BUILDING APPLICATION FORM.

WELLINGTON,

Date: Aug 7 1928

To the City Engineer,
Wellington.

Sir,

I hereby apply for permission to Erect—Church Building
at
House No. and Street

of
Address

according to Plans
and Specifications deposited herewith.

Particulars of Land:—Lot No. ____________________________ TOWN SECT.
of D.P. ____________________________

Frontage: ____________________________ By depth of: ____________________________ Area: ____________________________

Particulars of Building:—Foundations: Concrete Walls: Brickwood

Roof: Jarrah Framing Area of Ground Floor 2000 square feet

Area of Outbuildings ____________________________ sq. ft. Estimated cost £ 2300/–

Yours faithfully,

Wm. Husband Builder

Postal Address: 16 Shirting St. Wanganui
Drawings taken by engineer

Walls?

Sheet BB 27-28
All Saints' Church

NGAIO
CONTRACT FOR ALL SAINT’S CHURCH, NEW ZEALAND.

ADDENDA.

MAY 22nd, 1928.

The substance of this addenda shall be taken in preference to that described in the Specification or shown on the drawings just so far as it will apply. Matters concerning items in the body of the Specification which are not affected by the wording of the Addenda clauses shall remain in force and shall apply to the Contract.

Contractors are requested to give in their tenders three alternate prices for Roofing. No. 1, for Terra Cotta Marseilles Tiles as specified - No. 2, for approved Cement Tile of Marseilles pattern in its natural colour - No. 3, for Welsh Slates. Should slates be the chosen material, the following specification shall be made to:- All battens shall be Heart of Oregon, 2" x 1" securely nailed to rafters. The Wave Roof shall be covered with best quality Portland cement Dustless Slates. Each slate shall be secured near its head by two 1½" copper slating nails, and the vertical joints shall be kept true, and double courses shall be put to all eaves. All parts required to make the work perfectly weatertight shall be pointed with or bedded in cement mortar.

A written guarantee shall be given by the Roofing Contractors that they will keep the roof weatertight for twelve calendar months from the date upon which the Contractors' Maintenance begins.

GUTTERS & FLASHINGS. 24 gauge copper shall be used instead of galv. iron, excepting in and about the temporary roof, where galv. iron may be used. Galv. iron shall be used for the spouting which is only considered as being temporary.

SASHDOORS. In the side walls - which eventually will be removed, the mortar shall be of three parts of clean sharp sand to one part of best hydraulic lime.
FLOORING. Alternative prices are asked for one being for 4" x 1" Heart Jarran, and the other for 4" x 1" Heart of Red Pine. If Jarran be used it shall be machined smooth after laying; if Red Pine the ordinary dressing down is all that will be required.
In both cases the boards shall be secret nailed, but should any parts creak when walked over, extra nailing in those parts will be required.

POSTS & CROSS BEAMS shall have their edges chamfered ½" each way.

TOWER. Flag Pole shall be omitted, and pitched roof also. In lieu of this roof a reinforced concrete floor shall be substituted, 6" thick, corresponding with the other floors, but having a fall to outlet. This floor shall be placed in the wall 3'-9" below the top, so that there will be a parapet 3'-9" high. Its top surface shall be plastered ½" thick with 3 to 1 compo waterproofed Tociment as required by the makers of that material. In it shall be formed a manhole with concrete combing, 2'-6" x 2'-6" provided with a cover made of inch material and sheeted with 24 gauge copper. Strong hooks and eyes shall be used for securing the cover in its place.

LADDERS. Two ladders are provided in the Contract. A third similar ladder will be required to give access to tower roof. When the reinforcement rods in these tower floors outer wall, they shall be turned up and down alternately 6" into the brickwork.

VESTRY. A separate price is required for a vestry to be built on the N.E. corner of the nave. Its plan and construction shall be as shown on the drawing attached to this specification, the materials and workmanship being in strict accordance with the main contract. The price given shall allow for the omission of the screen forming the present vestry under tower. The three walls shall be 11" thick matching the side walls of church, excepting that the mortar used shall be cement mortar. The two doors shall be each 6'-6" x 2'-6" x 2" thick framed and ledged. with the top and bottom rails rebatted for sheathing,
each shall have an approved latch of the value of 10/- and
the outside door shall be provided with a Yale type of lock
valued at 12/6. The steps to the outside door shall be
heart of Jarrah, 10" x 2" treads housed into 2" thick stringer
and resting on 6" x 6" H.T. or H. Jarrah blocks at bottom. The
risers shall not be more than 7" and if this be not sufficient
to reach the ground, the ground shall be made up in an approved
manner to meet them.

