

COPY FOR *City Council*

SPECIFICATION.

CONTRACT FOR *Shops at Courtenay Place*
for E. M. Goodwin Esqre



MEMORANDA.

Tenders Close not later than noon on Monday, 6th March - to be del.
at the Architects Office, marked "Tender for Shops"
Deposit with Tender £50 (Fifty Pounds).

Date of Completion (See page 31)

Penalty for Non-Completion £2 per day.

Maintenance 3 months.

*Each Tenderer is requested to peruse the
General Conditions of Contract to be
seen at the Architects Office.*

ATKINS & BACON,
Architects,
WELLINGTON.

ATKINS & BACON
ARCHITECTS

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*Nathan's Buildings,
Wellington N.Z.
and at Wanganui*

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SPECIFICATION of Work required to be
done and Materials to be used in the erection
of FOUR SHOPS in Courtenay Place, Wellington,
for E. M. GOODWIN ESQ., in accordance with
Plans prepared for the purpose by
ATKINS & BACON,
Architects,
Wellington.

S I T E The site is part of Section 285 on the South side of
Courtenay Place and adjacent to and on the Eastern side of the
Post Office, having a frontage of about one chain to Courtenay
Place.

THE WORK Comprises the clearing of old buildings off the site, the
formation of a right-of-way on the western side of site adjacent
to the boundary of the Post Office property, and the erection of
Four Shops with rooms over and Verandahs over pavements.

DRAWINGS The drawings referred to are as follows:

1. Plans of ground and first floor 1/8" scale
2. Elevations and Sections 1/8" scale
3. Details 1/2" scale

Tenderers are advised to visit the site as the Contractor
is to be responsible for any damage done to existing roads or
buildings and is to make good in every respect and to the entire
satisfaction of the Architects any part of the same affected
either directly or indirectly by his work, and should there be

anything omitted in this specification or not shewn upon the drawings which is necessary for the proper completion of the whole work in a substantial manner, the Contractor is to do that work as though it were fully specified or shewn.

PRELIMINARY WORK ON SITE Take down and remove the whole of the old buildings on site and Verandah, search for and fill up all old drains, manholes, etc. Remove all rubbish. Shore up and protect with screens or otherwise to obviate damage or disturbance to adjoining buildings.

The brick rubbish may be used to fill in under right-of-way.

EXCAVATOR & BRICKLAYER -----

See also other trades and special clauses.

Form the site to the required levels and excavate for all foundations, footings, drains and for basement, and remove all surplus soil and leave all clear and clean on completion.

All foundations and footings to be commenced on perfectly solid bed.

CONCRETE Properly box where and as necessary to effectually prevent possibility of admixture of earthy or other unsuitable matter with the concrete of the foundations.

No portion of the foundations is to be covered up until it has been approved.

Cement to be kept under cover, off the ground and protected from damp, to be so arranged as to be conveniently inspected for testing and identified to be of the best Portland of Colonial or British manufacture, the brand and quality to be approved by the Architects or their deputy, and proved equal to the requirements of the Engineering Standard Committee's specification for cement.

Stone to be approved perfectly clean broken stone or angular gravel, nothing in the foundations larger than will pass through a $2\frac{1}{2}$ " ring and elsewhere through a $3/4$ " ring, the latter also screened through $1/8$ " mesh.

Sand to be approved perfectly clean and sharp river or pit sand.

Concrete of all foundations to be composed of by measure six parts of stone and sand in approved proportions to one of cement and all other concrete shall be composed of by measure nine parts of stone or gravel to five of sand and three of cement.

Concrete to be made on approved mixing boards and with gauges of required sizes. The aggregate to be loosely thrown in and the gauge filled to level of top only (only one on a board at a time). A cask or two bags to be emptied on top and the whole to be turned twice dry and twice wet immediately after mixing and well rammed.

The wetting to be done by means of a sprinkler, care to be taken that no cement is lost and that there is no excess of water. The water to be quite fresh and clean.

When required in smaller quantities it is to be accurately measured.

The concrete shall be used immediately after mixing, and no concrete which has commenced to set shall be allowed in any part of the work.

The concrete of reinforced work shall be laid and specially tamped in order to secure the most perfect compactness and homogeneity throughout the work, the tamping to be continued till the concrete is thoroughly consolidated.

All concrete laying is to be carried evenly round all walls and piers, care to be taken to ensure good connections at all junctions of walls and piers and in case of reinforced work of walls, beams, floors, ceilings and girders.

Each section of concrete to be as nearly as possible completed in one operation.

FOUNDATIONS All foundations, including ground floor hearths, footings bases to columns and piers under floor sleepers, to be of concrete finished with a perfectly even surface, true to levels.

DAMP COURSE At levels directed lay a damp-course 5/8" thick composed of perfectly dry fine screened gravel and sand, mixed with enough strong tar and pitch so boiled that it will set hard and tough on cooling.

The admixture of tar and gravel to be thoroughly incorporated together upon a hot plate immediately before being put in place, where it is to be well rammed or rolled and is not to finish anywhere less than the specified thickness.

The damp-course is to be laid under all walls on top of all foundation walls, also under all sleepers and plates and wherever required to prevent timbers being in contact with brick or concrete work.

CONCRETE FLOORS Fill up under all solid concrete floors with screenings or other approved material, so rammed as to produce a perfectly rigid and permanent bed for the floor.

All concrete floors to have falls and channels formed as directed.

The floors of outside W.C's and Porches, ground floor hearths, and the Shop entrances to be of concrete 4" thick with a layer of heaviest (sheep) Galvd. wire netting embedded 1" from upper surface.

Each of the hearths of the upstairs fireplaces to be formed of a slab of seasoned concrete 6" thick reinforced with four 1/2" rods and built 14" in brickwork.

All steps and thresholds and curbs in right-of-way to be formed of similar concrete.

