIRE PROTECTION	
Check and service fire extinguishers as required	

10 YEARLY CHECK / WORK LIST

Carry out the annual check / work list.

In addition:

	tick
PAINTING	
Clean down and paint all roofs	
Clean down and paint all exterior fabric of the buildings	
As necessary, paint interior surfaces	
ELECTRICAL	
Check the whole of the electrical installation	

AFTER A STORM

After a storm, check all structures and trees.

MAINTENANCE LOG SHEET

Date

Description of Job

Materials Used

Tradesman/Contractor

Cost

Before And After Photos (Attached)

APPENDIX I

ICOMOS New Zealand Charter For The Conservation of Places Of Cultural Heritage Value

Preamble

New Zealand retains a unique assemblage of places of cultural heritage value relating to its indigenous and its more recent peoples. These areas, landscapes and features, buildings, structures and gardens, archaeological and traditional sites, and sacred places and monuments are treasures of distinctive value. New Zealand shares a general responsibility with the rest of humanity to safeguard its cultural heritage for present and future generations. More specifically, New Zealand peoples have particular ways of perceiving, conserving and relating to their cultural heritage.

Following the spirit of the International Charter for the Conservation and Restoration of Monuments and Sites (the Venice Charter 1966), this charter sets out principles to guide the conservation of places of cultural heritage value in New Zealand. It is intended as a frame of reference for all those who, as owners, territorial authorities, tradespeople or professionals, are involved in the different aspects of such work. It aims to provide guidelines for community leaders, organisations and individuals concerned with conservation issues. It is a statement of professional practice for members of ICOMOS New Zealand.

Each section of the charter should be read in the light of all the others. Definitions of terms used are provided in section 22.

Accordingly this charter has been adopted by the New Zealand National Committee of the International Council on Monuments and Sites at its meeting on 7 March 1993.

1. The Purpose of Conservation

The purpose of conservation is to care for places of cultural heritage value, their structures, materials and cultural meaning. In general, such places:

(i) have lasting values and can be appreciated in their own right;

(ii) teach us about the past and the culture of those who came before us;

(iii) provide the context for community identity whereby people relate to the land and to those who have gone before;

(iv) provide variety and contrast in the modern world and a measure against which we can compare the achievements of today; and

(v) provide visible evidence of the continuity between past, present and future.

2. Indigenous Cultural Heritage

The indigenous heritage of Maori and Moriori relates to family, hapu and tribal groups and associations. It is inseparable from identity and well-being and has particular cultural meanings.

The Treaty of Waitangi is the founding document of our nation and is the basis for indigenous guardianship. It recognises the indigenous people as exercising responsibility for their treasures, monuments and sacred places. This interest extends beyond current legal ownership wherever such heritage exists. Particular knowledge of heritage values is entrusted to chosen guardians. The conservation of places of indigenous cultural heritage value therefore is conditional on decisions made in the indigenous community, and should proceed only in this context. Indigenous conservation precepts are fluid and take account of the continuity of life and the needs of the present as well as the responsibilities of guardianship and association with those who have gone before. In particular, protocols of access, authority and ritual are handled at a local level. General principles of ethics and social respect affirm that such protocols should be observed.

3. Conservation Practice

Appropriate conservation professionals should be involved in all aspects of conservation work. Indigenous methodologies should be applied as appropriate and may vary from place to place. Conservation results should be in keeping with their cultural content. All necessary consents and permits should be obtained.

Conservation projects should include the following:

(i) definition of the cultural heritage value of the place, which requires prior researching of any documentary and oral history, a detailed examination of the place, and the recording of its physical condition;

(ii) community consultation, continuing throughout a project as appropriate;

(iii) preparation of a plan which meets the conservation principles of this charter;

(iv) the implementation of any planned work; and

(v) the documentation of any research, recording and conservation work, as it proceeds.

GENERAL PRINCIPLES

4. CONSERVATION METHOD

Conservation should:

(i) make use of all relevant conservation values, knowledge, disciplines, arts and crafts;

(ii) show the greatest respect for, and involve the least possible loss of, material of cultural heritage value;

(iii) involve the least degree of intervention consistent with long term care and the principles of this charter;

(iv) take into account the needs, abilities and resources of the particular communities; and

(v) be fully documented and recorded.

