

4.3.4 QUARRY MAINTENANCE ENGINEER'S HOUSE: Kennedys Bush Road



Figure 130: Source: T Ussher 01.2020

A glimpse of the house is possible from the Kennedys Bush Road entrance due to overgrown planting.



Figure 131: Source: T Ussher 01.2020

The west, road-side façade of the house.



Figure 132: Source: T Ussher 01.2020

The north façade of the house with the glazed lattice window to the sunporch.



Figure 133: Source: T Ussher 01.2020

The south side of the house with the rear porch.

4.3.4.1 History & Description

The Quarry Maintenance Engineer's House was designed by the Council's City Engineer's department in 1939. A.R. Galbraith was the City Engineer at the time of the house's design and construction. **(MA IS SEEKING CCC ARCHIVE SEARCH OF GALBRAITH, PLUS WHO WAS CITY ARCHITECT IN THE ENGINEER'S DEPT AT THE TIME)**. It is thought that the house was designed for the Quarry Engineer, also referred to as the Quarry Maintenance Engineer. Christchurch City Council holds the original architectural drawings which are included in the appendices to this conservation plan. These are referenced as job number A.102/1. However, little other written, drawn or photographic evidence of the house and its occupants has been found with the Christchurch City Council files containing no historical information or employment records. The quarry was located within the Paparua County Council boundaries and some records of council correspondence and minutes have been obtained from Archives NZ. These relate to nuisance issues between the quarry and neighbouring residential properties only and no information relating to the quarry manager's house's construction has been found.

The house was designed following the Depression of the 1930s and immediately prior to World War Two. It was a time of austerity and a shortage of housing. It is not known whether this shortage contributed directly to the

need for the house for quarry staff and whether it was provided to replace the accommodation provided by the old manager's house close to the quarry operations.

Nationally, the housing shortage during the 1920s became even more acute following the Depression years of the early 1930s. Approximately 7,000 building permits were issued for new houses in 1927, but by 1933 that had fallen to below 1,500.¹⁰⁶ This was at a time when 6,000–7,000 new homes were required annually for a growing population. By the late 1930s, the housing shortage of around 20,000 dwellings, was extreme.

CCC started a social housing programme in the city in 1938 for people with obvious housing needs.¹⁰⁷ This programme coincided with the design and construction of the maintenance engineer's house at the quarry.

The housing shortage continued during the war years when the house was built and was compounded by a shortfall of skilled labour and building materials. Copper, steel, zinc, electrical cable, conduit, and paint ingredients, which were required for the war effort, were largely unavailable for house construction. The government introduced legislation in response to the shortages controlling the sale and use of building materials and the issue of building permits. Only construction considered to be essential was permitted. The government's building policy was that domestic building was to meet the housing needs of families only and construction had to be economical. It was almost impossible for single people to build. These controls, which continued until well after the end of the war, had a significant influence on the construction of houses both during the war years and in the post-war period, affecting not only the Maintenance Engineer's House, but also the 1950s Quarry Workers' Accommodation Units when they were built.

The Government played a role in housing design starting during this period through legislation and education. The original model building bylaw, NZS 95, was introduced in 1935 as a result of the Hawke's Bay earthquake, but it was not until 1944 that Part IX, *Light Timber Construction*, was added. NZS 95 did not become enforceable until adopted by a council as a local bylaw – often with local modifications.

For its period, the house is contemporary in its architectural design and has left the stylistic constraints of the bungalow period behind. Its planning is a response to its site, being well orientated to the sun and with shelter to its entranceways. The house is planned with the living spaces being to the fore at the public side of the house with the bedrooms being private, unlike the earlier bungalows and villas before them that mixed the private bedrooms with the public living areas of the house. The interior design celebrates new materials of the day seen with the plywood panelling in the living and dining spaces, and with the Moderne detailing of the Art Deco period. The house is transitional towards the Art Deco houses that, although appearing prior to World War 2, became particularly popular after the war.

4.3.4.2 Setting & Context



Figure 134: Source: Heritage Aerial Map 654

The quarry engineer's house on Kennedys Bush Road is circled. The quarry manager's house is to the north, and the accommodation units to the south. The boundaries of the quarry station are defined by the black and white lines.

The house is located on quarry land on Kennedys Bush Road to the west of the quarry and up hill above the Quarry Manager's house and below the Accommodation Units. The house has road access from Kennedys Bush Road and walking access across the quarry land to the quarry operations. The house is located on an excavated flat site with the ground rising away from the house to the east and south. The house spaces are well laid out and orientated to the sun, with living spaces on the west opening to the sunporch on the north, and the bedrooms on the north and east sides of the house. Service rooms are located on the south side of the house. An aerial photograph dated 1940-44 shows that the garage on the Kennedys Bush Road front boundary was built at the same time as the house. A woodshed adjacent to the garage was built in the 1970s where an earlier 1960s shed had been located. A large shed on the north side of the house being built between the 1970s and 1990s.

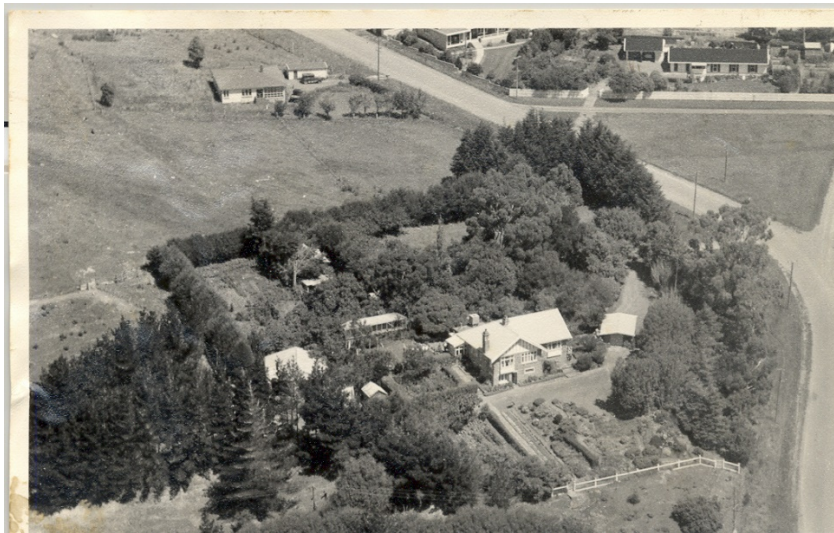


Figure 135: Source: Opus International files. Undated.
The quarry engineer's house on Kennedys Bush Road is located uphill from the manager's house.

The house is located in close proximity to the two benched tracks that historically connected the quarry to Kennedys Bush Road and White's Tramway that joined to Lincoln Road. They are thought to have been from the operation of the quarry prior to the 1890s.

Evidence remains of the landscape design of the setting seen with Halswell quarry basalt paving slabs for paths and steps, and rubble stones for terracing of the property to the east and south of the house. The site was exposed to the prevailing winds that come from all sides and trees provide shelter. Trees to the Kennedys Bush Road frontage are now substantial and overhang the garage and encroach on and shade the west side of the house.



Figure 136: Source: T Ussher 06.2021
The street frontage of the garage.



Figure 137: Source: T Ussher 06.2021
The garage and woodshed.



Figure 138: Source: T Ussher 01.2020
The sheds to the north side of the house.



Figure 139: Source: T Ussher 06.2021
The stone paving and terrace edging to the south side of the house.

4.3.4.3 Construction & Technology

The house was built in a period of stringent size, design and material constraints following the 1920s–30s Depression, and its construction, materials use and technology were controlled by the NZS95 model building bylaw that had been recently introduced following the 1931 Hawke's Bay earthquake.

The house has a reinforced concrete perimeter foundation and a piled timber framed sub-floor structure with ex100x25 rimu tongue and groove flooring. Walls are of rimu 100x50 framing supporting a pyramidal hip roof with rimu rafters, struts and purlins. Galvanised corrugated steel roofing is laid on rimu hit-and-miss sarking. The soffits are lined with "Masonite" which is a compressed wood-pulp hardboard that had been developed in 1898 in Britain.

Weatherboards are painted rimu, bevel-back profile with 160mm cover. They are mitred at the external corners and installed without soakers.

All window and door joinery is of timber construction. The windows are unusual in their detailing and operation with the upper fanlight rebated to the top rail of the casement sash below. The meeting between the windows is over-flashed with a galvanised steel plate screw fixed to the fanlight. The detail means that the casement sash cannot be opened without first opening the fanlight.

The internal doors are framed with a flush plywood panel both sides. Doors up to the 1930s were panelled doors, but with the plainer look preferred with the Art Deco and Moderne interior décor styles, doors with flush panels fixed over the door's frame became common. Flush panel core doors with no supporting door leaf frame, now the most common interior door used were not developed until the late 1950s.

Interior wall linings are fibrous plaster board with painted lining paper. The living room and dining alcove have rimu plywood panelling that was originally varnished but is now painted. The kitchen and bathroom have hardboard linings to wet areas. The porch, laundry and toilet are lined with painted rimu match lining.

The interior timber finishings, including the interior doors and architraves, skirtings, living room and dining alcove windows, dining alcove sideboard joinery, and the sunporch lattice window were varnished, while the bedroom and service room windows and the service room framed and ledged doors were painted. It is not determined whether the scotias were expressed as a timber look detail or were originally painted with the ceiling. The original use of the finishes remains except for the panelling, the living room, dining alcove and sunporch windows, and the dining alcove sideboard joinery that is now painted.

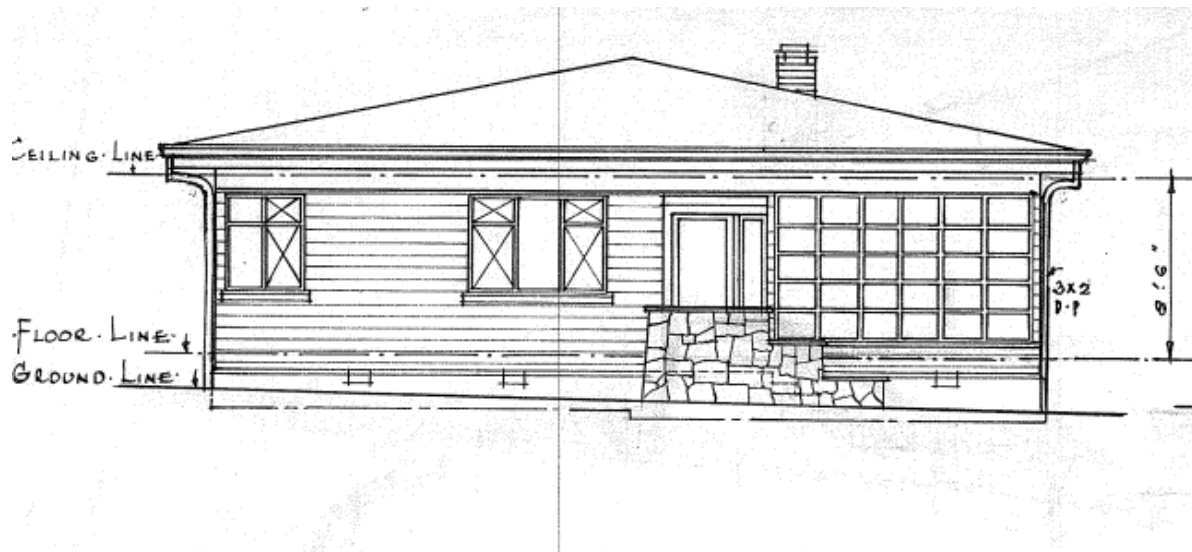


Figure 140: Source: CCC, 1939 CCC City Engineer's Dept. Architectural drawings
The north elevation with the main entrance porch and sunporch glazed screen.