CONCRETE BAND At the levels of underside of first floor joists and roof plate there is to be a band of concrete 10" deep, the full thickness of wall less facings carried round every external party and cross wall reinforced with two continuous 1" steel rods, all

as shewn, the moulds for concrete to be rigid, true, clean and watertight. The concrete to be a wet mixture, well tamped, the steel to be approved best quality Siemens Martin mild steel free from scale or loose rust, to be properly straightened, neatly and sharply bent at angles, in longest lengths procurable, butted joints, and with a piece of similar diameter and 2'6" long at each joint to ensure continuous strength, members to be accurately and rigidly fixed in position with No.6 steel wire every 3'0" and closer where necessary, and ends of rods at first floor level to be hooked up round flange of girder so as to form a continuous tie.

Form corbelling out for chimney breast projections at first floor level with additional reinforcement as sketch, and also for plates as shewn.

REINFORCED CONCRETE FLOORS The upper floor over Shops Nos.2 and 3 will be formed of similar concrete 6" thick reinforced with 40 lbs. rails at 3 feet centres, laid flange upward, to have at least 8" bearing on walls. All rust or scale to be cleaned off and the rails to be treated with a coat of liquid cement before fixing, and interlaced with Galvd. barbed pig wire at 6" pitch.

The concrete is to be well tamped and the whole floor laid in one operation on a strong and rigid centering close jointed so that the liquid cement shall not escape. Lengths of No.5 fencing wire are to be embedded every 2'6" x 1'6" and left standing through top of concrete for fixing battens for floor.

COKE BREEZE Fill in over these floors where required to take Decolite with coke breeze and cement concrete 5 to 1 finished with a true and even surface to the Expert's satisfaction, and formed to fall as required.

LINTOLS All lintols where the concrete band does not serve are to be similarly formed, but 7" deep and 18" longer than the opening.

GIRDER ENCASMENT Encase the shop front girder with similar concrete.

The girder to be first wound round spirally 16" pitch with Galvd. barbed pig-wire blocked out from flanges and soffit of girder and the concrete filled in between the flanges inside and out and well and carefully tamped so as not to disturb the reinforcement.

CORBELS Build in cast and seasoned concrete corbels to project to carry ends of beams, those in front piers carrying steel joist to be as shewn with 5/8" hook bolt embedded to pass through flange at each end of each joist with nut and washer.

All concrete to be kept well wetted as directed to prevent too rapid drying as no visible joinings or cracks or discolourations will be allowed in any of the work.

BRICKWORK All bricks to be hard, sound, red bricks of regular and approved size and shape with clean sharp arrises well burnt and without flaws, cracks and other defects, and equal to sample on view at the Architects' office.

No soft or imperfect bricks or bats to be delivered on the ground.

No broken bricks to be used except where necessary as closers.

All sand to be of approved quality sharp and clean, and to be washed if so directed

Lime to be approved best fresh Hydraulic. Cement to be as for Concrete.

Mortar is to be composed of three parts of sand to one part of best fresh Hydraulic lime, or where so directed it is to be 2½ parts of sand to 1 of cement, all by measure and to be approved.

The height of four courses of bricks laid in mortar is not to exceed more than 1" the height of the same bricks laid dry.

All bricks to be well wetted and laid while wet. All joints, both bedding and vertical, are to be filled quite solid with mortar, so that there shall not be the slightest cavity in any joint. All brickwork shall be carried up uniformly, the

difference in level between any two parts to be within 2 feet.

The thickness of walls are to be as shewn. The joints of all plastered walls are to be raked out to a depth of $3/8$ " immediately after laying.

The exterior of all walls, piers and returns to front and East side and all chimneys, are to be of specially picked bricks with $5/16$ " joints gauging and bonded with body of work.

Provide all splayed, moulded and recessed bricks shewn or required. The arches to be carefully set out and bricks formed to templates. All brickwork to be in English Bond with Flemish facings.

Form brick-on-edge copings with double tile creasing under splayed brick band and sill courses. Provide centres and properly form all arches.

Form herring boning in spandrils, all as shewn. The upper six courses of all chimneys, all parapets above roof line all piers under girders. All the foregoing to be in cement mortar.

Form band courses with brick on end and build in selected burnt headers where and as shewn.

The horizontal joints of all face brickwork to be raked and pointed with a weather joint, the upper portion of the joint being evenly pressed back and the lower side cut off to straight edge, and all vertical joints to be key drawn. The face of bricks to be washed clean with water, and left neat and clean on completion.

Insert in all walls, chimney breasts, etc., every eight courses in height and immediately above and below all openings, except where concrete bands occur, a row of Johnston's H.B. steel wire bonding to each $4\frac{1}{2}$ " in thickness, to be carried round all buildings, hooked together at angles and junctions and turned 3" up and down wherever required.

At openings the bricks are to have their inner portions well tarred before laying.

Where necessary for fixing Joinery and timber work generally and for any fittings whether included in this contract or not,

build in approved coke breeze blocks.

Build set-offs for concrete floors and plates as shewn.

Build all projections and carefully bed all concrete corbels and templates, and all plates and sills and other timber work in cement, and all external door and window frames in Mastic.

Build in all bolts and other ironwork, and also point all flashings in cement.

Window sills to have galvd. iron water bar at underside of wood sills.

Build in all concrete bands, beams and lintels, steel joists, girders, etc., shewn or described.

CHIMNEYS Build up the chimney breasts as shewn. Carry up jambs and turn 9" arches in cement on $2\frac{1}{2}$ " x $1\frac{1}{2}$ " wrot. bars, split at ends and turned up and down 3" through jambs and fill in spandrils. All flues to have at least three sides 9" work pargetted and perfectly smooth and even throughout, tops to be formed and finished to detail. The tops of vent flues to have fine Galvd. netting covers neatly fitted.

