### SPECIFICATION

FOR FIRE HOUSE ON JEFFERSON STREET, GLENWOOD, RAMPEN, N.O. FOR THE RALEICH FIRE DEPARTMENT.

H. P. S. KELLER, ARCHITECT.

RALFIGH, N. C.

The Contractor will furnish evidence of having obtained his State licenses .

The Owner reserves the right to reject any or all bids .

A certified check of two percent of the estimate, to accompany each bid.

The Contractor will, within ten days after signing the contract, deliver to the Owner a bond of some Solvent Trust, or Gauranty Company, satisfactory to the Owner, in the sum of twenty five percontum of the contract price, conditioned that the scal Guaranty or Trust Company guarantees the faithful performance of the contract and the completion of the work within the time provided for.

Contractor will figure and submit an alternate estimate for elevations as shown on sheet No. 8
GRADES:

The Contractor will grade that portion of the lot upon which building is set, as shown by grade lines on the elevations.

WATER:

The Contractor will pay for all water used during construct-

#### EXCAVATION:

walls, for piers, chimneys, floors - one foot clear space under wood floors, and for all sever and drain pipes. All trenches for w walls to be to line and all to firm earth, ready to receive the foundation. After walls are up, fill and pack earth around foundation walls to required height. Surplus earth disposed of by the Contractor.

#### FOUNDATIONS:

All rough foundation walls, piers and chimneys are to be built of a No. I quality hard burned brick. All brick to be wet on dry weather. Each brick to be laid in full bed of mortar. Walls etc. to be bonded every 6th course. Build in six 4° T. C. pipes for ventilation under wood floors, also four C. I. vents in center partition, as shown. All rough brick walls shall be carried

Section and Assessment of the Control of the Contro

3" above grade. All outside brick walls from 6" above grade to footings, shall have a smooth trowelled water proffed coment coating I/2" thick. This to be of dark cement.
CHIMMEYS:

Build the chimneys and flues as shown. Flues indicated are to be Terra Cotta with 4° brick withes between. All brick work bonded, plumb and true. See note for stove holes.

Build rough openings for fire places and line fire with fire brick in fire clay cement, the brick over openings supported by 4 X 4 X I/4° L's 4° in jambs. Turn trimmer arches on wadd centers to width of breasts. Hearths to be of 4 X 4 red quarry tile gray cement joints. Face of chimneys and fire place to be of same face brick as exterior.

#### CEMENT MORTAR:

All brick work below grade and last five courses of chimneys to be laid in mortar composed of one part fresh Portland coment and two parts clean sharp screened sand— IO 5 lime paste.

All other common brick work laid in mortar composed of three parts lime, two parts sant and one part Portland Cement. Place and build in all necessary steel work.

#### FACE BRICK:

#### Norwood Ruffs or equals

The exposed surfaces of building, from vater-proofing course to cornices, the porch valls, piers chimneys and all other exposed brick work as shown by elevations, are to be faced with a rough textured brick with full color range - level running, or stretcher bond, with end joints perpendicular. Joints not over I/2" and raked I/4" deep. Face brick tied to sheathing with galvanized iron wall ties each alternate course. See: Fireplaces. Face brick laid in Carnoy cement. Clean brick work upon completion.

Brick work over opening, supported by angles as indicated and no bearing in jambs less than 4°. NOTE: Beam supporting lintel over entrance to apparatus room, also beam supporting face brick in gable, alternate design sheet No.8

Furnish and apply all sill bolts and all cast iron 4 X 8° vents in center wall. Six required. See C. I. plates under door posts, apparatus room.

#### CINDERS:

Under floor in apparatus room lay 4° of clean conders, well tamped in place. Cinders to be wet before concrete is laid.

The floor of apparatus room and toilet; steps to living rooms and to rear outlet; and front porch; drive way to street, curb re urns and all concrete work as shown on block plan, sheet No.8 are to be of concrete. Base as shown. All concrete composed of one part fresh Portland Cement, two parts clean sharp sand and five parts broken stone or gravel. All this concrete work finished with a I top dressing— one of cement and one of sand, trowelled smooth and hard. NOTE: In toilet room and apparatus room, continue this top dressing to a height of 6°) on side walls with cove in angles and quarter round at top. Rake brick joints to give key. All these floors, steps, bases etc. to be made with dark cement. NOTE: Floor in shower bath to be of 4° X 4° red quarry tile in cement.

#### FRAMING TIMBER:

The whole of the framing timber in and throughout the building to be of Standard square edge and sound, long leaf or obiginal
growth yellow pine- full and square to the dimensions indicateddry straight grain, free from large or loose knots, sap, shakes or
other imperfection imparing its strength or durability.