5. RESPECT FOR EXISTING EVIDENCE

The evidence of time and the contributions of all periods should be respected in conservation. The material of a particular period may be obscured or removed if assessment shows that this would not diminish the cultural heritage value of the place. In these circumstances such material should be documented before it is obscured or removed.

6. SETTING

The historical setting of a place should be conserved with the place itself. If the historical setting no longer exists, construction of a setting based on physical and documentary evidence should be the aim. The extent of the appropriate setting may be affected by constraints other than heritage value.

7. RISK MITIGATION

All places of cultural heritage value should be assessed as to their potential risk from any natural process or event. Where a significant risk is determined, appropriate action to minimise the risk should be undertaken. Where appropriate, a risk mitigation plan should be prepared.

8. RELOCATION

The site of an historic structure is usually an integral part of its cultural heritage value. Relocation, however, can be a legitimate part of the conservation process where assessment shows that:

(i) the site is not of associated value (an exceptional circumstance); or

(ii) relocation is the only means of saving the structure; or

(iii) relocation provides continuity of cultural heritage value.

A new site should provide a setting compatible with cultural heritage value.

9. INVASIVE INVESTIGATION

Invasive investigation of a place can provide knowledge that is not likely to be gained from any other source. Archaeological or structural investigation can be justified where such evidence is about to be lost, or where knowledge may be significantly extended, or where it is necessary to establish the existence of material of cultural heritage value, or where it is necessary for conservation work. The examination should be

carried out according to accepted scientific standards. Such investigation should leave the maximum amount of material undisturbed for study by future generations.

10. CONTENTS

Where the contents of a place contribute to its cultural heritage value, they should be regarded as an integral part of the place and be conserved with it.

11. WORKS OF ART AND SPECIAL FABRIC

Carving, painting, weaving, stained glass and other arts associated with a place should be considered integral with a place. Where it is necessary to carry out maintenance and repair of any such material, specialist conservation advice appropriate to the material should be sought.

12. RECORDS

Records of the research and conservation of places of cultural heritage value should be placed in an appropriate archive and made available to all affected people. Some knowledge of places of indigenous heritage value is not a matter of public record, but is entrusted to guardians within the indigenous community.

CONSERVATION PROCESSES

13. DEGREES OF INTERVENTION

Conservation may involve, in increasing extent of intervention: non-intervention, maintenance, stabilisation, repair, restoration, reconstruction or adaptation. Where appropriate, conservation processes may be applied to parts or components of a structure or site.

Re-creation, meaning the conjectural reconstruction of a place, and replication, meaning to make a copy of an existing place, are outside the scope of this charter.

14. NON-INTERVENTION

In some circumstances, assessment may show that any intervention is undesirable. In particular, undisturbed constancy of spiritual association may be more important than the physical aspects of some places of indigenous heritage value.

15. MAINTENANCE

A place of cultural heritage value should be maintained regularly and according to a plan, except in circumstances where it is appropriate for places to remain without intervention.

16. STABILISATION

Places of cultural heritage value should be protected from processes of decay, except where decay is appropriate to their value. Although deterioration cannot be totally prevented, it should be slowed by providing stabilisation or support.

17. REPAIR

Repair of material or of a site should be with original or similar materials. Repair of a technically higher standard than the original workmanship or materials may be justified where the life expectancy of the site or material is increased, the new material is compatible with the old and the cultural heritage value is not diminished. New material should be identifiable.

18. RESTORATION

Restoration should be based on respect for existing material and on the logical interpretation of all available evidence, so that the place is consistent with its earlier form and meaning. It should only be carried out if the cultural heritage value of the place is recovered or revealed by the process.

The restoration process typically involves reassembly and reinstatement and may involve the removal of accretions.

19. RECONSTRUCTION

Reconstruction is distinguished from restoration by the introduction of additional materials where loss has occurred. Reconstruction may be appropriate if it is essential to the function or understanding of a place, if sufficient physical and documentary

evidence exists to minimise conjecture, and if surviving heritage values are preserved. Reconstruction should not normally constitute the majority of a place. Generalised representations of typical features or structures should be avoided.