Efficient means to be taken to ensure each chimney working satisfactory at all times.

FIREPLACES The three fireplaces in Tea Room will be bricked up with $4\frac{1}{2}$ " work and finished same as walls.

VENTILATORS Where directed, build in 24 approved 12" x 12" cast iron ventilators in outside walls and shop front curb and form flues for them, rendered inside in cement weathered to prevent moisture driving in, and form thirty-two 12" x 12" openings for through draught under ground floor in party and internal walls.

Form openings in parapet for iron trough gutters (see "Plumber").

GAS TABLES Build in iron brackets and bars to carry iron plate for Gas Rings. (See "Smith & Founder").

GRAVEL YARDS & PAVEMENT &c. Cover the yards and right-of-way with 3"

of approved gravel well rolled. The latter to be laid on a bed of hard rubbish or heavy ballast well rammed and crowned as directed.

Make good present footpaths and yards wherever disturbed and leave same equal to new. Make approved roadway across pavement, and leave all clear as shewn on Plan.

RIGHT-OF-WAY The right-of-way to Bake-house in rear of site to be always fully maintained in good order, and easy of access so as not to inconvenience the Occupier in any way.

CARPENTER & JOINER

See also other trades and special clauses.

All timbers to be free from all defects such as knots and shakes, and all to be guaranteed thoroughly seasoned and dry at time of using. On no account will work be accepted that shows any defect in this respect.

All timber except otherwise specified is to be best quality Oregon or selected building Heart Rimu.

All Totara or Matai specified is to be all Heart.

All visible timber is to be dressed.

All timber exposed to weather or damp is to be Heart of Totara. All inside dressed work is to be hand finished dark grained Heart of Rimu, except otherwise specified.

All other timber except otherwise specified is to be approved selected Oregon.

The distances given between centres of framing are to be in every case a maximum and wherever spacing works out differently the distance between centres is to be lessened by the insertion of an extra timber.

Framing is to be at 18" centres, except otherwise mentioned.

The whole of the work is to be of the best description and the whole of the framing to be framed bolted and spiked together in manner approved by the Architects.

In all cases the size specified means the size of the stuff when rough and not more than $3/16$ " will be allowed after dressing both sides.

Doors and other Mill prepared joinery are to stand when finished the full size specified or shewn and the timber to be well weathered after preparation and before putting together.

Should the sizes of any timbers be neither figured on the Drawings or mentioned in this Specification, the instruction of the Architects will be taken.

All trimmers and pieces into which they are trimmed are to be one-half thicker than the adjoining or corresponding timbers and

tenoned, draw-bored and pinned with hard-wood pins as directed.

Care to be taken that a clear space is left round the edges of all the timbers in the walls.

All ironwork to be B.B. Crown iron or other equal quality, forged, finished and fixed in a workmanlike manner, bolt heads and nuts square twice diameter of bolt and one diameter deep, each with two washers, each three diameters wide by a 1/4 diameter deep. All holes in ironwork to be so forged that the sectional area of iron is not lessened and ends of straps to be turned in. All ironwork to be dipped into Linseed Oil at the forge while hot.

Straps, bolts, spikes and nails are to be full size and so placed as to ensure the most substantial work. Holes to be bored and all nails to be punched where necessary.

The lower plates to be 4" x 3" and the sleepers and stringers 6" x 3", all Heart of Totara and well bedded. Other plates 4" x 3" bolted to concrete bands, all in long lengths, all to be bedded and bolted down every 4 feet and at angles with 1/2" bolts 12" long with double hook ends and nuts and washers.

All other framing adjoining concrete and brickwork to be similarly bolted.

Studs and their plates to be 4" x 2" with 3" x 2" bracing where directed well nailed. The following will be stud partitions Staircase enclosures and partitions about Tea-room lavatories.

JOISTS

The lower joists to be 6" x 2" at 18" centres well spiked. First floor joists to be 12" x 2" with a row of fully nailed 2" x 2" herring boning every 6 feet or less nailing battens to concrete floors to be 3" x 2" wired and stapled to concrete. (See "Bricklayer").

Where joists enter or pass through walls they are to be so wrapped with No.2 Malthoid as to effectually protect from damp.

Every third joist including ceiling joists, rafters and purlins next gables are to be tied to wall by an approved strap bolt, built in wall and bolted where joists run parallel to walls the three nearest to walls are to have similar strap bolts 4 feet apart.

ROOFS Roofs to be formed as shewn. Ridge 10" x 1½". Valleys formed with 8" x 1" nailed to backs of purlins. Purlins 4" x 2" at 30" centres. Principals 7" x 2" in long lengths scarfed and strapped at joints, strutted and tied with 5" x 2" and 4" x 3", and to have two rows of similar cross bracing well fixed to principals and ceiling joists and to struts and ties, all as shewn or directed. Ceiling joists 6" x 2" with 6" x 3" longitudinal bearers.

The bearers to lean-to over Kitchen to be two 6" x 3" bolted together with 1½" bolts 2 feet apart. Fix bearers for gutters and storm-water conduits as directed.

All roofs to be strongly built, bolted, tied and strutted as directed, so that the whole is perfectly rigid.

In all roofs lay a pair of 10" x 1" boards properly packed on joists and rafters so that all parts can be conveniently inspected. Strengthen ceiling joists for two cisterns (see "Plumber"), and form platform for same 4'0" square of 1" boards.

Fix bracketting for cornice round Tea Room at 16" centres, well nailed.

PLATE ON BEAMS A 4" x 3" plate to be bolted with 5/8" bolts every 2'6" to flange of steel beam over first floor ceiling (see "Smith & Founder") for fixing roof timbers.

ROOF COVERING The whole of the roofs are to be covered first with 1" sarking, no butt joints, and well nailed, then with red edged felting on which are nailed 3" x 1" battens 2'6" or less apart to receive iron.