There shall be three windows (one to open) matching the other
windows in church. All shall be left complete and watertight.

The outside door must open inwards as eventually it will be
an inside door. To overcome the chance of rain beating in,
the stiles and head shall be grooved as in casements. The
rebate in which the door is hung, shall be deeper than usual and
the sills shall have a stout metal strip along it to prevent
drift and along the lower edge of bottom rail, there shall be a
weathering piece overhanging this strip, and any other item that
may be required to make this door storm proof, shall be provided
and fixed. The ceiling shall be of plaster boards with 4" x ½"
battens, cutting it up into even panels. Round the three higher
walls shall be fixed a 3" x 1" picture mould, lining in with the
chamfered top plate of the lowest wall.

The Clauses referring to Clerk-of-Works
shed and to the platform etc., provided for
the laying of the foundation stone, shall
be omitted.

Please note that the contract provides
for 250 feet run of Storm Water Drain to
be used as directed.
SPECIFICATION OF WORK required to be done in the erection and completion of ALL SAINTS' CHURCH at Hoale, in accordance with drawings prepared by:

Clerk & Clerk
W.J.H.
Architects, 8 Panama Street,

January, 1929. WELLINGTON.

SITE. The site adjoining the present Church School.

CONTINGENCY FUND. The Contractor shall provide the sum of seventy five pounds (£75) to be spent, if required, on the building as the architects shall direct. The whole or any part of this sum unexpended shall be deducted from the Contract in full.

WATERTIGHT AND DRY BUILDING. The Contract provides for an absolutely watertight and dry building, and the Contractor shall provide all flashings, laps, extra laps, pointings and stoppings, and any other means to obtain this object, whether specified or not.

WORKMANSHIP AND MATERIALS shall be of the best quality of the kind specified. Condemned materials shall be immediately removed from the site.

A W.C. for the use of the workmen shall be provided.

CLERK OF WORKS OFFICE, to remain the property of the Contractor, having a floor area of 42 sq. ft. shall be erected in some convenient position overlooking the works. It shall have a good window and shall be provided with a desk and a lock-up drawer under it large enough to take the Contract drawings without their being folded or rolled.

EXCAVATION & FILLING, to bring the site to the levels shown, will be performed by the employer, but all excavations for foundations, drains, etc., shall be done by the Contractor to the depths shown on drawings, and he shall fill round same with well rammed material.
EXCAVATION

FOUNDATIONS. In all cases the foundations shall go down to the depth shown, and should the Contractor come across any faulty ground he shall call the Architects' attention to it, and shall follow their written instructions with regard to it. Should more concrete be required than is specified or shown, it shall be paid for at the rates prevailing in the district, as ascertained by the Architects.

CONCRETE

THE CEMENT shall be of an approved brand obtainable in the Wellington market, and shall comply in all respects to the British Standard specification applying to cement.

PROPORTIONS. Concrete shall consist of one part of cement to 6 parts of approved clean aggregate, containing just enough sand to fill the interstices in the shingle. The ingredients shall be thoroughly mixed, turned over at least twice dry and twice wet, until they are thoroughly incorporated; or as an alternative a mechanical batch mixer may be used.

FOUNDATIONS shall be of concrete and shall be continuous under all walls, and shall be reinforced with two $\frac{1}{4}$" diam. steel rods side by side, 10" apart and 2" from the bottom. Foundations to all posts shall be 2' 0" sq. at the bottom.

PILES. Shall be of concrete of the size of an ordinary petrol tin and shall be sunk at least 12" in below the solid. In each pile shall be embedded No. 8 B.W.G. cold, wire sufficiently long to embrace the sleepers to which it shall be firmly secured.

The piles shall be placed so as not to exceed 4' 6" between centres in the rows.