20. ADAPTATION

The conservation of a place of cultural heritage value is usually facilitated by it serving a socially, culturally or economically useful purpose. In some cases, alterations and additions may be acceptable where they are essential to continued use, or where they are culturally desirable, or where the conservation of the place cannot otherwise be achieved. Any change, however, should be the minimum necessary and should not detract from the cultural heritage value of the place. Any additions and alterations should be compatible with original fabric but should be sufficiently distinct that they can be read as new work.

21. INTERPRETATION

Interpretation of a place may be appropriate if enhancement of public understanding is required. Relevant protocol should be complied with. Any interpretation should not compromise the values, appearance, structure or materials of a place, or intrude upon the experience of the place.

22. DEFINITIONS

For the purposes of this charter:

adaptation means modifying a place to suit it to a compatible use, involving the least possible loss of cultural heritage value

conservation means the processes of caring for a place so as to safeguard its cultural heritage value

cultural heritage value means possessing historical, archaeological, architectural, technological, aesthetic, scientific, spiritual, social, traditional or other special cultural significance, associated with human activity

maintenance means the protective care of a place

material means physical matter which is the product of human activity or has been modified by human activity

place means any land, including land covered by water, and the airspace forming the spatial context to such land, including any landscape, traditional site or sacred place, and anything fixed to the land including any archaeological site, garden, building or structure, and any body of water, whether fresh or seawater, that forms part of the historical and cultural heritage of New Zealand

preservation means maintaining a place with as little change as possible

reassembly (anastylosis) means putting existing but dismembered parts back together

reconstruction means to build again in the original form using old or new material

reinstatement means putting components of earlier material back in position

repair means making good decayed or damaged material

restoration means returning a place as nearly as possible to a known earlier state by reassembly, reinstatement and/or the removal of extraneous additions

stabilisation means the arrest of the processes of decay

structure means any building, equipment, device or other facility made by people and which is fixed to the land

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BILINGUAL TEXT

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TE PUMANAWA O ICOMOS O AOTEAROA HEI TIAKI I NGA TAONGA WHENUA HEKE IHO O NEHE

KUPU WHAKAATU

Ko nga taonga maha tuku iho a te tangata whenua me tauiwi hoki o Aotearoa kei te tu rangatira ki te titiro a te ao whanui mai ano. Ko enei taonga, te whenua me ona ahuatanga maha, nga maunga, nga moana takutai, nga mara, nga marae, nga wahi tapu, nga whare maha kua whakaturia, nga tikanga ketu whenua me era atu pou whenua maha whai mana koia nga tino taonga. Koia hoki te tino take ma Aotearoa me te ao whanui tonu hei painga mo nga uri heke iho o nga iwi o te ao. Otia, kei nga iwi o Aotearoa nga tikanga rangatira hei tohu, hei tiaki i aua taonga waiho iho.

I runga ano i te wairua o te kaupapa o te Mana o Nga Pouwhenua o Te Ao mo te tiaki me te tohu taonga (Te Pumanawa o Venice 1966) ka whakatakotoria nga tikanga hei taki haere i nga ahuatanga tiaki taonga tuku iho o Aotearoa. He tikanga whakakotahi i nga whakatau a ia ropu, komiti, kaipupuri, kaimahi me nga tohunga maha hoki ka pa ki aua taonga. He kaupapa whakaoti rangatira mo te hunga kei raro i te whakahaere a te komiti o ICOMOS o Aotearoa.

Me ata korero ia wahanga o tenei kaupapa i te taha o era atu kua takoto. E whai ake nei nga kupu whakatau kua mau i roto i te Wahanga 22.

Kua oti ra te kaupapa pumanawa te tautoko e te komiti Whanui o Aotearoa i raro i Te Mana o Nga Pouwhenua o Te Ao i te Hui-a-Tau i te 4 Oketopa 1992.

1. TE TAKE O TE TOHU

Ko te take mo tenei tikanga he tohu i nga taonga maha waiho iho e mau tonu ana te mauri penei i enei e whai ake nei.

(i) tera e mau ana i roto i te hinengaro o te tangata;

(ii) tera hei titiro makutu kia mau tuturu ai nga ahuatanga e mau ana i aua taonga;

(iii) tera e mau tonu ana te mauri me ona korero me nga ahuatanga tuku iho hei titiro whakawa i te taha o nga uri me nga whanau;

(iv) tera e pa ana ki nga ahuatanga maha o te ao hurihuri hei titiro whakawa ki era kua taea i enei ra.