Roof framing to be well strapped and bolted to cross walls. Spouting to be fixed to fascias and with scotia below as shewn.

Form proper dovetailed cesspools of 1½" boards ready for lining in valleys between front gables to pass through party parapets.

— VERANDAH Form front and side verandahs as shewn and directed, well and strongly framed, securely tied to wall and ironwork with

straps, bolts and cleats. The beams and plates to be Heart of Totara. Fix bearers for box gutters as shewn with holes through ceiling for downspouts, and frame the spandrils at each end of both front and side verandahs with studs and dwangers for fixing match lining.

Form 1½" panelled parapet at front end of side Verandah with 2" moulded and weathered capping and 1" facings. The back rough boarded and sheathed with iron.

The glass panels to be ^{Amph Plate} fixed with moulded beads bedded in red and white lead and screwed. All to be accurately formed to details.

MATCH LINING To be 6" x $\frac{3}{4}$ " ~~and~~ T.C. & V. jointed and to be thoroughly well cramped up and so finished that every joint shall remain quite close.

Cover the end spandrils to Verandahs with vertical match-lining, the soffits of stairs and ceilings and soffits of kitchen, outside W.C. and Porch, to be covered with match-lining fixed to soffit of rafters, and returned round beam. The walls and ceiling of Pantry, Lavatories and inside W.C.'s to be similarly covered, fixed vertically to dwangers or battens secured to walls.

Finish round angles of all match-lining and to cover joint of lining and plaster with 1½" scotia moulding.

DADOES Cover the walls of Shops to a height of about 10'6" with match-lining fixed to 3" x 1" nailing battens not more than 2'6" centres secured to breeze bricks built into walls every 2 feet apart projecting 1/4" beyond brick face. Finish on top with 3½" x 3" cornice mould rebated to cover joint with plaster.

Cover the walls of Tea Room to a height of 8'0" with similar matchlining but 3½" widths and the cornice mould returned against window architraves and returned and mitred round architrave and door heads.

FLOORS All floors to be laid with 6" x 1" T. & G. Heart of Matai double nailed finished clean and close jointed and all byewood planed off. Heading joints are to be splayed and all boards over Electric Conduits are to be screwed down and easily removable.

The floors of Bathroom, Lavatories and inside W.C's are to be as last, but rough, laid to falls and prepared for laying "Decolite" as directed. Where "Decolite" occurs over concrete floor it is to be laid on coke breeze (See "Bricklayer").

GROUND, &c. Fix rough grounds to breeze bricks in wall, where required for nailing skirting or other Joinery in plastered walls. Fix rough bracketting for plaster cornice in Tea-rooms.

SKIRTINGS & ARCHITRAVES Skirtings to be 8" x 1" and architraves 5" x 1" both moulded to detail. Finish round openings without doors with linings and architraves to match doors.

WINDOW LINING & SILL BOARD All windows to have 1" linings inside fixed to rough grounds and tongued to frame, and 1" sill board with moulded and returned edges tongued to sill and with 1" x 1" returned scotia under.

CASINGS Case the visible internal R.W. downpipes with 3/4" Rimu casing fixed to wall and with facing piece screwed for inspection.

Case the first floor ceiling beams with similar casing fixed to rough brackets between flanges of steel joist and scotia against ceiling.

MANHOLES Frame for and form two Manholes with linings and fillet round to finish plaster and panelled hinged doors for access to roof.

DOORS All doors to be to detail, hung with three 4" cast iron butts to double rebated jamb linings 1 1/2" thick fixed to framed grounds secured to brickwork unless otherwise shewn, and to have transoms where fanlights over.

All doors square panelled except otherwise specified. All sashed panels prepared with beads for glazing. Glass to be 21 oz. best quality selected, unless otherwise specified. Cathedral glass to be selected tinted.

Thickness of all doors under 2'8" wide to be 1½", and 2'8" wide or over 2" thick, unless otherwise specified.

All locks 6" Pallas motion mortice and Harcourt's best oval Cocoa furniture.

Outside doors to be Heart of Totara.

All ironmongery to doors, windows, etc., to be selected.

The doors to outside W.C's to be two panel and the outer Kitchen and Passage doors four panel bead butt.

The side entrance to Shop No.1 will be three panel, two lower panels as last and the upper panel sashes in squares with ovolo astragals glazed with Cathedral glass.

The Shop doors to be similar but moulded both sides and glazed with 26 oz. Clear sheet as shewn, each to have large size Yale night latch and three keys and shop door latch p.c. 15/-.

The doors to upstairs W.C's to have fanlights over glazed with Cathedral glass.

WINDOWS Windows to be of the sizes shewn daylight of opening, all sashes and frames to be Heart of Totara, and all glass to be best selected 21 oz., except otherwise specified.

Heads 2½", sills 4" weathered, double sunk, checked and grooved and with water bar.

Hung windows to be double hung except otherwise specified, in 1½" box frames, with pocket pieces, parting beads, stops and fillets. Sashes to be 2" ovolo moulded with 1" astragals as sh and with best sash cords and pulleys, brass cam fasteners and sash lifts, all to approval.

Where mullions are shewn they are to be properly boxed, the top sash of one light and bottom sash of other light to be fixed.

Casement windows to have solid frames and mullions, rebate and chamfered, grooved for weather round rebate and for lining

The casements to be grooved round to match groove round rebate of frame and check grooved and weathered lower rail. All to be hung except otherwise specified with strong $3\frac{1}{2}$ " cast iron butts.

All windows to be to detail.

The casement windows to back wall of Shops and fanlight over Shop door, will be hung at bottom to open inwards with Legatt's or other approved fanlight gearing with approved woven cords.

The lower lights of front casements to have rebated and grooved meeting styles, one casement to be fixed, the other to open outwards on butts at side with best quality bronze casement fastener and double jointed stay. The fanlight to be hung at top to open outwards with similar stay and two pins.