CONCRETE FLOORS. The first and second floors of Tower shall be formed of concrete 6" thick reinforced with $\frac{3}{8}$" mild steel rods spaced at 6" centres in each direction, and well wired together and with hooked ends to rods. These floors shall be left rough.
MANHOLES shall be formed in tower floors where shown and of the size directed.

BRICKLAYER

All walls, above the foundations, string courses, and weatherings, except where shown or specified to be otherwise, shall be formed of the best brickwork.

BRICKS. All bricks used shall be Gasco Pressed Bricks and the best bricks shall be picked for the interior face work.

All shall be hard and well burnt, and those that are chamfered shall be shaped and pressed before being burnt, and shall show unbroken arrises. All bricks used in the arches shall be formed with both faces radiating to the centres from which the arches are struck, and in every case a vertical joint shall be at the apex of the arch, a key stone never being used in a properly formed Gothic arch.

MORTAR shall be composed of nine parts of clean sharp sand, two parts of best hydraulic lime, and one part of Portland cement, the latter being added just before the mortar is to be used. Great care shall be taken that all joints, both vertical and horizontal, are filled solidly up with mortar.

DAFF COURSE. Six inches above the ground line in all walls etc., there shall be laid a damp course, consisting of one part of cement and one part of sand and finishing not less than ½" in thickness.

BOND. Where the walls are 4½" thick they shall be in stretcher bond. Elsewhere they shall be in English bond.

CAVITY WALLS. The outside walls shall be built with a cavity the two parts being tied together by approved No. 6 B.W.G. Galv. wire ties. These ties shall be placed in every eighth course, and at intervals of not more than 2 ft 3" apart.

The cavities shall be kept free from mortar droppings as the work proceeds, holes being left at the bottom until the completion of the work, to allow them to be thoroughly cleaned out.
The upper walls of tower shall be built solid without cavity. Care shall be taken not to stain the wooden posts or other timber work with mortar, as it is proposed at some future date to form a clerestory when the posts would be free standing.

**HORIZONTAL WIRE BONDING.** In all brick walls starting 12" above the damp-course there shall be embedded rows of No. 8 galv. wire, one wire to every 4½" thickness of brickwork. They shall be continuous round the building and shall be placed in every sixth course of brickwork.

**POINTING** for interior work shall be in white mortar with neatly ruled and cut joints. This does not mean "tuck pointing", but simply careful pointing in the real joints.

Exterior work shall be done with a simple struck joint, slightly weathered.

**CLEANING DOWN.** Visible brickwork, both interior and exterior, shall be cleaned down and freed from cement stains with a weak solution of green copperas and water.

**BOLTS ETC.** shall be built into the walls to hold all timbers that have to be secured thereto. ¼" diam. bolts shall be used in all cases.

**BRICKS FORMING WINDOW SILLS** shall be set in mortar composed of 1 part of cement to two parts of sand.

**VENTILATING GRATINGS.** Where directed, in order to give ventilation under the floors, there shall be built in twelve (12) 18" x 6" approved Terra Cotta gratings. There shall also be built in twenty-four (24) 9" x 6" terra-cotta approved vents to ventilate the wall cavities.

**COPINGS** of parapets shall be in the hardest picked bricks, laid in cement mortar 2 to 1.

**RAPHERS AGAINST GABLE WALL** shall be bolted thereto with ½" bolts placed not more than 4' 6" apart.

**BRICKS BRICKS.** The bricklayer shall build in all breeze or St. Tona blocks required for the fixing of joinery etc.
WINDOWS: shall be built in as the work proceeds with a mastic joint between the wood and the brickwork all round, and under the sills on the outside. So as to make them watertight this mastic shall be "Eveready" or some other approved similar material.

PLASTERED EXTERIOR. The top and back of the tower parapets shall be plastered with 3 to 1 cement compo and finished not less than \(\frac{2}{3}\)" thick and made so that damp will not penetrate into the building.

Where the temporary wooden walls abutt the brickwork at the back of the church the junction shall be made tight, 2 to 1 cement compo overlapping the flashing.

INTERIOR. The ceilings of the Vestibule and Vestry shall be rendered with 3 to 1 cement compo after the concrete surface has first been hacked to form a key, and shall then be plastered to smooth surface with ordinary stucco and white washed with a fixed wash in as many coats as are required to produce a solid effect.