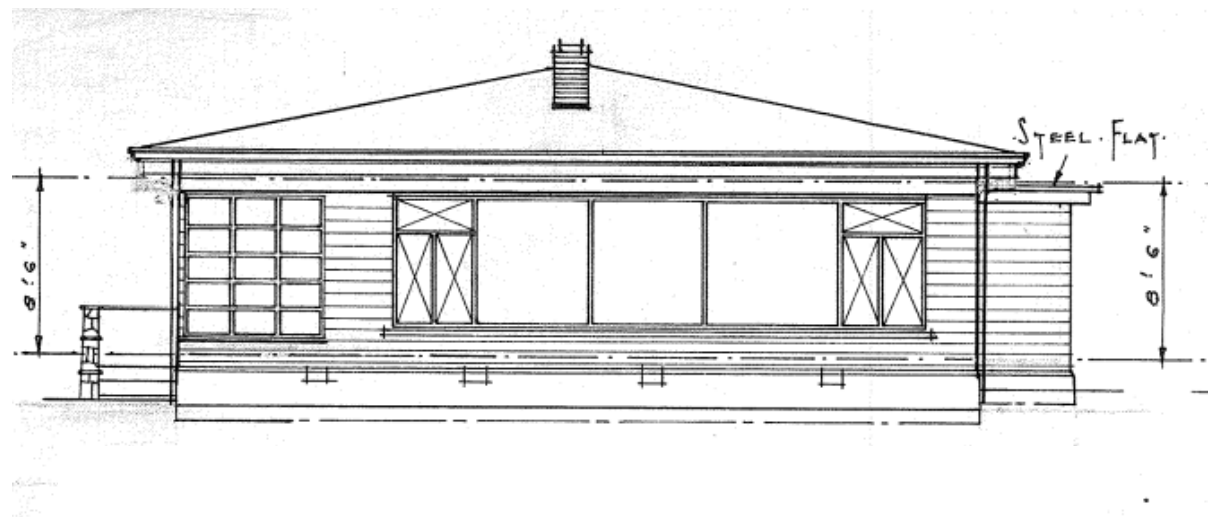


Figure 141: Source: CCC, 1939 Architects drawings
West, roadside elevation

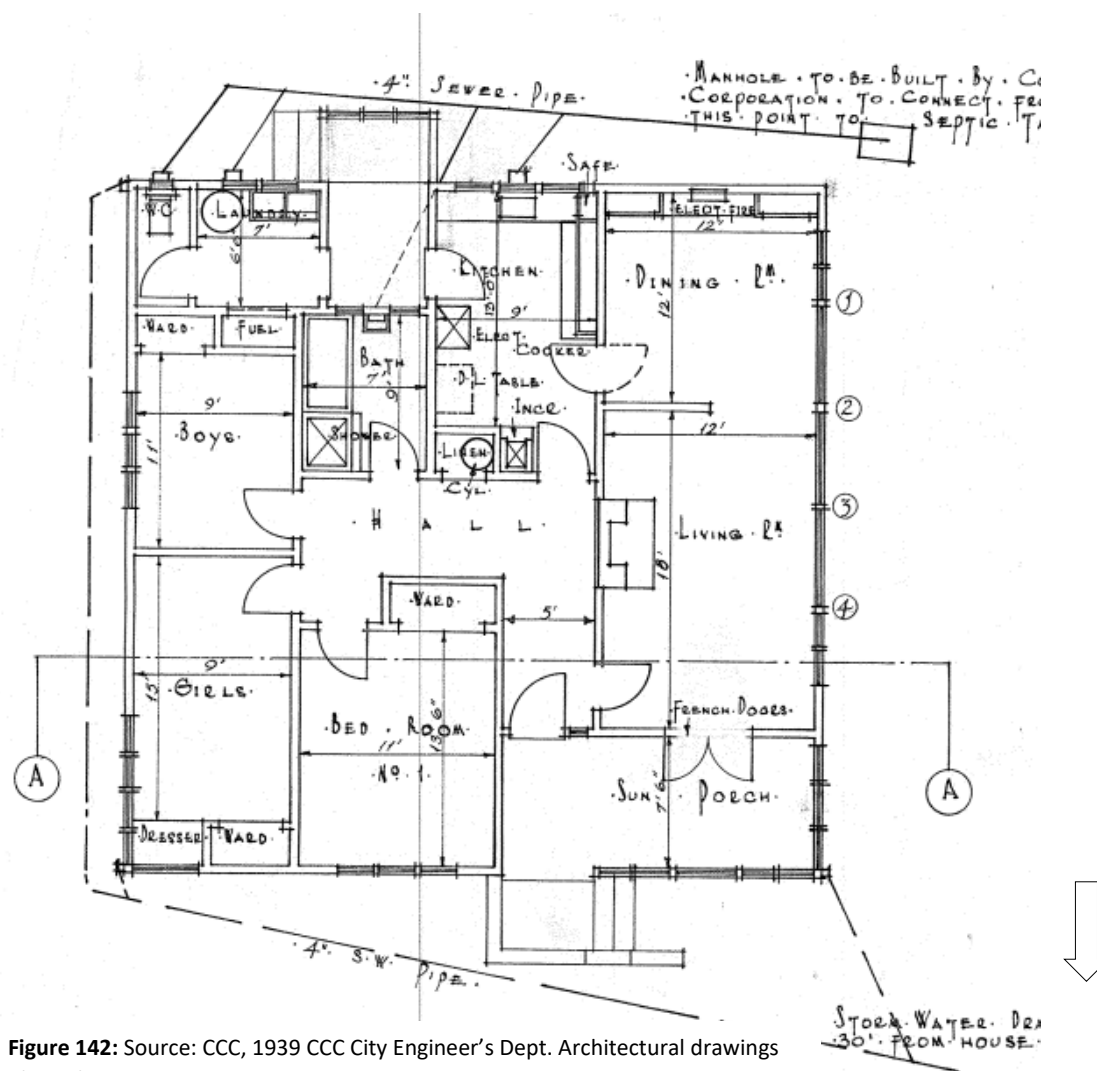


Figure 142: Source: CCC, 1939 CCC City Engineer's Dept. Architectural drawings
Floor Plan

The house was heated with an open fireplace in the living room, and there was a solid fuel chip heater installed in the kitchen that also heated the water via a wet back. The chip heater remains but the hot water cylinder has been removed. There was a copper in the laundry for clothes washing, the concrete slab of which remains. The bathroom included a separate shower and bath, with a handbasin. The toilet was separate and is located off the rear porch and laundry, so is external to the house. This was unusual by the 1930s with the toilet being located within the house since the early 1900s and may have been for the practical reason of providing the toilet with external access for the engineer to use without first having to wash up before entering the house, as well as for cost reasons with only one toilet being able to be installed. (The same provision was made in the Accommodation Units in the 1950s).

Electricity was installed with the distribution board located in the rear porch.

4.3.4.4 Classifications

The Halswell Quarry Maintenance Engineer's House is not scheduled in the Christchurch District Plan, Appendix 9.3.7.2, *Schedule of Significant Historic Heritage*. However, it is part of the Halswell Quarry setting that is scheduled as a Group 1 - Highly Significant place. The house and its setting is not listed by HNZPT.

4.3.4.5 Comparative Analysis & Similar Heritage Values

The house was designed in the 1930s, a few years after the adoption of NZS 95 and the model building bylaws in 1935. The introduction of the bylaws coincided with the government's state housing building campaign of the 1930s, and the state houses and the Maintenance Engineer's House share the same construction technologies and material use. A feature of the state houses of this period was the attention given to their orientation and the siting of rooms for good sunlight and healthy living, and this is also seen in the Maintenance Engineer's House.

The Maintenance Engineer's House, although being a simple square in plan influenced by the constraints on house building of the 1930s and '40s, incorporates some sophisticated Moderne design elements in the principal rooms, including the rimu plywood panelling, the large west wall living room and dining alcove window, and the glazed screen walls of the sunroom that elevate its architectural and aesthetic values above that of the 1930s state house. It is transitional towards the Moderne Art Deco style that was to become popular after World War 2, but that was a radical new design philosophy emerging in Europe, Britain and the USA during the 1930s setting aside earlier conservative architectural influences in response to more liberal social attitudes that emerged after WW1 and the Great depression.

The engineer's house is more generous in the size of its spaces than contemporary state houses of the period. The plan of the house is very efficient maximising the amount of space provided while minimising the size of the built envelope. Popular architectural design influences are adopted which is something not seen in the more austere state house. This sets these two housing responses that respond to the same criteria and constraints apart, one by the City Council, and the other by the State.

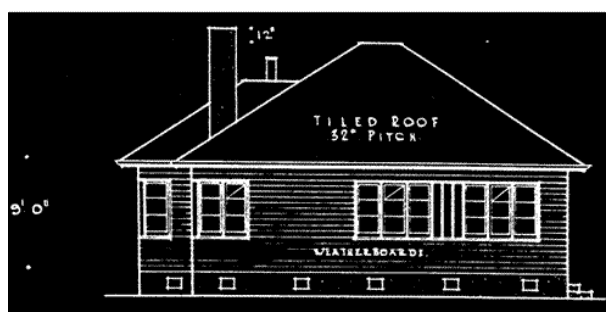
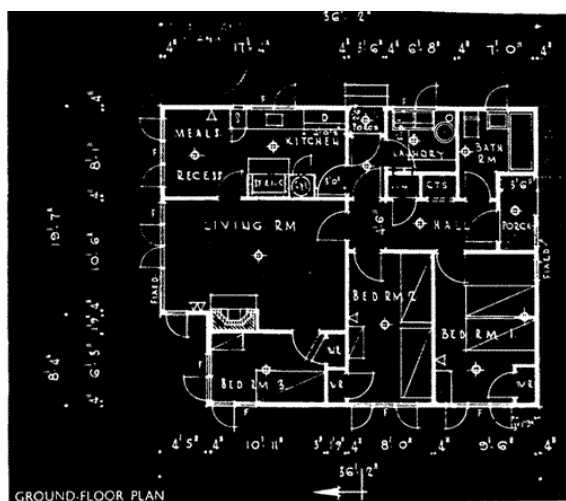


Figure 143: Source: nzhistory.govt.nz
Floor Plan and elevation of a 1937 state house.

4.3.4.6 Changes to the building

The house retains a very high level of authenticity of its fabric and legibility of its architectural form including both the exterior and interior of the house. Interventions are limited to:

- Removal of the chimney to below the roof line,
- Addition of the awning/hood over the large west window,
- Installation of the French doors to the sunporch exterior opening,
- Extending the part dividing partition between the living room and dining alcove creating two separate rooms.
- Painting of the originally varnished wall panelling, joinery and west wall window in the living room and dining alcove, and of the sunroom lattice window.
- Re-lining of the shower cubicle.

Interventions causing changes to the house are consequently minimal and are reversible.

4.3.4.7 Status and Condition

The building has suffered from a lack of maintenance. The observations that follow are from visual inspection of the house only.