All framing timber and scantling to be of sizes and distances apart indicated on the framing plans and sections as mentioned. Any other timber not shown on the drawings but required to carry out the evident intent of the plans in a proper manner, is to be furnished by the Contractor.

#### FRAMING:

All framing excepting 5/10 sills and rafters, to be sized. The building is to be framed, braced, spiked in the best manner, perfectly true and plumb and in accordance with the drawings.

No wood work is to be placed within one inch of any chimner and no large nails are to be driven into any chimner. Particular care is to be taken in plumbing and bracing frame.

Contractoris to carefully mark out on sills for all openings as shown on plans and verify same. All sills and g rders to be hal ved at corners, angles and spliced. All splices to be made over piers or on walls in every instance. All sills 20° long and under to be in one piece. Joists cut in between sills and flush with top and carried on a 2° X 3° joist carrier spiked to sill. All joists to be sized and to be level with top of sill. All to be well spiked to sills and girders, plates and partitions caps and where lapp ed. The corner posts are to be 4 I/2 X 6° sized. Girts 4 I/2 X 4° tenoned into posts and pinned or spiked. Common studding to be 2° X 4 I/2° spaced I6° on centers. No studding to be spliced.

Studding each side of openings to be doubled. Braces 4 I/2" X 4" at all corners and angles. Plates to be made as shown, breaking point and securely spiked to posts, studding and to each other.

PARTITIONS:

All partitions throughout the building to be set according to floor plans, and cross bridged. All openings to be left out the proper width to receive door jambs. Furr partitions to conceal all soil pipes.

Bearing partitions on first floor to foot upon garders below and be capped with plate for the reception of coiling joists.

Roof supports above to be set on plates. The stude at angles to be thoroughly spiked together before being placed in position, All door and window openings over 3: wide, to be thoroughly and substantially trussed, partitions set to straight edge. Grounds put up for finish throughout the building. All partitions that have not bearing walls under them, to have two rows of cross bridging.

Frame around hearths with headers and trimmers of double joists or as shown, well spiked together and at bearings.

This Contractor to do all cutting for plumbers, heating contractor. No important timbers to be cut more than one foot from bearings:

DRIDGING:

Bridge floor joists once in span.
MAIN ROOF:

The main roof of the house is to be framed as shown. All valleys and ridges to be maintained perfectly straight. Rafters to be notched on the plates and spiked. See detail. Build in posts and purlins to support roof as shown and all to be tied and made

perfectly secure and strong- cellar beams as shown.

#### SHEATHING:

The outside frame of entire building to be sheathed horizontally with I3/I8 M & D Roofers laid close and nailed with two 8d nails to each and every bearing. All splices to be made on studs. Leave out for all openings as shown. Cover all roofs horizon tally with I3/I6 M. & D. Roofers, laid close and nailed twice to each be bearing with two 8d nails. All uneven places to be smoothed off with a plane. Form saddle behind chirneys to turn water. All this sheathing to be free from large or loose knots or knot holes. Lay on first floor joists a sub floor as above well nailed. Sheathing Paper:

Cover all sheathing on exterior side walls and roof with Newsonset black water proof paper, allowing 3° lap, well secured to boarding. Also between sub and finish floors.

OUTSIDE FIRISH:

All outside finish to be worked from clear kiln dried A grade yellow pine in strict accordance with the elevation and detail drawings and to be put up in a skillful manner with close joints and nails sunk for puttying.

Main comices to be supported by outlooks as por details.
All mouldings etc. to be smoothly out.

#### METAL TOPK:

.CORNICES:

All valleys to be lined with 24 guage Lynore Metal galvanized 8" each side and 6" valleys. All flaming on wood and brick walls is to be concealed and of Potts A. L. T. 40 lbs I. C. tin- also

gaddles.

All cuttors, ridges, rain veter conductors and heads, are to be of galvanized iron worked to designs shown. Conductor pipes to be 2 I/2" X 3 I/2" and to be held in place by stamped ornament—al clamps. All cuttors to be secured in place by I" X I/8" galvanized strips 30" C's and must be level from end to end and without fall. All rain water leaders to be connected with 4" T. O's drain pipes at grade. Drain pipes are to be extended to street gutters.

#### VENTILATORS:

Place the four star type galvanized iron ventilators in roof where shown. The pipes from ventilators to be flared at bottom to connect with the IST X IST Louvre registers to be placed in ceibings. Series 200 Hart and Cooley white Japan registers to have chain controls from floor and are to be placed by general contract or. Creating and ridge mould for front perch of above galvanized iron. All flashings in brick work must be let an inch at least into the joint and cemented tightly in place—whetere of galvanized diron or time Flashing well nailed to wood work. Porch roof of Potts A. L. T. I. C. time Required: A written guarantee to keep all roofs tight for one year from completion.