All the panels of the main ceiling of the Nave shall be formed with fibrous plaster sheets made by an approved maker and finished fully \(\frac{1}{4}\)" thick. The fixing of these panels shall be most carefully done so that a perfectly clean white even surface is left at completion. Stepping shall be done in plaster of Paris.

FOUNDATION STONE. The Contractor shall provide and fix where directed a 1" thick second grade statuary marble slab secured to a backing of brick on edge with copper cramps and flush with the brickwork. This slab shall be 27" long and six courses in height. On it shall be incised in 1" sunk and leaded letters words containing in the aggregate 100 letters, some of them capitals, interspaced with the necessary steps.

In connection with the laying of the stone the Contractor shall provide a strong and well supported platform, containing approximately 300 sq. ft. with steps leading up to it. He shall
also provide satisfactory means of lowering the slab and its backing into place.

**Carpenter & Joiner**

**Timber to be Dry.** All timber used for joinery shall be "bone" dry, and those parts used in constructive parts shall be dry.

**Heartwood.** All timber used throughout the building shall be heartwood and no strip or edging of sap of any kind will be allowed. This, however, shall not apply to the temporary Chancel, where the studs and top plates and other hidden timbers, (excepting the bottom plate) may be of First Class C.B.

**All Visible Timbers** shall be hand dressed perfectly smooth and clean. All nails shall be 2½ times in length the thickness of the pieces they are securing, and wherever used in visible work shall be punched in below flush.

Excepting where specified to be otherwise the following timbers shall be used:

- **Totara** for sleepers and wall plates under floor line, and for window frames and sills.
- **Building H.T. Rimu** for all unexposed constructional timbers above the floor line, and for floor joists.
- **H. Waiata** for all flooring and for treads of the inside and outside steps.
- **Cedar** for weather boards and for angle steps, barge and cover boards.
- **H. Jarrah** for the rest of the timber required in the building, specially selected material being used for joinery and for the panelling.

**Sleepers and Stringers** shall be as shown and secured to concrete or brickwork by galvanised wire built into the solid work and firmly stapled to the timbers. A layer of first quality malthoid shall be used to isolate all timbers from brick or concrete work.
JOISTS shall be spaced so as not to exceed 18" between centres and shall be firmly nailed to sleepers and stringers. Those to space under tower shall be 5" x 2" and elsewhere 7" x 2".

FLOORING shall be of 6" x 1" T. & C., each board being well cramped up and double nailed, and left without creaking, and all rough and uneven surfaces shall be planed smooth.

The vertical formed by the different floor levels and the steps shall be formed with 1" thick material. Edge of treads shall be flush with the risers.

HOOPS. These shall be four completely framed principals, all the parts forming them being properly framed together. The sweeps shall be scarfed as shown. Each of these principals shall have 1" round tie rod let into an octagonal block in the middle, tapped with right and left hand threads to allow for tightening up. These tie rods shall be absolutely horizontal, neither cambered nor sagging, and shall be kept thus by a ¼" king rod. These principals shall be secured to the posts, and shall have their different parts bolted together with ⅜" bolts. Having neatly cut hexagonal heads and nuts.

The principal against the wooden wall at the Chancel end of Nave shall be similar to the others, excepting that the lowest sweep and the king and tie rod will be omitted.

At the tower end 8" x 3" rafters shall be bolted to the wall with ½" bolts at 3' 6" centres, and arranged to take the ends of the purlins.

The purlin on the main roof shall be 5" x 3" at the apex, and 5" x 4" elsewhere, and shall be housed into each side of each principal rafter 1", and shall be firmly nailed, and over each principal and extending 12" over each purlin there shall be fixed a strip of 1½" 16 gauge gald hoop iron, well nailed with 3" nails (seven being used in each case). In the case of the end rafters this hoop iron shall be well nailed to the face of the 10" x 3½" rafters before they are bolted to the wall, and shall then be bent over to secure the purlins.
The common rafters over these purlins shall be 4" x 2" spaced at 18" centres and firmly nailed to the purlins. In the centre of each bay between the principal rafters 4" x 3" intermediates shall be fixed to make the panels smaller.