There are mould and water ingress issues and the floor is decayed in places to the point that it is unsafe and requires replacement. There is rot in the south-east and south-west corners of the house and to the bottom of the sunporch west lattice window and wall.

The Masonite hardboard soffit linings are sagging and there is wet rot in areas of the fascias. The spouting and downpipes have rusted through causing water deterioration of the exterior cladding and ponding at the foundations. The vents on the east and south sides of the house are at or below ground level and with water run-off down the slope of the site exacerbated by stormwater from the rusted out spoutings, water is able to enter under the house. This could be contributing to the poor borer damaged condition of the floor.

The house requires repair and repainting.

The garden is overgrown and requires maintenance including cutting back of foliage from the house. There is a single garage built at the same time as the house that is in poor, but salvageable repair that is also overgrown requiring clearance of foliage. Two shed structures on the property are of ad-hoc construction using salvaged materials to hand and are considered to be beyond repair.

The current status and repair requirements of the house are included in the *Current Condition and Maintenance Report 30.06.21* appended to this conservation plan.

4.3.4.8 Statement of Authenticity and Integrity – Maintenance Engineer's House

Refer to the tabulated Assessments of Significance contained in Appendix A for the detailed assessment of the Maintenance Engineer's House that includes comment on the authenticity of the fabric and legibility of the built form. Below are statements summarising the detailed assessment.

Generally, the house retains a high degree of originality, both to its designed form, and in its authenticity of fabric. Built-in furniture remains throughout, the layout remains largely intact, there is evidence of original door and window hardware. On the exterior the cladding and windows remain intact. The garden includes extensive use of Halswell quarry basalt paving stone for crazy paving, steps, retaining walls, edging and planters.

Form and design: The Maintenance Engineer's House retains a high degree of integrity and form of its design which is largely unchanged since its construction in 1939. Interventions are additions rather than removals, the most invasive being the installation of the exterior French entry doors to the sunporch, separation of the dining alcove from the living room with the extension of the separating half partition, and the painting of varnished rimu panelling and windows' woodwork.

Materials and substance: The house retains a high degree of authenticity of materials, finishes and substance apart from the interventions previously listed above. The kitchen retains its original kitchen cabinetry although this is well worn.

Use and functions: The house retains the original function of its spaces including the retention of the various rooms in their original form.

Tradition, techniques, and workmanship: The traditions, techniques and workmanship used in the construction of the house fully remain.

Location and setting: The immediate setting of the house has changed little with its relationship to the quarry, the manager's house, and the accommodation units remaining evident. Trees now enclose the house and garage, and their encroachment is contributing to the house's deterioration. Hard landscaping features including pathways and terrace retaining walls remain but are obscured by overgrowth and lack of maintenance. Added

sheds, although they have some significance to occupants, do not contribute to the house's setting. Refer also to Section 3.4, *Assessments of Landscape Fabric & Site Fabric*.

Spirit and feeling: The spirit and feeling of the Maintenance Engineer's House remains unchanged providing insights into the accommodation provided by industry for its staff, and the variety of the accommodation provided at the quarry provides evidence of its hierarchical social structure.

4.3.4.9 Statements of Significance – Maintenance Engineer's House

Refer to the tabulated *Assessments of Significance* contained in Appendix A for the detailed assessment of the cultural heritage significance of the Halswell Quarry Maintenance Engineer's House. Below are statements summarising the detailed assessment.

Historical and Social Significance, Cultural and Spiritual Significance

The house has moderate social significance being reflective of the Depression and World War 2 war years and the austerity and limitations imposed on residential building by the government due to material and resource shortages. At the time, housing throughout New Zealand was in very short supply which led to the government state housing programme of the 1930s and the Council social housing programme that started in 1938.

The dwelling is of historical and social significance for its association with the quarry, and with the quarry engineers and their families who lived there. At the time of drafting this conservation plan, who the quarry engineers were, and who lived in the house has not been identified and more research is required to find out, if possible, who the various occupants of the house were.

The dwelling is of moderate cultural significance giving insights into the significance of the quarry engineer in the functioning of the quarry, and of family life of the late 1930s post Depression years. The house, together with the quarry manager's house, singlemen's quarters, and accommodation units show the hierarchy and status of the various quarry workers' roles and positions through their location and design. The provision of dwellings at the quarry provides evidence of a previous way of life where employer's provided housing on the employment site that is not common today and which was a response to the housing shortage throughout New Zealand in the Depression, war, and post war years.

Architectural and Aesthetic significance

The limitations of house size and material use in the 1930s due to the housing shortage crisis and consequent government restrictions would have driven the design of the house. Despite this, as with state housing criteria of the time, the house is well orientated to the sun and light for healthy living and is generous in the size of spaces provided for family accommodation.

The Quarry Maintenance Engineer's House has moderate architectural and aesthetic significance as a 1930s house influenced by the government's state housing criteria but incorporating decorative Moderne style influenced elements in the design of the principal living spaces of the house, whilst providing more restrained and simple finishes and décor to secondary spaces.

Technological and Craftsmanship Significance

The house is of some technological and craftsmanship significance for its materials and construction methods which reflect standards of the time that included the introduction of the model building bylaw that was developed in response to the 1931 Hawke's Bay earthquake. The construction of the house consequently is typical of the technology of the 1930s that arose from the statutory requirements introduced that decade. The use of Halswell basalt in the detailing of the main entrance, as well as in the landscaping is of note for the craftsmanship and the house's link to the quarry.

Contextual Significance

The house has some contextual significance contributing to the wider heritage landscape of the quarry and its associated group of buildings relative to both the functioning of the quarry and to the hierarchy of housing provided for its staff. Collectively, the quarry setting contains a grouping of buildings of that are of contextual

significance in terms of their physical relationship, location, function and material use in their building and their landscape setting.

Archaeological and Scientific Significance

The dwelling and setting are of archaeological significance for their potential to provide evidence of human activity pre and post 1900 and being in close proximity to the benched tracks, (refer Benched Tracks a & b, Figure 160, Section 5.3, *Understanding the Place – Archaeology*), leading from the quarry workings to White's Tramway.

QUARRY MAINTENANCE ENGINEER'S HOUSE

CURRENT CONDITION & MAINTENANCE REPORT



Summary of the Condition of the Building

The inspection of the house's condition was undertaken by Tony Ussher Architect during May and June 2021. The inspection was a visual inspection from the ground and did not include removal of fabric or invasive investigation. Inspection of electrical services and drains requires specialist action and are not included in this report. A structural engineer's inspection and analysis of the building has not been undertaken.

The Maintenance Engineer's House (the house) was built in timber framed construction to the requirements of NZS 95 that had been introduced in 1935. The framing timbers are rimu where seen and this is believed to have been used throughout. The house retains its original planning, form and construction, and retains a high degree of original fabric.

The building is on a sloping site with a reinforced concrete perimeter foundation and piled timber floor. The sub-floor space was not seen and whether the piles are timber or concrete has not been determined. For the period, concrete piles with jack studs to suit the floor to ground heights would be expected. The sub-floor framing was not seen, but there is no evidence of bounce or level issues seen in the floors and the sub-floor space is well ventilated. However, the ground level against the east and south foundations is above the level of the bottom of the foundation vents and the ground slope is towards the foundations. As a consequence, water is able to flow under the house and it is likely that the ground under the house and the sub-floor space is a damp environment that will be affecting the condition of the floor, evident from within the house with borer infested floorboards that are collapsing.

The house has a simple square plan form, which is the most efficient plan shape maximising space provided while minimising material use, an important consideration in the 1930s and 1940s. The exterior cladding is bevel backed weatherboards, painted. The wall cladding has been maintained and patch replaced in the past but currently has areas of rot at the south-east corner, south-west corner, and at the west sunporch window requiring localised repairs and replacement.

The roof is painted corrugated galvanised steel roofing that has been partially replaced including roofing over the area where the chimney was removed. The roof requires re-nailing and replacement of hip ridgings. Soffits to the eaves are hardboard flat sheet which has partially collapsed in places.

Doors and windows are of timber construction with windows having both casement and fanlight opening sashes. The opening sashes have no transom and weather-lap one to the other. The fanlights have a flat metal flashing plate screw fixed to the bottom sash rail lapping over the casement window top sash rail which may have been retrofitted due to weathering issues. The flashing plate prevents the casement sashes being opened unless the fanlight is opened first. Windows are single glazed. The window and door joinery is painted to the exterior, and on the interior, windows in the bedrooms and living spaces have evidence of having varnish finish, although these are now painted. Apart from the sunporch west window, the window and door joinery is generally in serviceable condition.

The sunporch is partially enclosed with the large trellis pattern timber windows with fixed panes. Generally, the windows need re-puttying of the glass panes throughout, and re-painting. The sill and lower jambs of the west side window panel have rotted out and the window panel will require removal, repair and reconstruction.

French doors have been installed to the north wall of the sunporch that was originally open with the sunporch providing a sheltered entrance to the house. Their installation has an unfinished appearance.

The porch entrance has a low Halswell basalt return wall to the north and east sides of the plastered concrete steps. The top, capping course of the stonework has been removed and requires replacement that will reinstate the weathering of the top of the walls.

The rooms throughout, apart from service rooms are lined with original fibrous plaster finished with painted lining paper to both the walls and ceilings. The living room and dining room have plywood panelled walls with fibrous plaster above. The living room and bedroom 1 walls have been painted with murals and graffiti, and the panelling to the original dining alcove walls has been painted to match the fibrous plaster walls. The rooms require repair of the wear and tear damage to the fibrous plaster and redecoration. The kitchen and bathroom are partially lined with hardboard, painted, which is in a worn state of repair.

Doors, architraves and skirtings in the bedrooms and hall retain their original varnish finish, although windows and scotias in these rooms that may have been varnished originally, are painted. The hall door to the living room has been crudely painted over the original varnish. Doors and windows to service rooms are painted.

The rear porch, laundry and WC ceilings and walls are lined with painted 90x12 rimu match lining which has some borer infestation.

Electrical services throughout were not inspected and it is recommended that the condition and compliance of the electrical services installation be confirmed by an electrical contractor. Sewer and stormwater drainage was not inspected and specialist inspection is required.

The house is provided with a single garage, the weatherboard cladding of which is in poor repair where trees and planting against the walls have caused the cladding to rot. A substantial vine growing against the north wall is also causing deterioration of the weatherboards. The roof is corrugated iron with timber barge boards and cappings that are in poor repair due to overhanging trees and lack of maintenance. The spouting and downpipes are badly rusted and downpipes are disconnected contributing to the rotting of the wall cladding.

The woodshed that is adjacent to the garage shading its east wall is in a dilapidated, partially collapsed state. The northern fence line shed is of adhoc construction using found materials and is in a very poor state of repair

and partial collapse. Due to its lack of a proper structure and use of untreated packing crate plywood and demolition materials, the shed is believed to be beyond repair and if retained, would require either significant reconstruction incorporating new fabric or replacement with a new building.

Recommendation

Overall, the house is considered to be in serviceable condition requiring repair of the weatherboard cladding and framing where rotted. From non-invasive examination from the ground, the south-east and south-west corners of the house and the west wall adjacent to the sunporch including the sunporch west window are the wall areas requiring significant repair and replacement work. Removal of weatherboards will reveal the extent of framing replacement work required and it is recommended that these areas be opened up to confirm the extent of the framing's deterioration prior to determining a strategy for repair. A consideration is the removal and replacement of all the weatherboard cladding on the house allowing a full inspection of the framing, installation of any services required, installation of wall insulation and building underlay, and the recladding the walls with direct fix weatherboard cladding to match the existing bevel back weatherboard profile.