The outside W.C's windows to be of glass louvres (edges grooved) $3/4$ " apart, with steep pitch and approved lap, properly housed.

SHOP FRONTS The shop fronts to be formed as shewn. The sill and frame to be Heart of Totara. The glazing beads to be No.1255 Wunderlich Metal covered bar with proper angle bars and quarter round beads screwed to frame with brass screws to secure glass.

Form rounded angle as shewn and glaze with $1/4$ " British Polished plate securely fixed so as to be perfectly watertight. The door frame to have transom for opening fanlight.

The frame and lining to shop fronts and fixed transom lights over to be securely fixed to brickwork, and to girder and steel joist at transom with straps and bolts, the whole to be accurately formed to detail and as directed.

SHOW CASE Form Show boards as shewn with 1" T. & G. floor. (That to Shop No.1 to be rough T.& G. fixed $1\frac{1}{4}$ " down to allow for tiles). Grooved for hardwood slip and with moulded nosing and moulding under, supported on framed beams formed of 4" x 2" well spiked together 2 feet centres, and to 4" x 2" plates. The riser covered with match-lining.

The soffit formed with 4" x 2" joists fixed to fillet bolted to transom joist and head of frame, covered both sides with match-lining and finished at top with cornice as described to Dado. The sashes will be 1½" glazed. Those above transom to be fixed and below grooved to slide on hardwood slip let into flooring and with beads all round. The frame to be formed of 2" stuff with mouldings and facings, all as shewn, and to details and directions.

COUNTERS Fit up Counter in No.1 Shop 3'0" wide where shewn, with 1½" Kauri top moulded on front and return end, and with 1½" Heart Rimu panelled and moulded front and end with 3" x 2" moulding under counter top, and with 1" tongued and glued divisions the full width every 4 feet, securely fixed to ledges on underside of top and to floor. The whole to be to detail and strongly put together with screws.

STAIRCASES Form Staircase as shewn with 1½" wall strings finished to match skirtings, 1" moulded treads with scotia under, and 1" risers glued blocked and bracketted with strong bearers under. Newels to be 5" x 5" with cut and shaped tops with turned finials. Handrails 4" x 3" moulded and 2" x 1½" square balusters. All formed to details and as directed.

MANTELS Fix in Tea Room three plain figured Heart Rimu Mantels formed as shewn with panelled Overmantel and moulded to detail, and three similar Mantels but without panelled overmantels in other first floor rooms.

Fit up 1½" Rimu shelf on shaped brackets 2" thick over each Kitchen fireplace.

SINK TABLES Fit up in Shop No.1 Kitchen a grooved draining table of 1½" thick Kauri with housed 6" skirting round on strong framed bearers and brackets to detail.

Provide strong dressed bearers plugged to wall to carry slate Lavatory tables and fix 4" chamfered Rimu skirting round with returned front edge.

W.C's ^{six (6)} Fit up ~~four~~ W.C's with best hinged seat and cover on approved brackets with rubber pads and fix shelf for cistern where directed.

METERS Form cupboards for and fit up Gas and Electric Meters where directed.

SHELVING Fix $1\frac{1}{2}$ " board runs from manholes to various parts of roof. Fit up in best manner equal to 300 B.M. of 1" shelving of sizes and in position directed, on proper brackets and bearers.

FENCING & GATES Form fence 4'0" high enclosing back yards with 5" x 4" Totara posts splayed at top, and two arris rails out of 4" x 4" cut diagonally housed and pinned to posts, filled in with 1" rough boarding (Matai or Totara) with 3" x 3" weathered and trenched capping and 12" x $1\frac{1}{4}$ " Totara base board housed to posts.

BREASTWORK Form breastwork as shewn with 5" x 3" sawn Heart of Totara piles, sunk 1'6" in solid ground with 5" x 2" cleats, the posts not more than 5'0" apart tied securely with two double strands of No. 5 galvanized wire, well strained and stapled to posts and to split Totara land ties let 2'0" into ground. Fill in with $1\frac{1}{2}$ " Totara or Matai boards well secured. Form steps of rough Heart of Totara as shewn with $1\frac{1}{2}$ " treads trenched to $1\frac{1}{2}$ " strings.



SMITH & FOUNDER

CAST IRON Provide and fix in position the cast iron columns shewn on Plans and detail. All to be clean castings, free from flaws and sand holes with properly feathered angles and holes drilled for bolts, and bearing surfaces for girders turned. All fixing to concrete to be with 1" ragged bolts, two to base of each column.

The Verandah columns will be Messrs Luke & Co's No.22.

The column in Shop No.1 under shop front girder will have a bracket of 7/8" metal cast on with bolt holes to receive joist under transom lights. The columns on first floor to be as shewn with two 3/4" ragged bolts to concrete and 3/4" bolts to beams.

STEEL GIRDERS Provide, hoist and fix the rolled steel joists (equal to Messrs Dorman Long & Co's, Middlesboro', England) in position shewn on plans and details. All bolt holes to be drilled.

The rolled steel joist in transom of shop front to be one 8" x 4" 18 lbs. R.S.J., with 3" x 3" x 3/8" L steel cleats and rivetted to web and bolted to T steel rafters, the ends of joist having 9" bearing in wall and bolted to concrete with 3/4" ragged bolt and washer at ends, the cantilever end bolted to bracket on column framed and cleated as shewn to return joist built 3 feet into wall.

The shop front girder will be two 9" x 4" 21 lbs. rolled steel joists bolted together at bearing and in centre of span with 3/4" bolts and steam tubing distance pieces accurately fitted. The girder to be continuous and joined over centre of bearings with 1/2" fish plates, each joint, with six 5/8" bolts to webs. The bearing ends to be built 12" into wall with two 3/4" ragged bolts and washer to concrete template at end and intermediate bearings, and to abacus of column with four 3/4" bolts.