(v) tera e kitea iho ana te haere o nga take mai ra ano ki tenei wa, a, tae noa ki te wa kei te heke mai.

2. NGA TAONGA TUKU IHO

Ko enei nga taonga e pa ana ki te whanau, ki te hapu me te iwi Maori. Kia kotahi tonu te noho piri o enei me te mau ano hoki o te mauri me te mana o ia iwi.

Te kaupapa kai tiaki i te tangata whenua o tenei Motu ko te Tiriti o Waitangi. Kua takoto te kupu i reira kei te tangata whenua ano te mana me te tika ki a ratou taonga maha mai i nga wahi tapu me nga pouwhenua puta noa mai i te Rerenga Wairua ki te Waipounamu whiti noa ki Whare-kauri. Kei te hora atu tenei kaupapa ki runga i era kua riro i raro i te ture mehemea kei te u tonu te mauri. Ko te korero mo aua taonga ka tukua ki nga kai-tiaki tika. No reira ko te kupu mo nga tikanga tiaki taonga kei te hunga kainga. Koia anake te huarahi tika. He hunga noho wehi, noho maharahara ki te tohu me te taki haere i nga take e pa ana e tata ana ki a ratou maa nga tupuna. Ko nga tikanga whakawatea, hiki tapu, karakia me nga tohunga taki i enei tikanga ma te hunga kainga e whakarite. Me ata taki aua tikanga i runga i te wehi, te ihi me te mana.

3. TIKANGA TOHU

Me whai wahi tonu nga hunga tohunga ki enei mahi katoa. Me tuku nga tikanga a te tangata whenua kia haere me nga rerekeetanga mai i tena rohe. Kia orite tonu te noho o nga mahi tiaki ki era a te hunga kainga, a, me ata tuku te kupu tautoko i mua atu i te mahinga o te mahi.

E whai ake nei nga kaupapa tiaki

(i) kia maro te takoto o te kupu whakatau mo te taonga tuku iho mai i nga tuhi rauhanga korero tuku iho kua ata tirohia, a, kua u kua mau i nga tikanga kikokiko katoa.

(ii) kia piri tonu ki te hunga kainga mai i te timatanga oti noa.

(iii) me ata whakatakoto te kaupapa whanui, a, me hangai hoki ki runga i nga pouwhenua kua whakataua

(iv) te tikanga whakahaere o ia kaupapa mahi.

(v) te ata taki haere i nga mahi rauhanga maha mai i te timatanga oti noa.

NGA TAKE WHAKAHAERE

4. TIKANGA TIAKI

Nga mahi me

(i) hapai, me awhi i nga ahuatanga tiaki katoa i roto i nga whakahaere

(ii) wehi, me tupato i nga ahuatanga katoa i roto i nga mahi torotoro kia ata pai ai te noho a nga taonga

(iii) ia ata tupato i nga mahi pokanoa i raro i nga pou o te kaupapa.

(iv) maumahara ki nga wawata, ki te ora me te kaha o te hunga kainga ki te taki, ki te hapai i nga tikanga.

(v) ata tuhi, me ata mahi nga tikanga hopu e mau ai nga take katoa ka mahia.

5. ME WEHI I NGA TOHU WHAKAARI

Kia maharahara i nga tohu whakaari ka tupono mai i te wa mai o nehe ki tenei wa ki te wa heke mai. Tera e tika ana te whakakore, ata muku taonga, ata mahi ranei mehemea ki te titiro iho kahore te mauri e whara. Me tohu, me tuhi nga tikanga katoa ka mahia mehemea ka ata kahore ka whakakoretia ranei te taonga.

6. TE TURANGA

Me ata tohu nga turanga marae i roto i nga rohe. Mehemea kua ngaro e ahei ana te whakaora mai i roto ano i nga kohi rauhanga o ia kaupapa. Tera te whanui o tenei tu toro haere ka uaua i tua atu i nga taonga here.

7. TE NEKE-A-RARU

Era wahi katoa e whai mana ana me ata titiro mehemea ka raru i nga tikanga o te wa. Mehemea ka noho mai aua ahuatanga e raru ai me whakahaere nga tikanga tiaki. Me he ka taea me whakatakoto he kaupapa hei arai.