A visual inspection of the concrete foundations revealed hairline cracking at some vents, but no structural cracking. Being built after the 1931 Napier earthquake, the foundation's concrete will be reinforced to the requirements of the model building bylaws of the day. An issue is the build up of the ground level, particularly along the east wall of the house and with the ground slope falling towards the house. Foundation vents to this side are partially buried, and on the south side gardens and paving are also above the bottom of the vents.

The poor condition of the rimu tongue and groove flooring, especially seen in the rooms on the east side of the house, requires further investigation. The floors, from a walkover, appear level with no undue springiness of the sub-floor structure being evident. The floorboards where exposed and seen have borer and the boards have broken through in places. The entire floor in the boys' bedroom has been replaced with particle board sheet flooring. The floor coverings remain in all the rooms except the hall, sunporch and the east side boys' and girls' bedrooms and should be lifted to expose the condition of the timber flooring beneath. The flooring should be lifted in those rooms with deterioration which will expose the condition of the sub-floor framing and piled structure. Any rot or borer deterioration will require treatment or replacement if the structural integrity of the timber is compromised. Sub-floor framing repairs and foundation wall, pile, bearer and joist connections should be inspected and while access is possible, upgraded to the requirements of NZS3604. The extent of the dampness under the floor will also be revealed.

Typical flooring installation of the period was to install the tongue and groove flooring between the walls that were framed directly off the floor joists, rather than today's construction methodology with the flooring laid with the walls erected over the floor. With the expected flooring installation in each room to be between the walls, its replacement is a straightforward process of removal of the old and replacement with new. Action for the reinstatement of the floor would include installation of a ground damp proof membrane and underfloor insulation with new flooring laid. The ground level along the east side of the house should be reduced to ensure the bottom of the vents are above finished ground level, and a drainage course or field drain provided to drain water away from the foundations. The garden along the south side of the house should also be lowered below the vents, and planting kept clear of the house.

The roofing requires a thorough close-up examination but appears to be serviceable with renewal of sprung fixings and replacement of damaged hip ridges. The spouting and downpipes require complete renewal. Stormwater drainage has not been determined and requires investigation. The soffits should be removed and replaced with painted HardieSoffit sheet reinstating the appearance of the removed painted hardboard.

In summary, subject to the condition of the sub-floor structure, the house is believed to be readily repairable and with insulation upgrades would provide well planned and sunny accommodation for a family. Desirable upgrades are the insulating of the house as discussed above. Insulation of the windows through installation of secondary glazing to the window sashes would also be desirable.

The garage is considered to be repairable, but the woodshed and northern fence line sheds are considered to be beyond repair and it is recommended that they be removed or replaced, although the northern fence line sheds impinge on the outlook and setting of the house.

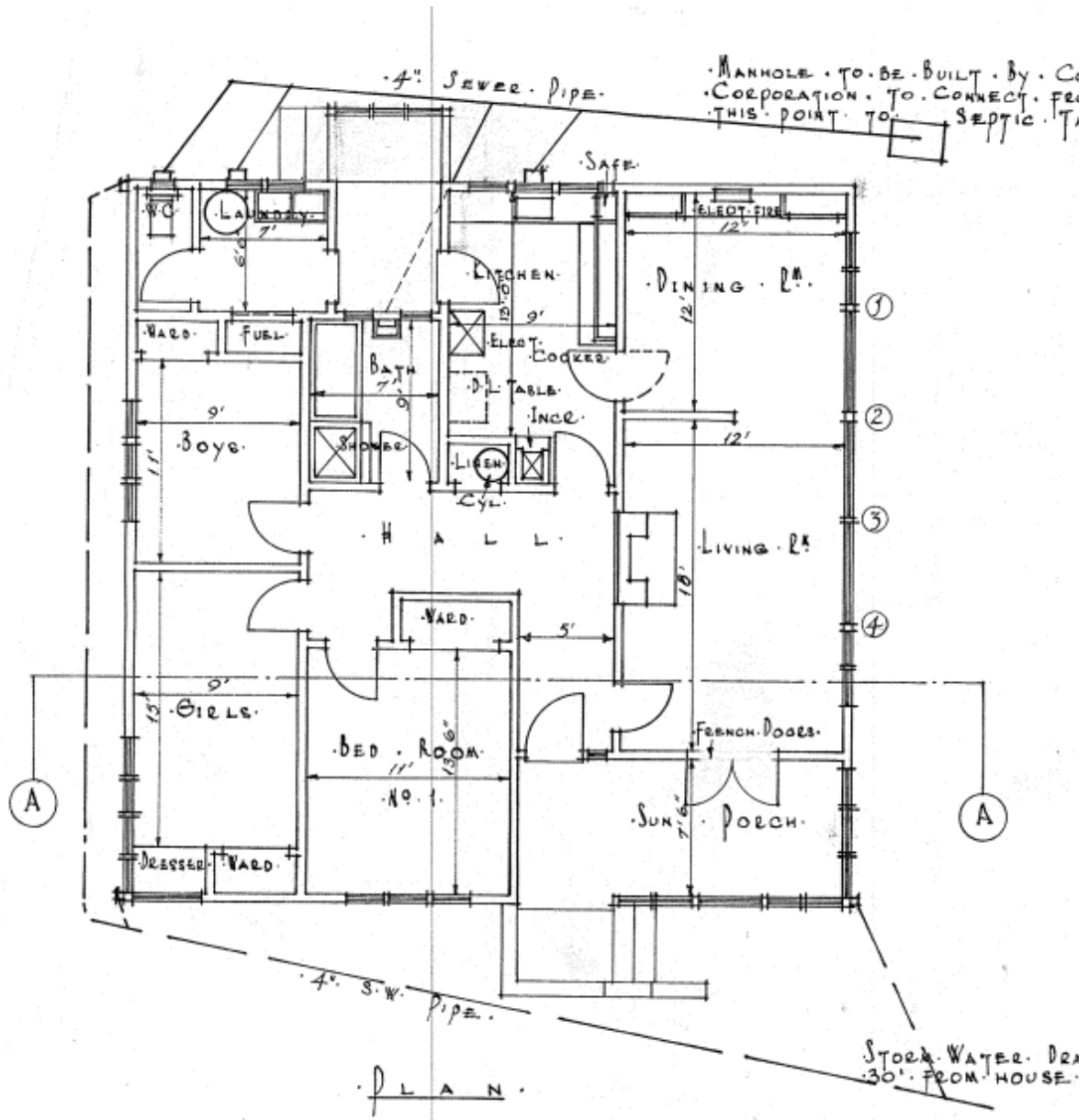
A change of use for other uses would require other statutory upgrades including structural upgrading and provision of access and facilities for the disabled.

Assessment Criteria

Recommendations are made in this report on the basis of the following assessments and actions prepared by the Christchurch City Council for the assessment, maintenance and repair of its buildings.

Condition Reference	Condition	Description
		Note Buildings Expected Life: 80 years
0	Non-existent	Asset abandoned or no longer exists.
1	Very Good <i>(No work required)</i>	- Secure weatherproof structure, designed to appropriate standards and well maintained. - Safe site - Likely to perform effectively under current maintenance regime for 25+ years.
2	Good <i>(Only minor work required (if any))</i>	- As 1 but showing signs of superficial wear, tear and deterioration or not up to appropriate standards. - Normal maintenance needed to prevent initial stages of decay or dereliction commencing. - Needs to be re-inspected in the medium term. - In 10 – 25 years deterioration expected, but unlikely to fail. - E.g. mortar loss, spalling, fine cracks.
3	Fair <i>(Work required but asset still serviceable)</i>	- Functionally sound structure. - Early stages of decay or dereliction are becoming evident with minor components requiring replacement or repair, or reactive maintenance costs rising. - Failure unlikely within 5 yrs, but further deterioration likely and major replacement required within 10 yrs [except Heritage] - Eg cracks < 2 mm, surface staining, some loss of protective coating.
4	Poor <i>(Substantial work required in short term, asset barely serviceable)</i>	- Building not functioning properly and high maintenance costs arising (see eg. below) - Structural integrity becoming affected. - No immediate risk to health and safety but work required within 5 years to ensure asset remains safe. - Eg. cracks 2 – 5 mm, leakage; rising damp; rotting woodwork; decayed brickwork; inadequate security, coatings in need of heavy maintenance or renewal, undermining of foundation, corrosion.
5	Very Poor <i>(Major work or replacement required now)</i>	- Serious structural problems having a detrimental effect on the performance of the asset. - Site safety at risk. - Failure imminent or maintenance costs excessive. - Major work or replacement required urgently.

QUARRY MAINTENANCE ENGINEER'S HOUSE – FLOOR PLAN



Source: CCC, 1939 Architects drawings

The floor plan of the house extracted from the original 1939 architect's drawings.

QUARRY MAINTENANCE ENGINEER'S HOUSE – EXTERIOR

Item & Photograph	Current Condition and Status Description	Condition Reference	Recommended Remedial Action
Concrete Foundations 	Reinforced concrete with plaster finish and cast in wire mesh vents. There is hairline cracking by some vents. Foundation vents are rusting.	2 Good 3 Fair	A structural engineer should inspect the foundations and confirm if any action is required. Foundation vent grilles, wire brush, paint with rust inhibitor, and re-paint.
Entry Porch Steps & Wall 	Steps are plastered concrete. Basalt stone balustrade wall. (Refer to <i>Entry Porch</i> for added entry doors).	2 Good 2 Good, except missing capping stones to the tops of the walls.	Remove plant growth. Reconstruct the cappings of the walls with flat Halswell basalt slabs.
Walls: Weatherboards  	Painted bevel back weatherboards with 160mm cover. There is some borer evident and there is rot in localised areas in the south-east and south-west corners and around the west sunporch window. Paint has failed generally. The exterior corner mitres of the weatherboards are not fitted with soakers and some joints have opened.	3 Fair, general condition 5 Very Poor, where rotted.	General: Wash down all walls. Prepare, prime and re-paint with acrylic semi-gloss paint system. Remove rotted weatherboards, repair framing as required, install new H3.1 treated Pinus radiata boards to the same profile and finish. Clean deteriorated putty out from the open exterior corner mitres and re-putty prior to re-painting. Alternatively, install corner soaker flashings to each board.
Windows  	Painted timber. Joinery generally sound requiring re-painting and re-puttying of glass where putty is cracked. The west window of the sunporch has rot in the sill, bottom rail and stiles.	3 Fair, general condition. 4 Poor, Putty. 4 Poor	Wash down, strip and sand as required to remove flaking paint, re-putty sashes where putty is cracked, prepare, spot prime, re-paint. Were rot is present, replace the rotted piece of timber full length. Treat sound timber exposed during the repair with Metallex, prime repair section and prepare and re-paint the window.