The cantilever in return wall to be two similar 9" x 4"

steel joists bolted together with three $\frac{3}{4}$ " bolts and distance pieces as last, and built 10 feet into wall with $\frac{3}{4}$ " ragged bolts and washers to concrete templates, two at fulcrum bearing and four at end. The cantilever end framed into end of front girder as shewn with L steel cleats each with eight $\frac{3}{4}$ " bolts or rivets to web.

The beam over first floor ceilings to be an 8" x 4" 18 lbs. Rolled Steel Joist in one length between walls or jointed and fish plated over columns, bolted to abacus of each column with two $\frac{5}{8}$ " bolts and washer and drilled for bolting wood plate with holes for $\frac{5}{8}$ " bolts every 2'6". The ends in to bear 9" in walls and the rods in reinforced bands to pass through holes in web.

VERANDAH ROOF The Verandah roof to be formed as shewn on detail with $2\frac{1}{2}$ " x $2\frac{1}{2}$ " L steel rafters at 4'0" centres bolted to cleats and to 2" x 2" L steel purlins with $\frac{1}{2}$ " bolts and coach bolted to beam, and with $\frac{3}{4}$ " diam. stay rods, similarly bolted to roof framing and flange of girder.

GAS TABLES Provide to be built in (see "Bricklayer") two $\frac{1}{4}$ " steel plates one 3'0" x 2'0" and one 4'0" x 2'0", the latter (to be fixed in Pantry) supported on two cantilever brackets forged out of $2\frac{1}{2}$ " x $\frac{3}{8}$ " bar with caulked ends as sketch, the plate fixed to same with four countersunk boiler screws, and the former supported and similarly fixed to $2\frac{1}{2}$ " x $\frac{3}{8}$ " bar with caulked ends in jambs of chimney opening.

PLUMBER

See also other trades and special clauses.

SHEET IRON Flat sheet iron to be "Blackwall Special" or equally approved brand everywhere, well rivetted and soldered.

ROOF IRON Cover the whole of the roofs with No. 24 gauge corrugated galvanised iron of approved brand, double lapped and 6" overlap at butts, and fixed with best approved patent soldered headed nails. All edges to be perfectly neat and truly cut.

RIDGES Cover all ridges with 18" girth lead edged galvanised ridging.

Valleys. hay valleys 18" wide, with double turn at sides with 24 gauge galvanised iron -

GUTTERS & CONDUITS Form Verandah and chimney gutters with 22 gauge iron as shewn in as long lengths as possible without joints, and laid with good falls to outlets.

Similarly form stormwater conduits in roof to discharge over cesspools where shewn or required. The conduits to have tray under with weep pipes through wall as directed (See sketch).

Cover all cesspools and outlets for stormwater with 1/2" mesh galvd. wire netting soldered to properly fitting strong wire frame to entirely keep all rubbish and birds, etc., from entering.

CESSPOOLS Line Cesspools with 5 lbs. lead properly dressed over wood boxes (see "Carpenter") with outlet formed as directed with 4" lead pipe to discharge into conduit or carried through wall to discharge over R.W. head or connected with internal R.W. pipes with brass ferrule with wiped joint to lead and properly caulked to iron.

FLASHING Put 4 lbs. lead flashings and apron pieces wherever iron abuts upon brickwork, stepped where raking, round chimneys, to all gutters, cesspools, against parapets and wherever else

required, neatly tacked and dressed down, let 1" into brickwork, plugged with lead and cemented over. All to be so finished that the whole building shall be permanently watertight.

HOOD OVER GAS RINGS Form strong hood 3'0" x 2'0" with beaded edge over table in Pantry with 5" vent pipe to pass into flue, all of 24 gauge iron neatly made and stiffened round edge and fixed with iron stays to wall. All joints to be strongly rivetted and soldered.

SPOUTING To all eaves fix 24 gauge 6" Ogee galvanised iron eaves spouting fixed in approved manner with strong wrought galvanised brackets and straps to roof at 3'0" centres or less, and convey all water as shewn and directed through 3" diameter downpiping as directed.

DOWN PIPES All external down pipes and vent pipes to be 24 gauge galvanised iron with folded and soldered seam with tight joints, with soldered rolls at joints and screwed to wall with approved galvanised wrought iron ears.

Fix approved galvanised iron rain-water heads covered with 1/2" mesh galvanised wire netting.

The internal downpipes will be 4" diameter heavy cast iron with socket and spigot joints well caulked with red lead and tow, with all bends, etc., as required.

SOIL PIPE The soil pipe from first floor will be similar connected to lead branch from W.C. with brass ferrule as before described.

W O R K All Plumbers' work to be the best and strictly in accordance with the City Bye-laws unless more fully specified herein.

W.I. PIPES All wrought iron pipes throughout are to be galvanised having proper fittings and bends to be used instead of elbows.

~~B A T H Provide and fit up a Bath including trap and taps p.c. £8 (Eight Pounds). Fit up over centre of Bath as directed best approved brass spray Shower.~~

W.C.s. Provide & fit up each of the W.C.s with best approved clean white pedestal apparatus with P-traps & 4" lead vent to join C.I. soil pipe & 2" lead trap vent with cap over vent
• Now - Provide for each W.C. & fit up complete an approx. 3 gallon galv. cast iron flushing cistern with silent flush valve & fixed on strong brackets.

LEAD TRAPS All lead traps to be of approved form of 6 lbs. lead with large mud plugs.

WASTES & VENTS All wastes and vents within the building to be 6 lbs. lead to pass through wall with a good fall to prevent moisture leading in, outside to be 22 gauge galvd. iron and where necessary the waste to have T. for vent.

All vents to be carried up a sufficient height above the highest adjacent eaves and to have approved double capped ventilators with netting to prevent entrance of birds, to stand clear from all projections, to allow straight run and to be fixed with strong galvanised wrought grip frames and bolted together and screwed to wall.