The roof over tower shall be hipped as shown, being formed with 8" x 3" hip rafters, 4" x 3" ordinary rafters at 18" centres, and sarking and felt as for main roof. Rafters shall be cut onto a 4" x 3" plate bolted to wall. There shall be two 4" x 3" centre joists on which the base of flag pole shall be well secured. A gutter shall be formed all round with 1" boards.

The lower roof at the chancel shall be formed with 10" x 2" ridge 2" thick hip and valley blades, and with 4" x 3" rafters spaced as shown and fixed to 3" thick wall plate. This roof shall be covered with 2" thick T.G. & V. jointed sarking closely laid and double nailed with the dressed side downwards.

All other roofs shall be covered with 1" thick rough Mt. Xxwod wood sarking closely laid and double nailed.

All roofs shall be covered with 2 ply Asphalt saturated felt, well lapped.

**POSTS & BEAMS.** There shall be ten 8" x 8" and two 8" x 6" posts supporting the 8" x 8" beams on each side of the nave. The posts shall be built into the inner 4½" brick wall so that the back of them will be on the edge of the cavity. A steel 1" dowel shall be let into each post at the Xxw bottom, and the other end of the dowel built into the concrete blocks supporting the posts. The posts shall not extend below the floor beam lower than the bottom of the joists.

To make allowances for the future extension of the church all posts shall commence at the same level.

Posts shall be stub-tenoned into the beam at top, and jointing of beams shall occur only over the centre of posts and shall be scarfed.
To protect the posts where they are built into the brickwork, saturated felt shall be secured to the sides and back, and back and to the bottom and the inside of the beams.

All faces of the posts and beams shall be hand-dressed and finished as for face work, as it is proposed at some future date to form a clerestory, when the posts would be free standing.

**INSIDE FINISH OF ROOFS ETC.** Between the beams and the lowest purlins the space shall be closed up with 1" thick boards, with its grain running longitudinally. There shall be no heading joints visible in these boards.

Covering the joint at the beam's simple moulding to detail out of 4" x 2" shall be fixed, and this moulding shall also be carried round the walls at the chancel end.

The panels between the purlins etc. in the main roof shall be filled in with fibrous plaster sheets as specified under "Plasterer".

At the junction of these panels and adjoining timbers there shall be fixed 2" rimu scotia, mitred at angles.

At the junction of the brickwork with the posts and beams a 1½" x 1½" fillet, chamfered back ½" from the edge shall be secured.

**ROOF BRACING.** On the main roof there shall be stretched 1½" wide 16 gauge galv. hoop steel running in each direction on each slope at as nearly as possible an angle of 45°. This steel shall be secured at each intersection with timbers with 2" galv clout headed nails.

**WOODEN WALLS.** The back walls at the chancel end shall be timber framed with 5" x 2" studs at 16" centres secured to 5" x 2" top and bottom plates. The openings shall be trimmed with 4" x 3".

The outside shall be covered with 8" bevelled back stock pattern sawn (not planed) weather boards with ½" laps and approved building paper between the boards and the studs, well lapped. The boards shall be neatly butted to 4" x 2" cedar angle fillets, and to window frames which shall be grooved.
to take the flashing specified under PLUMBER.

Boards shall be in one length and no heading joints of boards shall be allowed.

Dwelling shall be done where required for the fixing of the panelling, the nailing not being more than 24" apart.

Soffits etc. to eaves and at gable ends shall be 3" thick, and facia for spouting 1" thick. Large boards to small roof shall be 8" x 1" and to main roof 10" x 1" sawn, (not planed). Cover boards shall be 6" x 1".

Panelling. The wood framed walls shall be panelled on the inside with 3/4" thick panel boards and 1/2" top and bottom rails and battens. The top edge of the bottom rail shall be splayed between the battens.

Partition, dividing the Vestry from the Vestibule shall be framed with 3" x 2" vertical and bottom and centre rails, having a 5" x 2" chamfered top rail. The Vestry side shall be covered with 12" x 8" chamfered boarding with 2" x 1" battens over the joint on the vestibule side. A 2" x 1/2" fillet shall be fixed to the top on the Vestry side to form a finish.