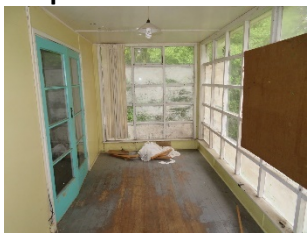
QUARRY MAINTENANCE ENGINEER'S HOUSE – EXTERIOR

Item & Photograph	Current Condition and Status Description	Condition Reference	Recommended Remedial Action
Fascias 	The fascias are painted timber. From visual inspection of the ground there was evidence of rot and borer seen at downpipes and closer inspection is required.	3 Fair	Replace the fascias with H3.1 treated Pinus radiata to the same size and profile. Stop, prime and paint.
Soffits 	Soffits are painted hardboard with butted joints and are in sound condition except where fixings have failed on two sides of the house with the boards slumped down from the eaves	4 Poor	Replace to the same appearance with HardieSoffit fibre cement sheet with stopped joints to the original appearance. Paint.
Roof 	The roofing is painted galvanised corrugated steel roofing. Nail fixings have sprung and hip ridge cappings are damaged.	3 Fair	Re-fix roofing as required. Replace damaged hip ridge cappings. Prepare and paint.
Spouting & Downpipes 	Spouting and downpipes are painted galvanised steel and have areas where they have rusted out and are leaking down the face of the house. Rotted out downpipes have caused weatherboards to rot at the south-east and north-west corners.	5 Very Poor	Replace all with coloursteel. Check stormwater drains and elbows and repair as necessary. Discharge new coloursteel downpipes to existing stormwater drain elbows.
Chimney	The chimney has been deconstructed down below roof level. The remains were not inspected within the roof space and should be inspected by a structural engineer.	Not seen	Structural engineer to inspect and advise.

QUARRY MAINTENANCE ENGINEER'S HOUSE - PORCHES

Item & Photograph	Current Condition and Status Description	Condition Reference	Recommended Remedial Action
Front Entry 	The main entry is via the sunporch that has been fully enclosed with the addition of a set of French doors on the exterior face of the house. The added doors lack weather protection, and their installation is not well done.	4 Poor	The recommended action is to remove the doors and infill wall panel restoring the entry and sunporch to their original form.
Rear Porch 	The rear entry porch has painted plaster on concrete where it is outside the foundation line of the house, and a raised tongue and groove floor level with the house where it is recessed. The floor has borer and some broken boards.	2 Good, concrete floor 4 Poor, T&G flooring.	Replace damaged flooring with new tongue and groove boards.
	There is one concrete step between the path and the porch which has an old crack across its corner.	3 Fair	No action required.
	The porch is protected from the weather on the south and west sides, with a glazed three-pane sash in the south wall.	3 Fair	Prepare and re-paint walls and timber work.
	The rear porch has a built-in basalt bench seat or bin from which the seat or lid has been removed.	3 Fair	Provide a new timber top so the bench is functional.
	Walls and soffits are lined with 90x12 match lining which has some borer evident.	4 Poor	Treat borer, prepare and re-paint. Replace badly infested boards that have lost structural integrity.
	The electrical distribution board for the house is located in the rear porch. The meterbox is located on the exterior south wall of the house.	4 Poor	Test board for asbestos. The electrician is to check wiring and the distribution board. Being an older board with fuses, it will possibly require replacement with a new board with MCBs.
	Doors are discussed with the internal rooms.		

QUARRY MAINTENANCE ENGINEER'S HOUSE - INTERIOR

Item & Photograph	Current Condition and Status Description	Condition Reference	Recommended Remedial Action
Sunporch    	The porch floor is ex 100x25 rimu tongue and groove boarding with a matai threshold to the threshold to the entry steps. The floor is currently painted.	3 Fair	Light floor sand to remove the paint. Finish with Hard Flooring Oil.
	The walls and ceiling are lined with painted hardboard with quadrant and half round beads. The hardboard appears to be later installation and original linings may be concealed beneath. Invasive investigation would be needed to confirm. The west wall hardboard is in poor water damaged repair.	3 Fair, except west wall. 5 Very poor, west wall.	Investigate whether the hardboard linings are original, and if not, determine whether evidence remains of earlier linings. Plywood or match lining may conjecturally may have been used. If hardboard remains, repair rotted area on west wall, repair beads, prepare and re-paint.
	The west and north sides are enclosed with timber lattice glazed screens, originally varnished, now painted. The lower part of the west wall lattice window has rotted.	3 Fair 4 Poor	Strip paint, prepare and varnish. Remove the west window, repair the rotten sill, jambs and bottom rail, prepare, reglaze and re-paint.
	The original front entry door is a framed and glazed door, varnished to the interior, painted to the sun porch.	2 Good	Prepare and re-paint.
	French doors to the living room.	2 Good	Prepare and re-paint.
	Added exterior wall French doors.	4 Poor	Refer <i>Front Entry</i> . Removal of the doors is the preferred and recommended action.
	Electrical services. Switches and outlets are recent fabric with cabling in poorly installed PVC conduit.	4 Poor	Electrician to inspect the electrical services installation.
Hall 	The rimu t&g flooring is exposed. It is in poor repair in the bedroom wing due to borer infestation and has patched holes as a result. Walls and ceilings are fibrous plaster with lining paper and paint that is in worn	5 Very Poor	Remove the t&g flooring and inspect the sub-floor framing condition. Repair as required. Provide new t&g flooring, or if the floor is to be carpeted, sheet flooring would be acceptable. Install sub-floor insulation.

QUARRY MAINTENANCE ENGINEER'S HOUSE - INTERIOR

Item & Photograph	Current Condition and Status Description	Condition Reference	Recommended Remedial Action
Hall (continued)  	condition. The ceiling junction is finished with a rimu scotia mould, painted. Skirtings are ex 100x25 rimu bevelled profile, varnished. There is some borer infestation evident. Internal doors and the HWC cupboard doors are framed doors with flush rimu plywood facings with rimu frames and ex45x12 rimu square architraves. Doors are varnished to the hall side. The hot water cylinder and shelving have been removed from the hot water cylinder cupboard. Electrical services. Switches and outlets are recent fabric.	3 Fair 3 Fair 2 Good	Strip lining paper, repair and re-stop walls and ceilings as required. Hang lining paper and re-paint walls and ceiling. Skirtings will require removal for the replacement of the flooring. Treat borer or replace like-for-like. Reinstall, sand, prepare and re-varnish. Sand, prepare and re-varnish. New HWC installation and shelving reinstatement required. Electrician to inspect the electrical services installation.
Living Room   	The timber flooring is carpeted and was not seen. Walls and ceilings are fibrous plaster with lining paper and paint above plywood panelling to the walls. The panelling and fibrous plaster walls have been painted throughout. The ceiling junction is finished with a rimu scotia mould, painted. Skirtings are ex 100x25 rimu bevelled profile, originally varnished, now painted.	Timber floor was not seen. 4 Poor, carpet. 3 Fair 3 Fair	Remove the carpet and inspect the floor and sub-floor framing condition. Repair as required or provide new t&g flooring. If the floor is to be carpeted, timber sheet flooring is acceptable. Install sub-floor insulation. Strip lining paper, repair and re-stop walls and ceilings as required. Hang lining paper and re-paint walls and ceiling. Strip the paint from the panelling, restore, prepare and varnish the rimu panelling. Skirtings will require removal for the replacement of the flooring if this is required. Reinstall, strip paint, sand, prepare and varnish.

QUARRY MAINTENANCE ENGINEER'S HOUSE - INTERIOR

Item & Photograph	Current Condition and Status Description	Condition Reference	Recommended Remedial Action
Living Room (continued)			
	The west window is a large window continuous between the living room and dining alcove. It was originally varnished, now painted.	2 Good	Strip paint from the window and architraves, sand, prepare and varnish.
	The French doors to the sun porch have four equal sized glazed panels each. They are painted but were originally varnished.	2 Good	Strip paint from the door, frame and architraves, sand, prepare and varnish.
	The hall door is a framed door with flush rimu plywood facings with rimu frames and ex45x12 rimu square architraves. It is painted to the living room side but was originally varnished.	2 Good	Strip paint from the door, frame and architraves, sand, prepare and varnish.
	The added door to the dining alcove is a painted flush panel door installed with ex100x25 architraves. Painted.	3 Fair	The preferred heritage conservation action is to remove the door and infill partition.
	The fireplace is blanked off and was not seen. It is fitted with a timber mantelpiece that returns around the sides of the fire as shelving and has a timber fender. The hearth was not seen.	3 Fair, chimney breast, mantle, shelving and fender.	Strip paint from the mantle, shelving and fender sand, prepare and varnish. Remove the blanking panels to the hearth and fireplace and determine action required.
	Electrical services. Switches and outlets are recent fabric.		Electrician to inspect the electrical services installation.
	Other: Infilling wall to the half partition wall between the living room and original dining alcove.	4 Poor	The preferred heritage conservation action is to remove the infill part of the wall reinstating the connected living and dining spaces.
Dining Alcove (now room)			
	The timber flooring has vinyl floor coverings and was not seen. (Note: The vinyl flooring may have asbestos in its backing).	Timber floor was not seen. 3 Fair, vinyl flooring.	Remove the vinyl and inspect the floor and sub-floor framing condition. Repair as required or provide new t&g flooring. If the floor is to be covered with floor coverings, timber product sheet flooring would be acceptable. Install sub-floor insulation.

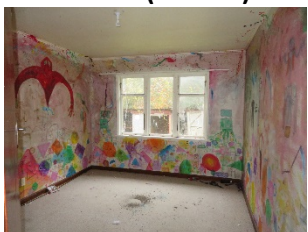
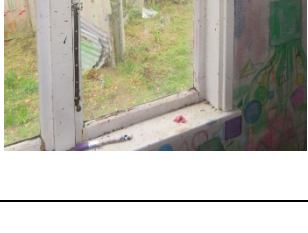
QUARRY MAINTENANCE ENGINEER'S HOUSE - INTERIOR

Item & Photograph	Current Condition and Status Description	Condition Reference	Recommended Remedial Action
Dining Alcove (continued) 	Walls and ceilings are fibrous plaster with lining paper and paint above plywood panelling to the walls. The panelling and fibrous plaster walls have been painted throughout. There is cracking of the wall at the junction between the living room wall infill partition and the original partition.	3 Fair, generally.	Strip lining paper, repair and re-stop walls and ceilings as required. Hang lining paper and re-paint walls and ceiling.
	The ceiling has evidence of water damage in the paint with mould on the surface of the affected fibrous plaster. The ceiling is finished with a scotia, painted.	4 Poor, ceiling.	Inspect roof for leaks and repair. Cut out damaged fibrous plaster ceiling area and provide new plaster-board repair. Stop, prepare and re-paint.
	Skirtings are ex 100x25 rimu bevelled profile, originally varnished, now painted.	3 Fair	Skirtings will require removal for the replacement of the flooring if this is required. Reinstall, strip paint, sand, prepare and varnish.
	The west window is a large window continuous between the living room and dining alcove. It was originally varnished, now painted.	2 Good	Strip paint from the window and architraves, sand, prepare and varnish.
	The kitchen door is a framed door with flush rimu plywood facings with rimu frames and ex45x12 rimu square architraves. The door and joinery are painted to both the dining alcove and kitchen sides, but the dining alcove side was originally varnished.	3 Fair	Strip paint from the door, frame and architraves, sand, prepare and varnish.
	The added door to the living is a painted flush panel door installed with ex100x25 architraves. Painted.	4 Poor	The preferred heritage conservation action is to remove the door and infill partition.
	Sideboard cupboards and joinery fitted to the south wall with plywood panelling between is in sound condition. The joinery, originally varnished, is now painted.	3 Fair	Strip paint from the sideboard joinery, panelling and shelf, sand, prepare and varnish.