From socket of vent drain carry 4" G.I. pipe vent complete.

LAVATORIES Provide and fit up complete in the best manner four selected glazed earthenware Lavatory basins p.c. 15/- each, 15" inside diameter with plugs and washer and with 1" rubbed slate table with rubbed front edge and rebated sinkings to receive basins. The joint between basin and table to be made in red and white lead perfectly watertight; Bearers and skirting (see "Carpenter").

SINKS Provide and fit up in the best manner the two sinks to be selected to value (bare) of £1:10:0 each.

PIPES & FITTINGS All pipes and fittings to be the best L. & L. wrought iron steam tubing galvanised, easy bends to be used instead of elbows, all joints screwed and made with red lead cement.

Flanges with bolts and nuts to be used for tank connections.

T A P S All taps to be best approved H.P. gun metal with good threads and full way and all other fittings to be of the most complete and perfect character. The positions and directions of all pipes and fittings will be pointed out by the Architects and all are to be easily accessible.

CISTERN On roof of back addition and in main roof where directed fit up on flooring (see "Carpenter") four approved 100 gallon Cisterns of 22 gauge galvanised iron with portable manhole. The two in main roof to have overflow to tray and with tray 6" clear of cistern all round, turned up 6" with bead edge and 1" overflow through roof to discharge as directed.

CIRCULATOR Provide and fit up on stand in Linen Cupboard where directed a strong 25 gallon copper Circulator, tinned inside, with flanges and deep sockets and neatly covered all over first with insulating material, and then with No.1 ship's canvas sewn on and fastened in approved manner, so as to prevent the slightest passage of heat.

WATER SERVICE Lay on water from City Main to each shop with 3/4" pipe. Take off branches as follows:

To sink in Shop No.1 with 3/4" pipe and tap and to a point outside each Kitchen with 3/4" pipe and hose tap to Shops Nos. 2, 3 and 4, with T and branch to inside capped off.

To each Lavatory basin with 3/4" pipe and tap, and 3/4" branch to first floor level of shop No.4 capped off.

To each cistern with 1/2" pipe and ball valve, and from cisterns over Shops No.2 and 3 with 1/2" pipe and Shops Nos.1 and 4 with 3/4" pipe and 1/2" branches to flushing cisterns.

G A S Lay on Gas to each Shop from Company's main with full size wrought pipes to give ample pressure to all fittings to the following points: To Kitchen in Shop No.1 for three large Gas rings in Kitchen and the same in Pantry and to three other Kitchens for Gas Cooker. The points are marked on plan.

DRAINS All drains to be laid complete as required by Bye-laws, in the solid ground, straight and true and with approved convenient means of inspection at either end of each march.

Lay waste and storm water drains and connect with the sewer and stormwater culvert in Courtenay Place, with buchan trap and

vents, all as required by Bye-laws. Build in traps of approved pattern with galvanised cast iron gratings. All drains to be laid and covered in in accordance with the City Bye-laws, to even grades in the solid ground.

All drains under or near buildings required to be laid on and fill in with concrete, are to be so executed in accordance with the City Bye-laws.

E L E C T R I C L I G H T

MATERIALS All materials and work to be of the best quality and description and all in accordance with the rules and regulations of the Underwriters' Association and the City Council and any other regulations in force, and tested to their Inspector's approval.

The several points are to be where shewn on Plan except otherwise directed.

CONNECT WITH MAINS Make connection with the City Corporation's Lighting and Power Mains.

SWITCHES The switches to be of the best "Tumbler" type with plain bronzed domes, fixed to neat approved Rimu blocks screwed to plugs in brickwork or where directed to woodwork. Their positions unless otherwise shewn on Plans to be by door of room in each case.

WALL PLUGS Approved porcelain wall plugs each with switch as required are to be fixed as above where shewn for cooking and heating installation.

FITTINGS Where ceiling roses are noted in Schedule they are to be approved plain porcelain with cord pendants to be supplied where indicated in Schedule.

~~All other pendant fittings are to be selected.~~

~~Allow the lump sum of £100 for selected pendants and brackets, all bare, which the Architects may select where they choose, and~~

~~any difference between the cost of those selected and the above sum will be deducted from or added to the Contract price.~~

All lights to be supplied with approved bronzed holders, and selected shades of average value of 2s.6d. each, and with "Osram" lamps.

CABLE All wires and cables to be of approved make concealed in strong steel screwed conduit of ample capacity to carry them, with inspection boxes at all junctions and wherever necessary to allow of any wires or cables to be drawn and replaced.

FUSES & DISTRIBUTION Fuses of the best approved type to be inserted wherever regulations require same, grouped in an approved manner, mounted in neat well made Rimu boxes stained and finished to match rest of woodwork, and with glass door and lock, fixed in approved positions and easily accessible.

MAIN FUSES, &c. The main switches, fuses and bus bars to be equal in capacity to carry a sufficient number of points to instal 10 per centum more lights and power, and all to be mounted similar to last.

Shop No.1 will be wired and fitted complete. Shops Nos. 2, 3, and 4, will be wired only from a convenient point as directed. The main and sub-distribution boards are to be included but the main switches omitted. The wires at all points to be left ready for connecting up, ceiling roses to be fixed where indicated in Schedule.

SCHEDULE OF FITTINGS

All the points in the following Schedule are to be wired and the fittings indicated fitted up with neat square or turned Rimu blocks with rounded edges, of size directed:-

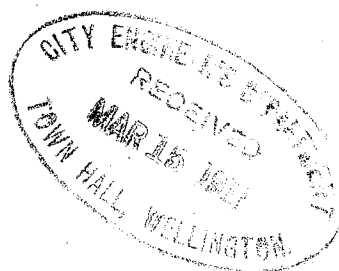
Position	16 c.p.	32 c.p.	Ceiling Rose	Cord Pendant	Switch
<u>Shop No.1</u>					
Verandah		1		Bracket	1 inside Shop
Shop front		2	2	2	1 by Stairs door
Shop	2	2	4	4	3 do.
Staircase	1		1	1	1
Kitchen	1		1	1	1
Tea Room	6		6	6	3 by Pantry door
Pantry & two Lavatories	3.		3.	3.	3.