8. TE NUKU

Kotahi ano te mana me te mauri o te tauranga me te pou o runga. Ka tika te nuku taonga i raro i te kaupapa tiaki mehemea i roto i nga whiriwhiri e kitea iho ana.

(i) kahore he hua o taua turanga

(ii) ma te nuku anake te taonga ka ora

(iii) ma te nuku anake te mauri ka u

Ko te turanga hou kia tika, kia tuturu i raro i nga take o te kaupapa tiaki.

9. TIKANGA WEWERO

He maha nga hua o tenei tikanga kahore e puta mai i etahi atu huarahi. E ahei ana te mahi ketu whenua mehemea ka ngaro oti atu nga take maha kei reira, e hihiko atu ai te hinengaro, ka mau mo ake tonu ake ranei nga take o aua taonga i raro i te kaupapa tiaki. Me mau katoa enei i roto ano i nga tikanga kua whakaaetia e nga mahi tohunga o te ao whanui, a, mehemea ka taea kia ma tuturu nga ahuatanga katoa o te toanga hei tikaro hei titiro ma nga uri heke iho.

10. NGA KOHINGA

Mehemea nga kohinga mai i tetahi wahi, taonga ranei e whai mana ana kia kotahi tonu te tohu me taua wahi, taonga ranei.

11. NGA MAHI WAIHANGA, HUA KAHU

Ko nga taonga whakairo, tuhi, whatu, arai matapihi me era katoa kei raro i nga taonga tuku iho, kia

kotahi te tu taonga. Mehemea me whakaora me karanga nga tohunga tika hei mahi hei tangotango.

12. NGA MAHI HOPU

Ko nga toro haere i nga taonga katoa me tohu ka whakauru ki nga whare pupuri taonga tika. Etahi o nga korero mo nga taonga ehara ma te iwi whanui engari hei tuku ke ki nga kai tiaki o ia iwi, hapu, hunga kainga ranei.

13. NGA WHAKAHAERE TIKI

Tera nga tikanga toro e whanake noa atu te kaha o te haere me te mahi pokanoa, te noho puku, te arai, te whakamau, te whakapai, te whakahoou te whakapupuru. Mehemea e tika ana me mahi te kaupapa tiaki i aua wahi, taonga ranei.

Kei waho i enei tikanga era mehemea he kape ke nga mahi whakaora mai i nga toanga.

14. TE NOHO PUKU

He wa ano e kitea iho ana kahore he wahi ma te pa pokanoa. Otira ahakoa kua ngaro te take tinana ko te mauri kei te mau tonu.

15. TE WHAKAORA

Me ata tiaki me whakaora nga taonga tuku iho i runga i nga kaupapa kua takoto. Ahakoa he mate tuturu te pirau me mahi nga tikanga whakaora i runga i te kaupapa tiaki.

16. TE WHAKAU

Me ata arai nga taonga tuku iho kei memeha noa iho. Mehemea he hua ano kei tera ahua me waiho. Ahakoa me he mate tuturu te mate pirau ma nga tikanga tiaki e pupuri.

17. TE WHAKAPAI

Ko nga mea hei whakaora i nga wahi kua kiro kia rite ki era o te mea tuturu. Ka tika, ka ahei nga mahi whakapai kia nuku noa ake i nga tikanga ki era o nehe mehemea ka roa te tu o nga wahi, mea mahi ranei, a, kei te rite ano hoki nga mea hou hei whakaora ki era o nga mea tuturu me te mau tonu hoki o te mauri.

18. TE WHAKAHOOU

Me hangai nga tikanga whakahoou i te taonga me nga mea kua purua kia orite ai te tu, te ahua hoki ki tera o nehe. Mehemea ka tu, ka mau taua ahua he tika me mahi nga tikanga.

Ko enei tu tikanga whakahoou, whakapuru, te aku ranei e ahei ana kia mahia i konei.