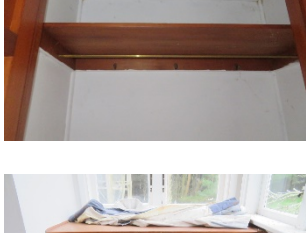
QUARRY MAINTENANCE ENGINEER'S HOUSE - INTERIOR

Item & Photograph	Current Condition and Status Description	Condition Reference	Recommended Remedial Action
Dining Alcove (continued)	Electrical services. Switches and outlets are recent fabric.		Electrician to inspect the electrical services installation.
Kitchen 	The timber flooring has lino tile floor coverings and was not seen. The lino is old and may even be the original flooring but is worn beyond serviceable repair and has been patched with modern vinyl sheet. Borer was evident in seen floorboards.	4 Poor, lino tile flooring. 4 Poor, seen floorboards.	Remove lino tile flooring. and assess the condition of the floorboards and sub-floor framing. Either repair or provide new flooring. If vinyl or similar floor coverings are proposed, timber sheet flooring would be acceptable. Install sub-floor insulation.
	Walls and ceilings are fibrous plaster above painted hardboard wall panelling. All surfaces are worn and there is water damage to the ceiling above the south wall.	4 Poor	The walls and ceiling linings can be repaired and re-painted but is dependant on whether the kitchen cabinetry is to be replaced with modern joinery.
	The south window has fanlight windows above opening casements The window is installed with ex45x12 rimu square architraves. The window joinery is painted.	3 Fair	Prepare window joinery and re-paint.
	The kitchen and hall doors are framed door with flush rimu plywood facings, rimu frames and ex45x12 rimu square architraves, painted.	3 Fair	Prepare window joinery and re-paint.
	The rear porch door is a framed door with flush panel to the kitchen side and vertical matching to the porch side. It has rimu frames and ex45x12 rimu square architraves, all painted.	3 Fair	Prepare door joinery and re-paint.
	The original kitchen cabinetry joinery and finishes are worn.	3 Fair	The kitchen cabinetry is able to be repaired and restored. This action depends on a decision as to whether it is to be retained as historical evidence or be replaced with a modern kitchen.
	Chip incinerator heater. The chip heater is non-compliant.		The chip heater is unable to be used. It may be removed.
	Plumbing and tapware.		Not assessed.
	Electrical services. Switches and outlets are recent fabric.		Electrician to inspect the electrical services installation.

QUARRY MAINTENANCE ENGINEER'S HOUSE - INTERIOR

Item & Photograph	Current Condition and Status Description	Condition Reference	Recommended Remedial Action
Bedroom 1 (Master)	The timber flooring is carpeted and was not seen.	Timber floor was not seen.	Remove the carpet and inspect the floor and sub-floor framing condition.
		5 Very Poor, carpet.	Repair as required or provide new t&g flooring. If the floor is to be carpeted, timber sheet flooring is acceptable. Install sub-floor insulation.
		3 Fair	Strip lining paper, repair and re-stop walls and ceilings as required. Hang lining paper and re-paint walls and ceiling.
		2 Good	Skirtings will require removal for the replacement of the flooring. Reinstall, sand, prepare and re-varnish.
		2 Good	Sand, prepare and re-varnish.
	The window has fanlight windows above opening casements The window is installed with ex45x12 rimu square architraves. The window joinery is painted.	3 Fair	Prepare and re-paint.
	The wardrobe is fibrous plaster lined with timber shelving and BMA finish hooks on a timber wall rail.	2 Good	No action required.
	Electrical services. Switches and outlets are recent fabric.		Electrician to inspect the electrical services installation.

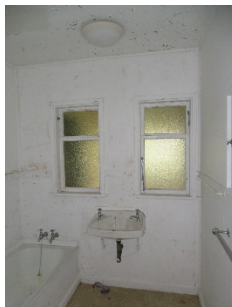
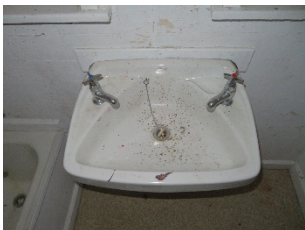
QUARRY MAINTENANCE ENGINEER'S HOUSE - INTERIOR

Item & Photograph	Current Condition and Status Description	Condition Reference	Recommended Remedial Action
Bedroom – Girl's 	The rimu t&g flooring is exposed. It is in poor due to borer infestation.	5 Very Poor	Remove the t&g flooring and inspect the sub-floor framing condition. Repair as required. Provide new t&g flooring, or if the floor is to be carpeted, sheet flooring would be acceptable. Install sub-floor insulation.
	Walls and ceilings are fibrous plaster with lining paper and paint that is in poor, worn condition. The ceiling junction is finished with a rimu scotia mould, painted.	3 Fair	Strip lining paper, repair and re-stop walls and ceilings as required. Hang lining paper and re-paint walls and ceiling.
	Skirtings are ex 100x25 rimu bevelled profile, varnished. Some borer infestation was seen.	3 Fair	Skirtings will require removal for the replacement of the flooring. Treat borer or replace like-for-like. Reinstall, sand, prepare and re-varnish.
	The hall door and the wardrobe doors are framed doors with flush rimu plywood facings with rimu frames and ex45x12 rimu square architraves. Doors are varnished.	2 Good	Sand, prepare and re-varnish. Replace the hall door recent powdercoated lever hardware with BMA finish hardware.
	The corner window has fanlight windows above opening casements. The window is installed with ex45x12 rimu square architraves. The window joinery is painted.	3 Fair	Prepare and re-paint.
	The wardrobe is fibrous plaster lined with timber shelving and brass finish pipe hanging rail. The interior is roughly painted.	2 Good	Strip paint overruns from interior woodwork, and re-varnish.
	Built-in drawers are of rimu construction with plywood drawer bottoms.	2 Good	No action required.
	Electrical services. Switches and outlets are recent fabric.		Electrician to inspect the electrical services installation.

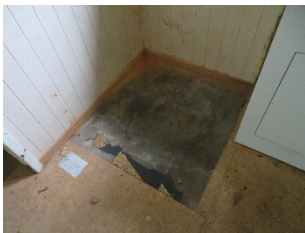
QUARRY MAINTENANCE ENGINEER'S HOUSE - INTERIOR

Item & Photograph	Current Condition and Status Description	Condition Reference	Recommended Remedial Action
Bedroom – Boys			
	The floor has been replaced with particle board throughout.	2 Good	Sub-floor framing requires inspection when floor areas elsewhere are opened up. Install sub-floor insulation.
	Walls and ceilings are fibrous plaster with lining paper and paint that is in worn condition. The ceiling is water damaged. The ceiling junction is finished with a rimu scotia mould, painted.	3 Fair, walls. 4 Poor, ceiling.	Strip lining paper, repair and re-stop walls and ceilings as required. Hang lining paper and re-paint walls and ceiling.
	Skirtings are ex 100x25 rimu bevelled profile, varnished. One skirting has been replaced with new and is poorly installed and finished.	2 Good	Replace recent skirting with new rimu matching the original profile. Sand, prepare and re-varnish.
	The hall door is a framed door with flush rimu plywood facings with rimu frames and ex45x12 rimu square architraves. It has scratches across its inside face. The door is varnished.	3 Fair	Deep sand to remove scratches, fine sand, prepare and re-varnish.
	The window has fanlight windows above opening casements. The window is installed with ex45x12 rimu square architraves. The window joinery is painted. There is one broken window-pane.	3 Fair	Prepare and re-paint. Replace broken windowpane and paint.
	The wardrobe doors are framed doors with flush rimu plywood facings with rimu frames and ex45x12 rimu square architraves. The interior of the wardrobe is fibrous plaster lined with timber shelving. The hanging rail has been removed. Two different sizes of door handle are installed.	2 Good	Source and replace door pull handle so both handles match.
	Electrical services. Switches and outlets are recent fabric.		Electrician to inspect the electrical services installation.

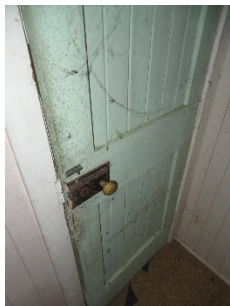
QUARRY MAINTENANCE ENGINEER'S HOUSE - INTERIOR

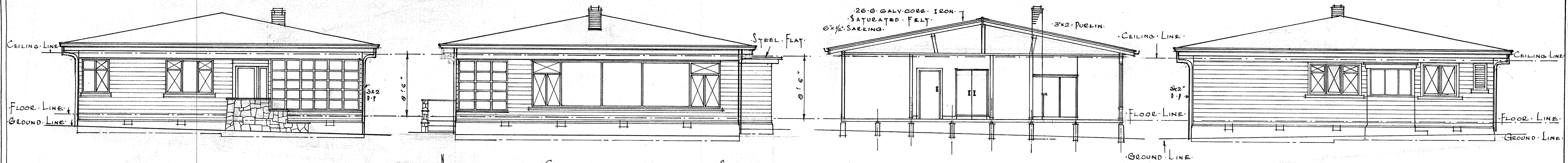
Item & Photograph	Current Condition and Status Description	Condition Reference	Recommended Remedial Action
Bathroom			
	The timber flooring has vinyl floor coverings and was not seen. (Note: The vinyl flooring may have asbestos in its backing).	Timber floor was not seen. 3 Fair, vinyl flooring.	Remove the vinyl and inspect the floor and sub-floor framing condition. Repair as required or replace with H3.1 treated plywood sheet floor and lay new vinyl flooring. Install sub-floor insulation.
	Walls and ceilings are fibrous plaster above painted hardboard wall dado panelling with a tile pattern. All surfaces are in poor, worn condition and there is condensation water damage across the ceiling.	4 Poor	Remove all linings and replace with Gib Aqualine wet wall gibboard. Stop and paint.
	The bathroom door is a framed door with flush rimu plywood facings with a glazed panel to the upper part of the door, rimu frames and ex45x12 rimu square architraves. The door is painted to the bathroom side and varnished to the hall.	3 Fair	Sand, prepare and re-varnish or re-paint.
	Two south windows open to the rear porch have fanlight windows above casements. The window is installed with ex45x12 rimu square architraves. The window joinery is painted.	3 Fair	Sand, prepare and re-paint.
	Skirtings are ex 100x25 rimu bevelled profile, painted.	3 Fair	Sand, prepare and re-paint.
	Bath is porcelain on steel.	3 Fair	Removal for wall and floor repairs will be required. Reinstall.
	The shower has a stainless steel tray and melamine board wet wall linings and ceiling. A Feltonmix shower mixer is installed.	3 Fair	Repair of the threshold step to the shower is required. Action required depends on the floor condition.
	The handbasin is a recent McSkimming's porcelain basin with low-pressure taps.	3 Fair	Remove for wall and floor repairs. Reinstall.