Steps & Railing shall be formed with H. Jarrah, except for the tread and flooring which shall be H. Matai or H. Jarrah. The landings shall be floored as for inside floors, the treads being 1 1/2" thick with projecting rounded nosings and with 1" risers and all housed and framed together in the best manner. Posts shall be taken into the ground and made absolutely rigid.

The Entrance Doors

Doors shall be 2 1/2" thick framed H. Jarrah, hung folding, the flying styles being rebattled. Each fold shall be hung on three 4" steel butts, and one fold of each door shall be secured top and bottom by 8" solid bronze bolts, No. 1560 Gibbon’s make, valued at seven shillings (7/-) each. The other folds shall be secured by approved locks and handles to the P. G., value of 35/- per doorway.
The frames for these doorways shall be 4" thick, solid, rebattled and well secured to brickwork.

There shall be a fixed panel over each of 2½" thick H. Totara with a Gothic shaped head, and the junction of the doors made watertight. The internal door shall be 2" thick, framed and panelled as shown, and hung on one pair of bronzed steel hinges, and having Gibbon's 5" No. 849 mortise lock, with No. 969 1½" furniture and escutcheon 18/6 the set.

The prices given are Wellington prices.

**TRAP DOORS** shall be fitted to the openings in tower floors formed with 1" T & C. V jointed boarding fixed to 1" battens, and each shall be hinged to a 3" x 2" piece bolted to floor so that doors will lift up and are easy to close.

**LADDERS** shall be formed with 4" x 3" staves and 2" x 1" runges check-ed ½" into staves, and firmly nailed thereto. There shall be a ladder in the tower from the ground to the first floor, and one from the first to the second floor. Each shall be firmly bolted to wall and shall be packed out sufficiently far to give proper foothold.

**WINDOWS,** shall be 3" thick, red wood, rebattled and chamfered, and with Gothic shaped heads with chamfered edges as shown, the bottom half of nave windows being divided from the top by a transverse splayed grooved, chamfered etc. out of 7" x 4" H. Totara.

The top and bottom halves of Nave windows shall be exactly the same so that each window can be made into two when the church is extended in the future.

The sills shall be out of 7" x 4" H. Totara and shall be splayed, grooved, and chamfered etc.

Two parts of each of the Nave windows as shown shall be made to revolve, and shall be provided with "Revolux" hinges to the value of £1 - 0 - 0 per set of four hinges. The top of sashes shall be weathered and the whole shall be made weather-proof.

The bottom of the centre Vestry window shall be made to revolve the same as the Nave windows.
Each opening shall be provided with fasteners to the F.C. value of $7/6 per sash. It shall be complete with cords, etc.

Louvres in Tower shall be formed with 6'' x 4'' H. Totara frames with Gothic shaped heads to show the same amount of woodwork projecting beyond the brickwork as the windows. Louvres shall be 1'' thick H. Totara or H. Jarrah fixed into grooves in frame and made so that rain will not enter the building. The outside shall be protected by $4'' mesh wire-netting to prevent ingress of birds.

BEATING shown on the ground floor plan is not included in the Contract.

WOODEN CROSSES shall be as shown out of 2$3/8'' x 2$1/8'' H. Totara.

COMMUNION RAIL shall be constructed as shown on drawings and shall be neatly fitted and made perfectly rigid.

FLAG POLE at the apex of tower roof shall be out of 6'' x 6'' pickled H. of Oregon, and shall be rounded and tapered and finished at top with a lignum vitae, truck and sheaves and cords etc. complete. The bottom of pole shall be taken through the roof and well stayed so as to be perfectly rigid.

GLAZING. The whole of windows shall be glazed in English Cathedral or similar approved glass of one approved tint, fixed in a watertight manner in $4'' leaded came divided similar to the typical detail. All shall be perfectly made.

Saddle bars shall be used wherever necessary to make a rigid job. The leadlights shall be permanently secured and shall be puttied on the outside of the church and left perfectly watertight, the putty being tinted to match the colour of the adjoining work. The word "putty" shall include "Mastic" or any other material that may be necessary to make the work satisfactory.
GENERAL. All plumbing work shall be carried out by licensed
tradesmen, and in strict accordance with the By-laws, and to the
entire satisfaction of the Authorities, everything necessary
being provided and fixed whether specially mentioned in this
specification or not.