19. TE WHAKAPURU

Te rerekeetanga o te whakapuru mai i te whakahoou ko te whakapuru mea hoou atu ki nga wahi kua mate. He tika tenei mehemea ka mau te ahua tuturu o te taonga, mehemea hoki e mahara ana ki nga mahi rauhanga kua takoto. Kaua te wahi hei puru e nui atu i te tinana tuturu o te taonga. Kahore he wahi o te mahi kape e ahei ana i roto i te kaupapa tiaki.

20. TE WHAKAHOHOU

Ko nga tikanga whakatau taonga tuku iho e pa ana ki te ahua o te tu me te ora hoki o te tangata te noho whanaunga, nga tikanga o nehe me nga oranga maha o te tangata. Ko etahi taonga me whakahoou me whakapuru me whakaora, a, me whakatau ko tehea te mea tika i raro i te kaupapa. Ahakoa pehea te nui, te iti o te tikanga ka mahia kia tupato nga nekeneke i te tino tinana o te taonga. Kia tata, kia rite nga mea whakapuru ki te mea tuturu kia marama ai te kitea iho te rereke o te puru hoou ki te mea tuturu.

21. TE TITIRO WHAKAWA

Kia marama, kia pai ai te titiro a te hunga whanui o te ao i te noho a te mauri o nga taonga, me haere nga tikanga Maori; te whakawatea, te karakia, me era atu tikanga. Kaua nga nekenga e huri iho ki te whakararuraru i te noho a te mauri, te ahua, te tu ranei a te taonga i roto i nga ahuatanga maha.

22. NGA KUPU WHAKATAU

Mo nga ahua o tenei kaupapa te whakahohou he tikanga pupuri i te ahuatanga tuturu o te taonga me te mau o te mauri ahakoa te haere o nga mahi whakahohou, nekeneke taonga kia tika ai ki te titiro a nga hunga e pa ana.

Te tiaki, he tikanga manaaki whakahaere i nga ahuatanga tohu kia u kia mau tonu ai te mauri.

Te Mauri, koia ke noho te i te taonga mai ano i nga tupuna o nehe, i roto i nga korero, i nga waihanga, i nga ketu whenua, i nga karakia me era atu tikanga maha.

Te arai he tikanga tiaki, tohu taonga kei raru, kei ngaro i te ngaro a te moa.

Te taputapu koia nga taonga o nehe na te tangata i waihanga ka heke iho ki nga uri.
Te wahi koia nga taonga maha o te whenua me te ao whanui nga wai, te moana, te whenua nga maunga, nga ngaherehere, nga roto, nga mania me era atu mea whakahirahira o te whenua.

Te tohu, koia te tikanga ata tohu, pupuri i te taonga kia u kia mau tonu ai te mauri.

Te whakapiri he tikanga tiakia i tera kua he te ahua ka whakapipiria atu kia ora ai.
Te whakapai, he tikanga tiaki i tera e kino ana i te pirau me era ahuatanga.

Te pupuri he tikanga tiaki, pupuri kia u, kia mau ai te ahua tuturu.

Te whakaora, he tikanga e u, e mau ai te mauri kia kore ai e kainga e te kino e te pirau.

Te pou whakaari, ko era taonga maha i waihangatia e te tangata, a, tau ana i runga i te whenua.