QUARRY MAINTENANCE ENGINEER'S HOUSE - INTERIOR

Item & Photograph	Current Condition and Status Description	Condition Reference	Recommended Remedial Action
Bathroom (continued) 	The wall cabinet is original fabric with a mirror fitted into the framed cupboard door. The cabinet is painted. The water supply is not operational and plumbing services were not assessed. Electrical services. Switches and outlets are recent fabric.	3 Fair	Prepare and re-paint interior and exterior of the cabinet. Assessment of the plumbing installation is required. Electrician to inspect the electrical services installation.
Laundry 	The floor has been replaced with particle board fitted around the concrete pad for the copper (removed). Walls are lined with vertically fixed ex100x12 rimu match lining which is painted. There is borer in some of the match lining.	2 Good 4 Poor	No action required except to lay vinyl flooring if required. Treat borer and fill holes. Prepare and re-paint.
	Skirtings are new 65x12 Pinus radiata, unpainted. Ceilings are lined with fixed ex100x12 rimu match lining which is painted.	2 Good 3 Fair	Prepare and paint. Sand, prepare and re-paint.
	The porch and WC doors are framed, ledged and braced doors with vertical matching to the porch side. The porch door has a recent rimlock fitted which is rusting, and the WC door has an original rimlock in serviceable condition but rusted.	3 Fair	Sand, prepare and re-paint the door. Repair dog scratch marks. Remove and treat rust on the rimlock and re-paint, or replace the rimlock with a Tradeco rimlock.
	The window has two casement sashes, painted. A cupboard described as a fuel store on the original drawings is lined with unpainted recent hardboard. It has no doors or ceiling. The laundry tub and tapware are recent fabric.	3 Fair 3 Fair 3 Fair	Sand, prepare and re-paint the window. No action required. No action required.

QUARRY MAINTENANCE ENGINEER'S HOUSE - INTERIOR

Item & Photograph	Current Condition and Status Description	Condition Reference	Recommended Remedial Action
Toilet – WC			
	The timber flooring has vinyl floor coverings and was not seen. (Note: The vinyl flooring may have asbestos in its backing).	Timber floor was not seen. 4 Poor, vinyl flooring.	Remove the vinyl and inspect the floor and sub-floor framing condition. Repair as required or replace with H3.1 treated plywood sheet floor and lay new vinyl flooring. Install sub-floor insulation.
	Walls are lined with vertically fixed ex100x12 rimu match lining which is painted. There is borer in some of the match lining. Walls finish to the floor with quadrant beads. Walls are painted.	4 Poor	Treat borer infestation and fill holes. Prepare and re-paint.
	Ceilings are lined with fixed ex100x12 rimu match lining which is painted. There is borer in some of the match lining.	4 Poor	The beads will be replaced when new floor coverings are installed. Prepare and paint with the walls. Treat borer infection and fill holes. Prepare and re-paint.
	The WC door is framed, ledged and braced doors with vertical matching to the porch side. The WC door has an original rimlock in serviceable condition but rusted.	3 Fair	Sand, prepare and re-paint the door. Repair dog scratch marks. Remove and treat rust on the rimlock and re-paint or replace the rimlock with a Tradeco rimlock.
	The timber window has fixed glass louvres and is painted.	3 Fair	Sand, prepare and re-paint the window.
	The WC pan is original fitted with a recent cistern. They appear to be in serviceable condition but were not able to be assessed.		Assessment of the plumbing installation is required.
	The main vent to the exterior of the WC is broken.		Replace the main vent stack from its connection to the cast iron pipe upstand. Sewer drains require investigation and assessment.
	Electrical services. Switches and outlets are recent fabric.		Electrician to inspect the electrical services installation.



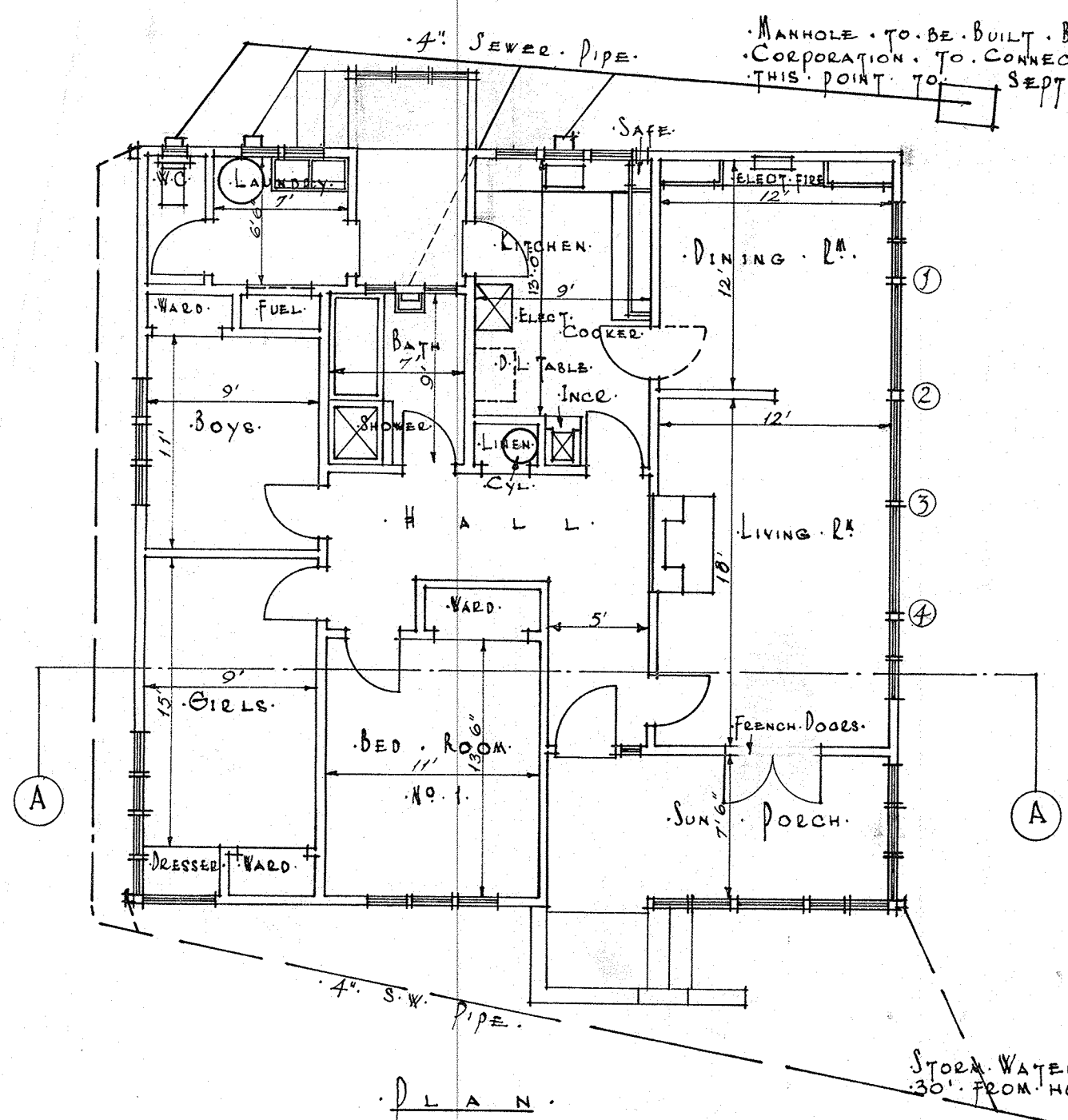
FRONT ELEVATION.

SIDE ELEVATION.

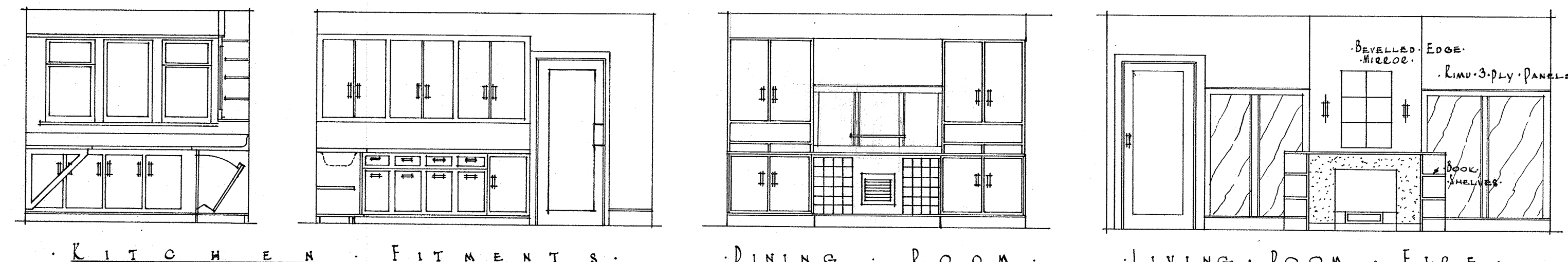
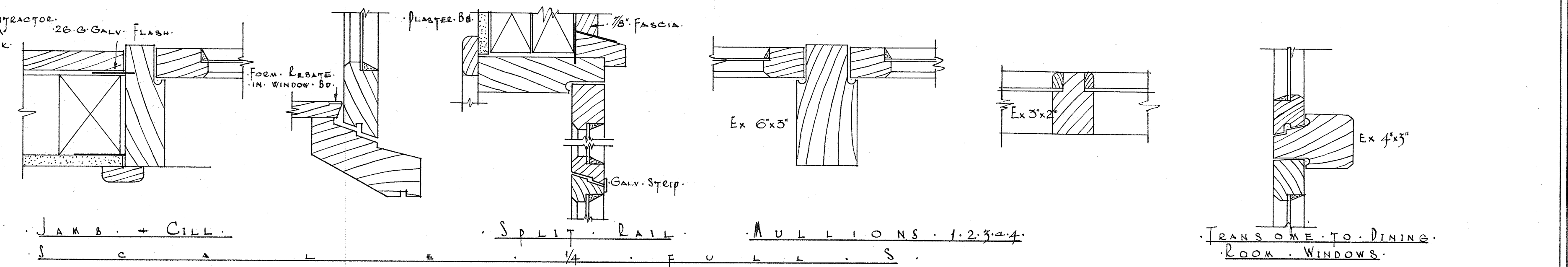
SECTION A-A.

BACK VIEW.