Frame out for all porch roofs as shown on drawings. Provide for level ceilings. Bed mould to be broad and well membered at splices and maters. Plates to be eased. Leave fillet on soffit at plate at least 3 / 16 of an inch each side. Valence Ceiking.

SEE: PORCH FLOOR.

#### WINDOW FRAMES:

The windows to be made as shown, box frames ( see details) for double hing sain I I/8" pulley stiles of stear hard pine with pockets to give access to weights. Pulleys to be anti-friction, Sargent Silver Lake sash cord and cast iron weights. Casements also to det ail. All frames are to be square and well braced before setting in walls.

#### PRIMING FRAMES:

The carpenters are to prime all outside door and window frames, all over, before they are set, with one good coat of lead and lindseed oil paints.

#### SASH:

All sashes appresentate to be custom made of clear, well seasoned white pine, glued and wedged in the best manner and divided into lights as shown on the elevation arrawings. All sash to b be I 3/4" thick. Attic to be I 3/8" thick.

Glass for all doors and windows to be clear A.A. D. S. American window glass, flawless, puttind and sprigged in balanced sash
and with wood strips in casement sash and doors.

OUTSIDE DOORY FRAMES:

All outside door frames to be made from clear  $_{\bullet}$  well selected stock, reputed as shown. See details. All to be set plumb and square. Doors to be I  $3/4^{\circ}$  thick. See details and notes on drawings. Door to apparatus room as detailed.

#### GROUNDS AND FURRING:

Put grounds for 3/4" plastering around all doors and windows and two behind base in living quarters. Put on metal corners to all projecting angles, full height.

In apparatus room, sheet rock will be used for side walls and coiling. Use joint tape and coment to cover joints, all well secured.

#### LATH:

All lath to be XX Century Copper bearing metal lath well secured study and joists and wired at joints where necessary.

PLASTERING:

Living quarters, only.

The walls, childes and all furred places as lathed and left for plastering, to be plastered with red top Ivery Coment Plaster.

be perfectly straight. Plaster wainscot 5: high in toilet room
to be of Keene's coment plaster trowelled to a smooth, hard surface for painting.

#### INTERIOR FINISH:

All stock for interior finish of every kind to be of the very best quality of White sap pine, tree from knots and black sap thoroughly kill dried. All to be smoothed, scraped and said-papered by hand before putting up. No interior finish of any kind is to be taken into the building until the plastering is thoroughly dry. Flooring to be taken direct from the dry kill to the building. All moulded work to be struck in accordance with detail sections. All interior trim is to be painted.

FINISH FLOORS:

Floors are to be laid over one thickness of paper. The finish floors will be B & Better rift pine face I3/I6° tightly driven blind nailed, planed and scraped and sand papered to a smooth clea sur ace, and shellaced one coat.

#### DOORS:

All exterior doors to be made as per details. All interior doors first floor are to be No. I white pine doors to sizes and thi cknesses indicated on plans. Main door to apparatus room to be made of "A" grade cypress. All doors over seven feet high to be hung on three loose pin butts.

#### DOOR FRAMES:

All inside doors to have I 3/8° frames with rebate strip. See detail. Frames to be blocked, solid for hinges. All frames to be set square and plumb.

#### BASES:

All rooms and halls in house to have base as per detail.

Put down oak strips to all hearths.

#### DOOR AND WINDOW TRIM:

The doors and windows to be trimmed as shown on drawings and details.

#### SPLICING OF FINISH ETC:

Splicing of door or window trim will not be allowed and joints

of bases, mouldings etc. must be carefully matched. Brad all moulded finish in quirk of mould and set in all nails for puttying.

PICTURE MOULD:

Picture mould to be furnished and placed by Contractor in all rooms of living quarters.

#### PLUMBING STRIPSA

Put up neat beaded strips of wood as finish of rooms for plumbing pipes where exposed.

#### HARDWARE:

The Contractor is to allow the sum of \$\circ\$ 250.00 for the hard-ware trimmings of all doors and windows and the fittings in part-try-exclusive of all sash cords, weights, pulleys- and does not include the fittings to door to apparatus room. All other finish hardware is included. This allowance is to cover the net cost to the Contractor and the Owner's all be permitted to select the hardware wherever he chooses and have the benefit of any deduction from this allowance. The Contractor is to put it on in a careful and workmanlike manner. He is also to provide and put on such other builders and finish hardware as is called for by the plans and specifications.

#### PAINTING:

All nail holes and where required and necessary will be puttied. All wood work will receive three good coats of lead
and cil paint( Carter Lead Company or John T. Lewis Bros.) pure
load and cils. Colors selected by the Owner. All metal such as
tin and calvanised iron will receive one coat of matallic paint an
and three coats of finish paint.