ALL MATERIALS used shall be perfect in quality and proof shall be
given if required, of their respective weights.

SPOUTING. To all saves shall be fixed 5" x 3" square 24 gauge
galv. iron spouting, the outside edge being stiffened by a
roll. This spouting shall be secured at intervals not ex-
ceeding 3' 0" with approved galv. iron clips.

R.W.P.'s. Rainwater pipes shall be five in number. They shall be
24 gauge galv. iron, complete with shoes, bends etc. Two shall
be 3" diam. and the other three 2½" diam. The one from the
tower shall have an approved 24 gauge galv. iron head, and
water from the roof shall be conveyed into it.

Each R.W.P. shall discharge into 4" glazed earthenware
drains and shall then be taken to the road channels, or as dir-
ected by the Public Authorities.

GUTTER. A gutter shall be formed behind the parapet walls of
tower of 24 gauge galv. iron laid over 1" boarding, and having
a proper fall to the outlet at back. This iron shall be carr-
ied up walls and roof sufficiently high to ensure its being
perfectly watertight, and over it shall be 24 gauge galv. iron
sprons let well into brickwork, and plugged and pointed.

FLASHINGS. Wherever required to make the work properly and per-
fectly watertight galv. iron flashings shall be used. Those
to the wooden walls at East end shall be 26 gauge and the rest
shall be 24 gauge galv. iron.

The Have roof against the tower and front walls shall be
over flashing, plugged and pointed.
The small roof at back shall be flashed against wooden wall, all window heads and frames where weather boards butt against angle and wall steps shall be flashed as specified, tuck into grooves and plugged and taken under weather boards, and turned over.

ROOFS: All roofs shall be covered with 24 gauge galv. corr. iron of "Urba" brand, fixed with lead headed nails and having a lap of two upward corrugations at sides, and at least 3" at ends. The iron at walls shall be flattened and turned up at least 6" and shall be over-flashed as before specified.

HIPS & RIDGES shall be 20" wide 24 gauge galv. iron lead-edged ridging with the lead wall beaten down.

MARSEILLES TILES: Tenderers are requested to state what price they would require for covering all the roofs with best-quality terra-cotta tiles of the Marseilles type, in place of the iron one before specified. Lettens shall be M. of Oregon, and each tile shall be wired thereto with No. 16 gauge galv. steel wire. Tiles shall be bedded and pointed in cement camp.

The hips and ridging shall be in tiles well bedded in cement. Tenderers to take into account that the earthing and felt and painting will not be required if tiles are chosen as the roof. On the other hand 6lb. lead will be required for the flashing etc. against the tower walls.

ELECTRICIAN.

ALL ELECTRICAL WORK shall be carried out under the conditions of the M.A. Underwriters Association, and to the entire satisfaction of them and the City Council Inspectors and of the Architects.

ALL NECESSARY SWITCHBOARDS and other appliances required by the Authorities shall be provided and fixed by the Contractor, whether specially mentioned in this specification or not, and the whole shall be connected up with the public service.
PAINTER

MATERIALS shall be of the best quality of their respective kinds and, if required, shall be first opened on the works and in the presence of the Architects or the Clerk of Works. No materials shall be stored or mixed in the church. Paint shall be of genuine white lead and pure linseed oil of approved brands.

All tints shall be approved.

EXTERIOR WORK. Doors and their frames, sashes, sills, and transom, louvres and their frames, crosses, flag pole and woodwork of steps and railing thereto, with the exception of the treads themselves and the flooring, shall be painted three coats of lead and oil paints as above; the first coat being priming coat.

All the rest of the woodwork (exterior) shall be coated with two coats of solignum or similar approved wood stain.

The corrugated iron roofs, and all girds, iron flashings, gutter, spoutings, (inside and out), down pipes and all other exterior metal shall be painted with one coat of best quality English oxide paint darkened to an approved tint.

INTERIOR WORK. All interior woodwork, except flooring, shall be treated with pure linseed oil, which shall be well rubbed in so that "gloss" will not show on the surface.

All interior metal shall be painted with two coats of lead and oil paint as before specified.

The plaster ceiling of the ground floor under tower shall be whitewashed and fixed so as to give a solid white effect. The plaster boards shall be left perfectly clean and white and of an even tint throughout.