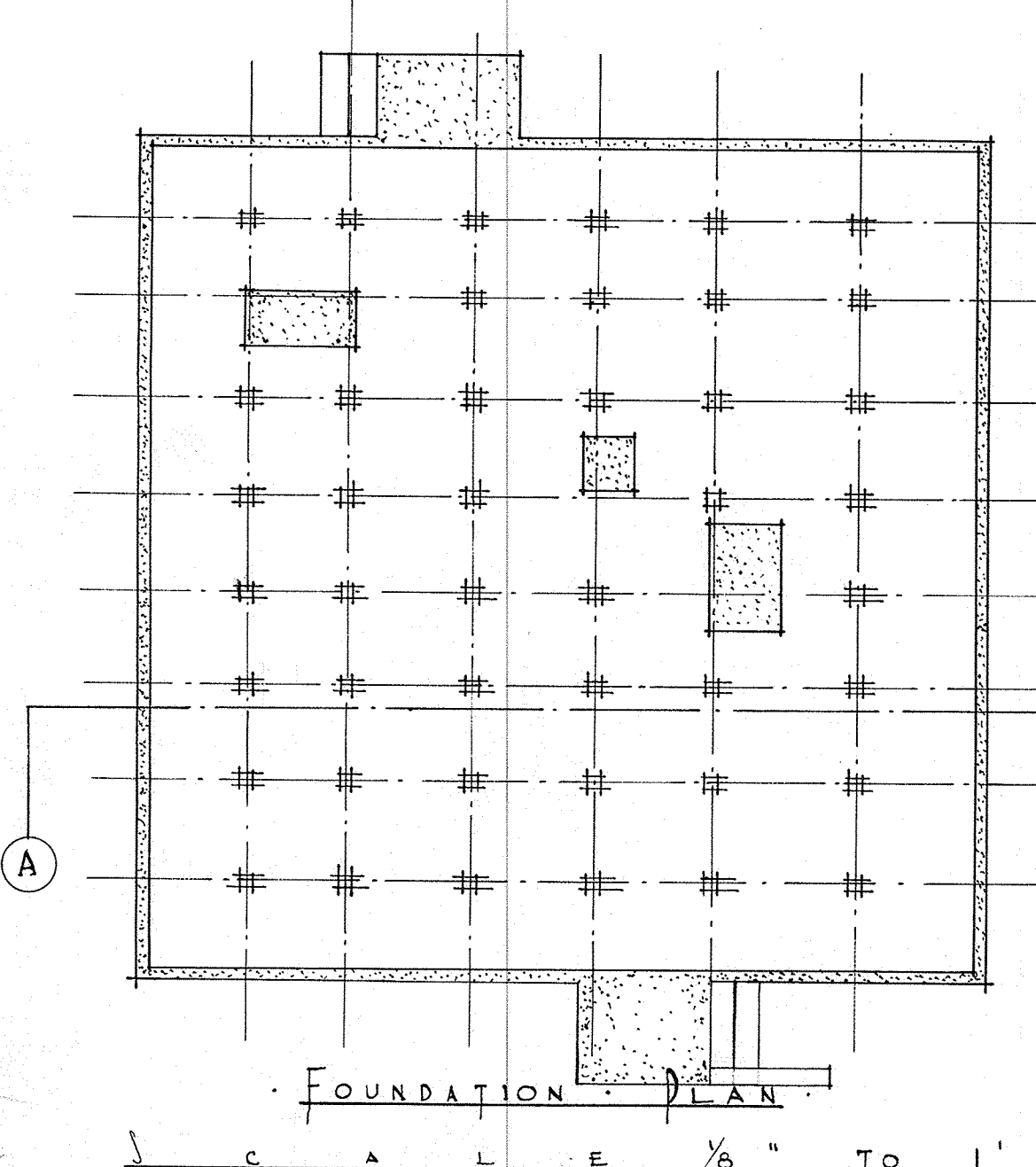
SCALE 1/8" = 1' IN 30'



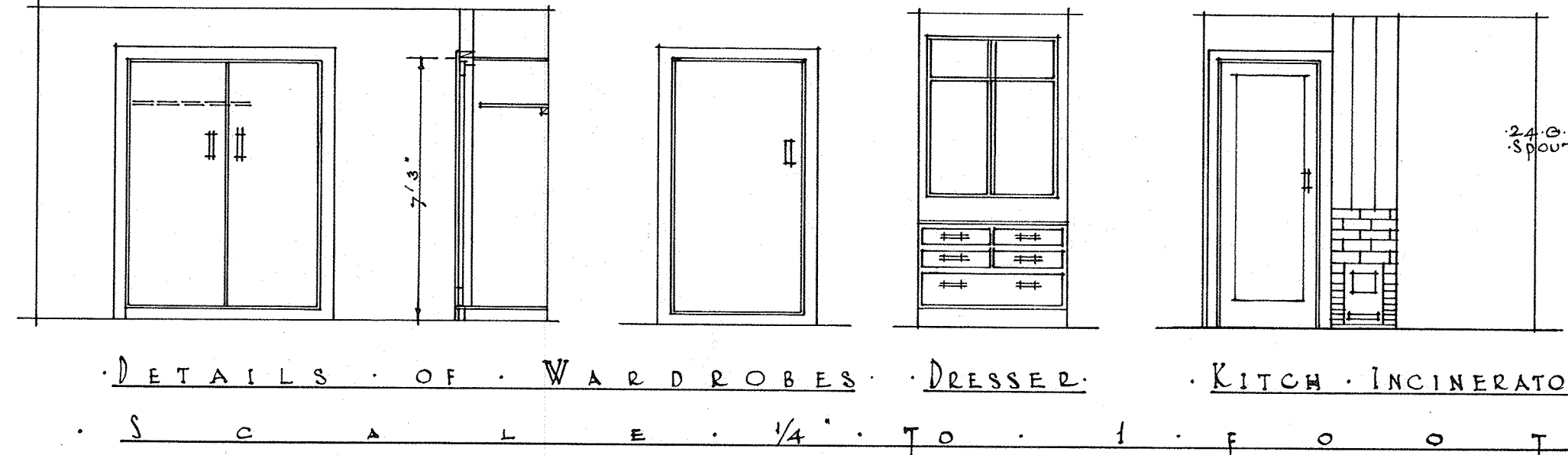
PLAN.



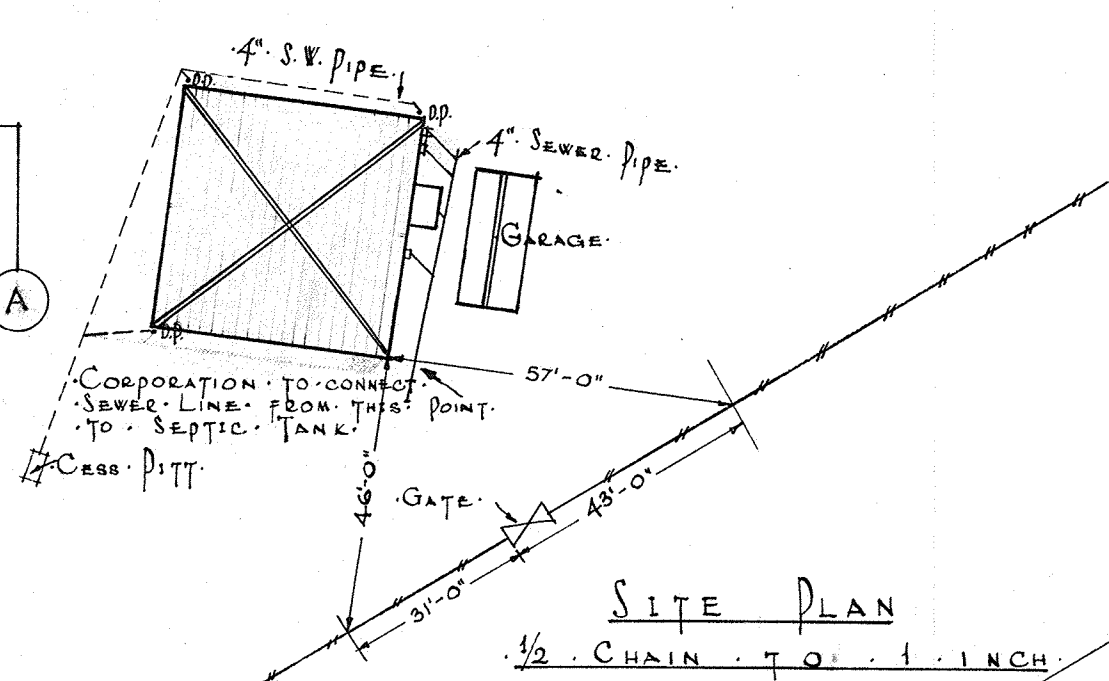
KITCHEN FITMENTS. DINING ROOM. LIVING ROOM FIRE.



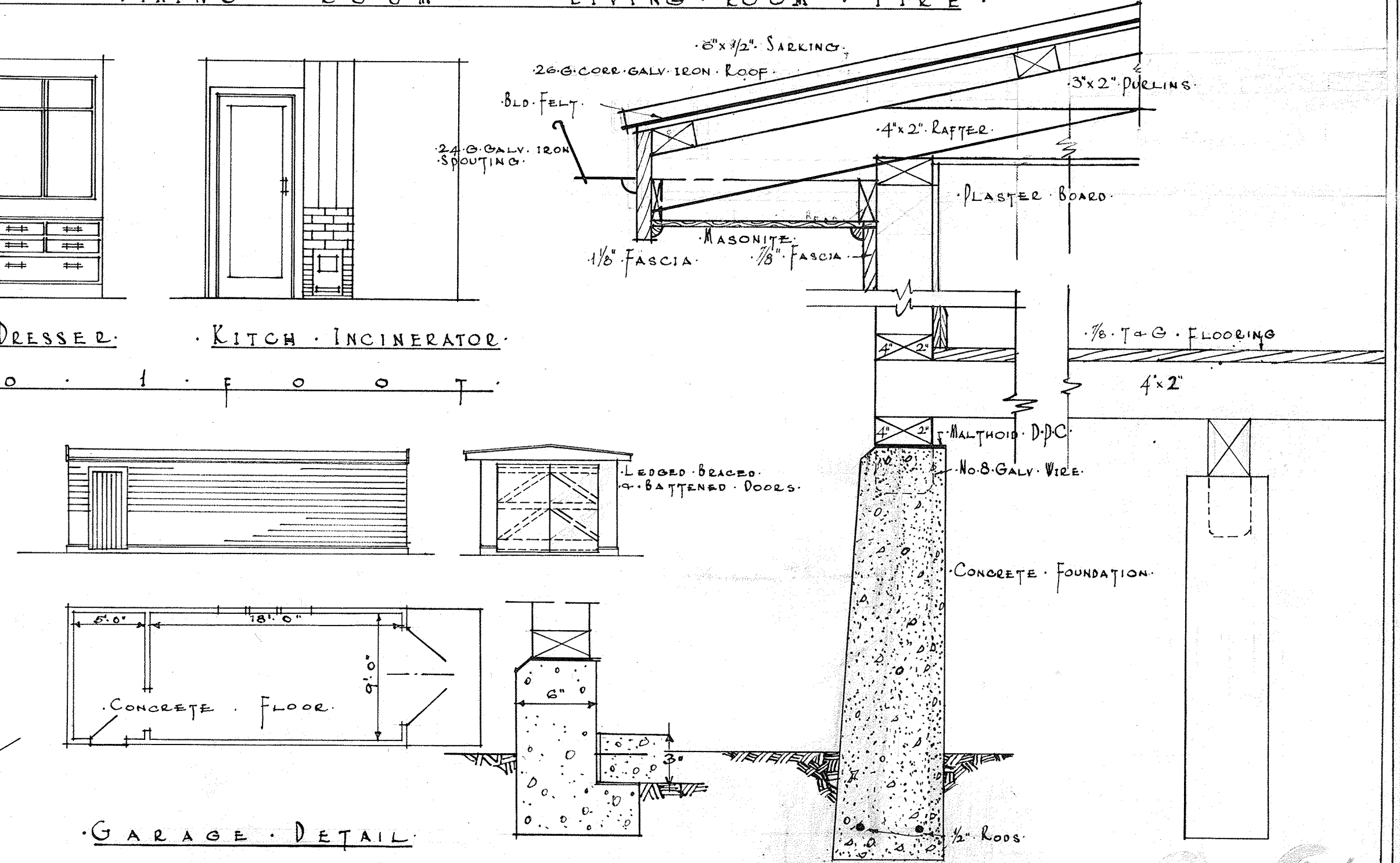
FOUNDATION PLAN.



DETAILS OF WARDROBES. DRESSER. KITCH. INCINERATOR.



SITE PLAN



GARAGE DETAIL.

ACTING
CITY ENGINEER

HOUSE AT HALSWELL QUARRIES
FOR CHRISTCHURCH CITY COUNCIL

CITY ENGINEERS DEPT.
ARCHITECTURAL ASST.
DRAWN BY
TRACED BY
CHECKED BY
28/7/39
2/8/39

A.10.2/1.