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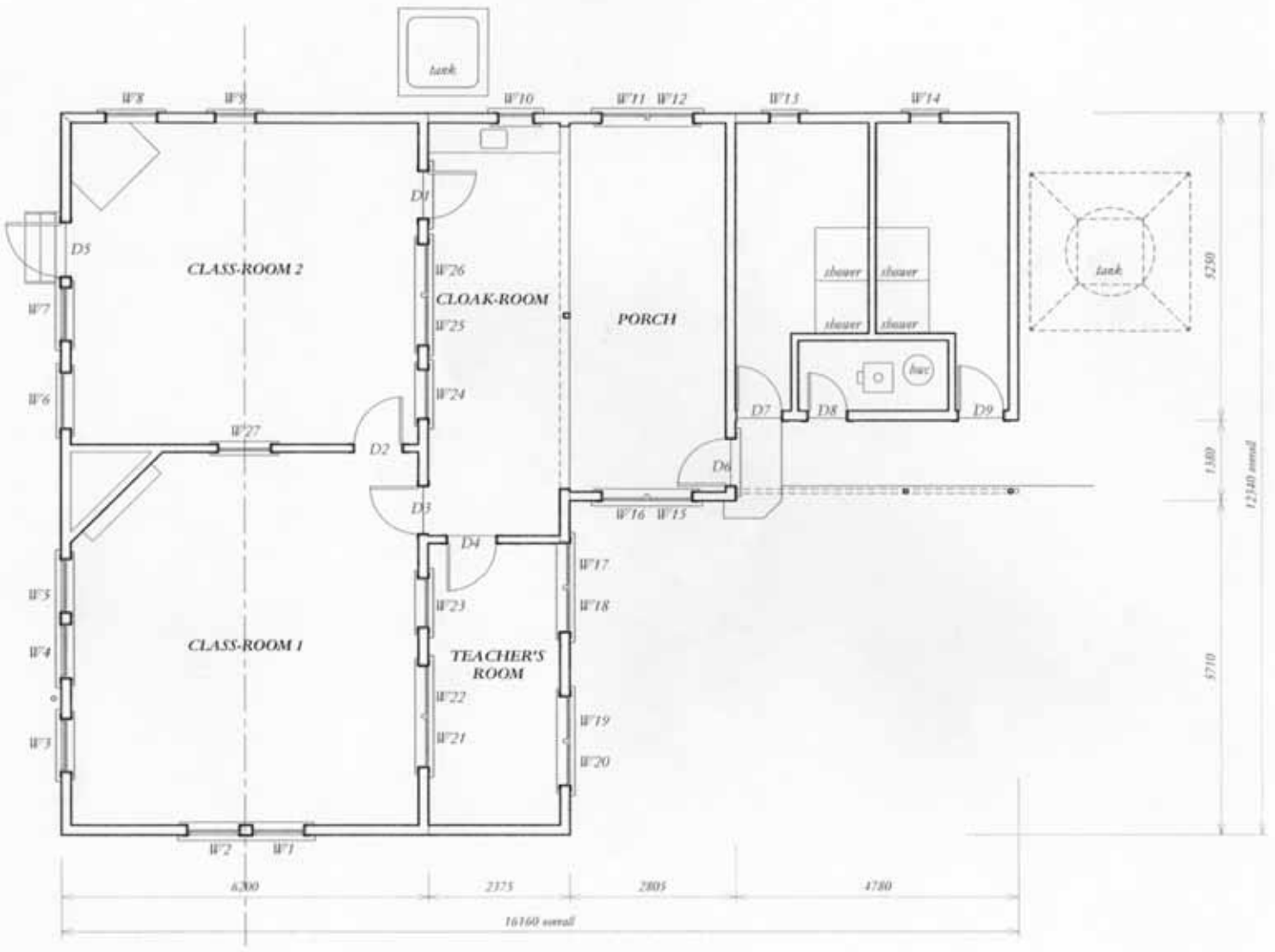
APPENDIX II

Jack's Mill School, G Penlington, 1926

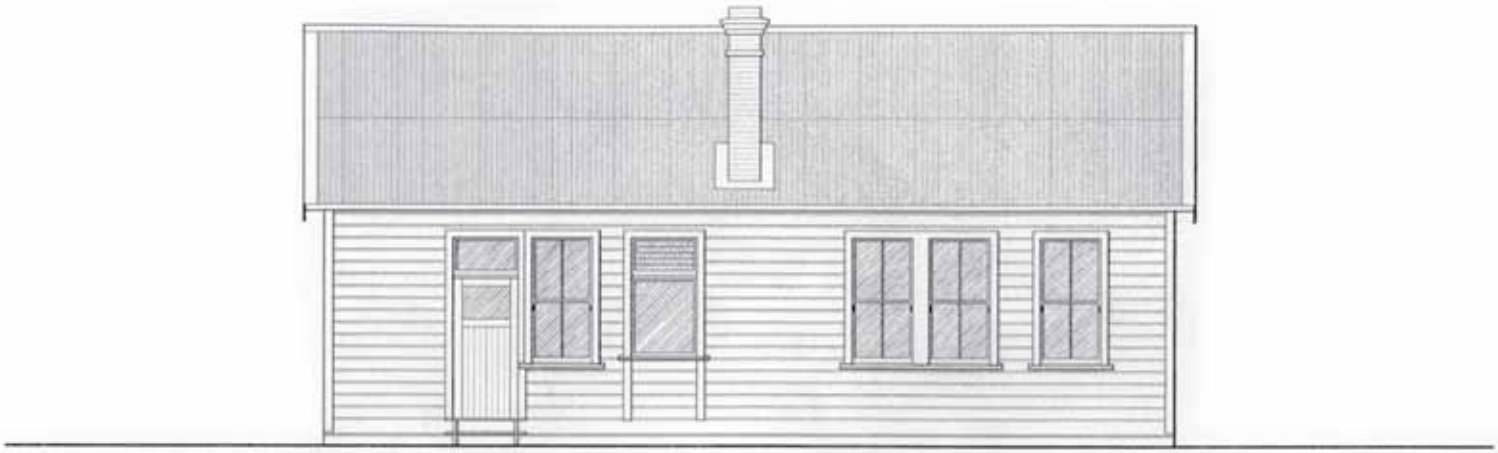
Jack's Mill School, drawn by Russell Murray, July 2006