Each Shop - Nos.2,3 & 4
(Conduit & wiring only)

Verandah		1			
Shop Front	2		2		1 by Shop door
Shop	4		4		2 behind Counter
Kitchen	1		1		1

Shop No.4 (additional)

Passages	1		1		1 at top of Stairs
Staircase	1		1		
first floor	8		8		



P L A S T E R E R.

See also other Trades and special clauses.

Sand to be approved clean and sharp, free from any deleterious matter and washed if necessary.

Portland cement best fresh approved.

Cement plaster to be by measure $2\frac{1}{2}$ parts of sand to 1 of cement, except otherwise specified.

CEMENT PLASTER The tops of chimneys and parapets to be weathered and the backs of all parapets, gables, etc., and outside of all external walls 9" or less. All concrete pavings, jambs and head of all Kitchen fireplaces and to No.1 Shop the whole interior of Kitchen fireplace also.

Concrete floors and hearths, except otherwise specified, concrete band, girder encasement and steps to be thoroughly wetted and cement plastered and finished to a good and true surface.

Lay all first floor hearths with selected best quality $4\frac{1}{4}$ " square red tiles, and entrance Lobbies to Shop with 6" x 6" similar tiles.

DECOLITE The floors of Lavatories, Pantry, first floor W.C's and Bathrooms to be covered with $1\frac{1}{2}$ " of "Decolite" or other approved flooring material, laid on wood floor or coke breeze concrete, and finished with perfectly true and even surfaces and lines and with smooth and polished faces.

Allow the sum of £8:10:0 nett to provide for this work being carried out by Experts.

The Plasterer to see that the Joiner has properly fixed all brackets and grounds before he commences the internal work.

Grounds to be laid where necessary, angles made solid, pipes trimmed for, and blocks and plugs fixed for all fittings.

The dwarf walls under Shop front to be covered with 6" x 3" selected glazed tiles, p.c. 3/- per dozen, set in cement on cement rendering neatly pointed with $1\frac{1}{4}$ " joints.

The Show Board in Shop No.1 to be covered with 6" x 6" approved white glazed tiles set in cement on cement bed 3/4" thick laid on rough boards with 1/2" mesh galvd. wire netting reinforcement, stapled to boards.

All brick walls internally throughout except otherwise specified are to be properly plastered with 4 to 1 cement plaster, and prepared for finishing coat.

The walls of Coals to be finished permanent lime white, brickwork to have joints struck.

Wood laths to be Oregon laths of best quality 4'6" long by 1 1/4" x 3/8" properly spaced, with bond broken every 18" at least and all double nailed throughout.

Laths to be well wetted before laying plaster.

The whole of the ceilings not otherwise specified are to be lathed and plastered with approved elastic fibrous fire-proof plaster, mixed and laid in the best manner, and all surfaces finished true, slightly roughened and nowhere less than 1/4" thick.

Finish the whole with a coat of fine stuff consisting of one of Dunedin Lime Putty, and one of well washed fine white sand, mixed a month before being used with one-fourth part of Plaster of Paris added at time of using, and the whole work to finish perfectly true, smooth, white and glossy.

Run 12" girth cornice round ceiling of Tea Room returned along beams as sketch.

All plastering work internally to be so finished as to have and retain a perfectly clean and even tone and finish throughout, and without stain or imperfection of any kind.

The Contractor will be held responsible for any damage to the Decolite floors.

P A I N T E R. -----

See also other Trades and general and special clauses.

The whole of the work treated under this heading is to be properly prepared, rubbed down and pumiced smooth, and every part to be carefully stopped.

The lead used to be genuine white lead and the best orange for priming, oil to be pure linseed oil, and the colour to be well ground, all of approved make and quality.

Paint the whole of the outside wood and iron work in three coats in tints directed. Doors and sashes to be four coat work. *Underside of Verandahs to be painted.*

Any timber failing to take the paint properly is to be repainted to match rest of work.

All doors and sashes to be coach varnished.

Paint the whole of the iron on roofs and Verandahs two good coats of Hartmann's or other approved permanent colour as directed.

All internal dressed woodwork (except floors) throughout, including fittings, is to be carefully darkened with lime to approval, and then so coated with oil and rubbed as to produce an even dull polish.

The visible pipes, etc., to be painted and finished to approval with "Bon Accord".

The Contractor is to leave the floors, all woodwork and windows perfectly clean on completion of contract.

Every assistance is to be rendered by every trade to any person who may be employed on work or fittings of any kind that may be arranged for during the progress of the work, so that a complete and satisfactory result may be obtained.

The whole of the timber required on the work must be thoroughly seasoned and carefully stacked with wood slips on the site, in manner approved by the Architects, and protected from damp and sun, within ~~THREE~~ (3) weeks from date of acceptance of Tender, on failure thereof the Contractor shall forfeit the sum of One Pound (£1) for every day that any portion of the timber remains unstacked as aforesaid, which sum shall be payable to the said Employer by the Contractor as and for liquidated damages, or the said Employer may deduct the sum from any moneys payable by him to the Contractor.

All dressed work, joinery finishings, and all fittings to be prepared and racked and stacked directly after contract is let to ensure the most perfect seasoning.

Tenderers are to state

- (1) How soon after signing contract they will hand over Shop No.1, Tea Room and premises complete: and
- (2) How long they will require to complete the whole contract.

Each Tenderer to state the names of his sub-contractors when required to do so.