Bungalow, drawn by A B Spiers, September 1993



CHRIS COCHRAN CONSERVATION ARCHITECT
THE WEDGE, WELLINGTON, TEL. 472 8847

FLOOR PLAN 1:100 RM 31-7-2006
JACK'S MILL SCHOOL - MEASURED DRAWINGS



WEST ELEVATION

SOUTH ELEVATION

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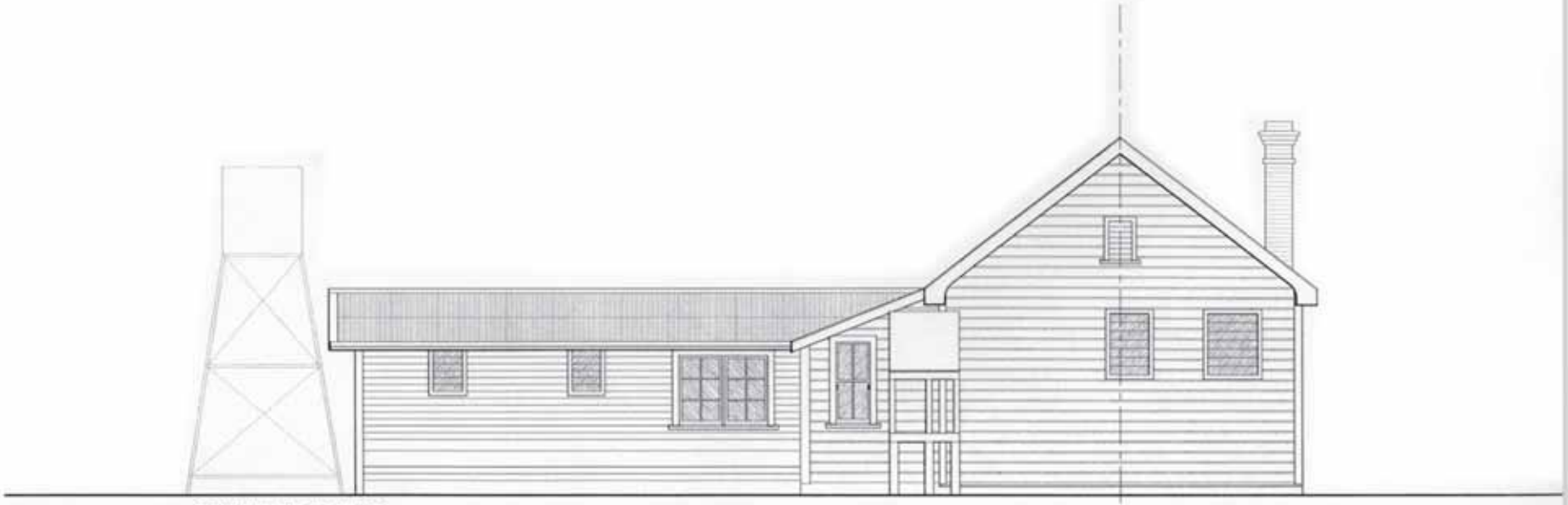
ELEVATIONS 1:100 RM 31-7-2006
JACK'S MILL SCHOOL - MEASURED DRAWINGS

EAST ELEVATION



NORTH ELEVATION

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