#### MANTELS:

Build mantel shelves as directed and dotailed, and secure to brick work with Metal Anchors.

#### TOILET ENCLOSURES ETC .:

Build toilet enclosures and lockers as detailed. Apply hooks in toilets and lockers.

### MAIN DOORS TO APPARATUS ROOM:

These door to be equipped with the Alith Prouty opening device. Flectromatic No. 1020 with one switch from seat of car and one switch in rear of apparatus room. Motor wired for IIO volts, 60 cycle, 3 phase alternating current.

As an alternate to the Electromatic, figure for opening device as shown on sheet No. I 1767 3. Allith Prouty details.

( Allith Prouty Co. Danville, Ill.)

SHOWER BATHS:

The shower bath enclosure shall be of Ribbon slate to sizes and height shown with N. P. clamps and slated doors

There is at present in The Build ng and Loan Building in Raleigh State stalls which can be adjusted to suit the requirements in this case. There slate slabs can be purchased including doors and clamps. See Mr. James Allison, Bldg. Loan office.

PLUMBING SPECIFICATION

FIRE HOUSE, CITY OF RALFICH, N. C.

He Pt S. KELLER. ARCHITECT.

RALFICH, N. C.

#### SCOPE OF WORKS

This section of the work is subject to the Raleigh Building Code. The work is to be executed according to these specifications in every detail, and the Plumbing Contractor is to furnish and install material and fixtures as shown on plans and mentioned herein. This Contractor is to employ a competent foreman whose duty it will be to direct the workmen and should be accessible should it be necessary to consult him at any time during the performance of this work.

It will be incumbent upon this contractor to proceed with the work in such a manner as will facilitate the performance of the work of all other workmen on the building and this contractor is to see to it that this part of the work is installed as the building progresses and is in no way to interfere with or retard any part of the construction which will be dependent on the completion of the plumbing installations.

It is intended that these specifications cover the installation of a thorough sanitary system of plumbing and waste disposal and supply and in no wise will this contractor deviate from these specifications, unless they conflict with the city ordinances governing plumbing, and not then until the Architect has been conferred with and his approval obtained. No beams shall be out for pipes without permissions

#### SEWER:

Connect with sewer in alley to wester PLUMBING:

The Contractor shall find, provide and fix good and complete as the progress of the work requires it, all the necessary fix-

tures for a cold water supply as indicated on the plans and in this specification— also all soil pipes ( waste) lead and iron pipes required fro plumbing. One sewerage systems All soil pipes from terra cotta sewer to roof shall be either east iron or lead pipes as required. No terra cotta pipes will be allowed under the building or within five feet of same. All east iron fittings shall be sound and smooth on the inside, free from cracks and samd holes, and of uniform thickness and average weight per ft. All to be east iron as per regulations:

Where pipes are supported by johnts, supports shall be not less than  $\mathbb{I}/4^{\bullet}$  in diameter and well secured to joints.

Run from sewer in allow a 4° pthra cotta pipe with heavy cemented joints, swa bing after. Extebd same to curb line. There connect with 4° Standard cast iron soil pipe and extend same to points required for connection with the various fixtures. These C. I. soil pipes to be extended through the roof and properly flashed with lead flashings. Leave out all necessary "Y" branches, also brass plug clean outs where required.

All joints in C. I. pipe to be filled with picked oakum, run with moulten lead and coulked tight in the best manner and tested with the water test to stand at least 24 hours.

WATER SUPPLY:

connect with and run from main water supply a I I/2" line of galvanized iron pipe. Connect with all the fixtures in the building. All pipes are to be properly graded so as to empty when cut off. Each line of fixtures to have shut off cocks. Put in hose connections for Rudd Heater. One hose connection for street front and one for rear. N. P. sill cocks.

All connectors between lead and impipes to be made with Standard brass ferrules and wiped joints.

The following "A" grade fixtures will be furnished and placed in the building and to be properly connected with cold, water—trapped, vented and left in per fect working order—all as per numbers, and as illustrated. All fixtures to be so arranged as to

be disconnected from system without shutting off water. FLOOR DRAINS:

Floor drains to be placed as shown on plans and to be as per plate P. 883I C 3 Douglas.
WATER CLOSETS:

In each toilet room, set and connect the John Douglas Co. Stratford Plate 2620 C china bowl, with quartered oak open from seat, these to be provided with weights or springs to hold same up Each closet seat flush to be Sloan's Co. nickel plated Royal flush valve with back inlets—one inch ground union with straight stop, china Oscillating handle, I I/2 diameter. Elbow flush connections spud couplings, wall and spur flanges—all properly connect de LAVATORIES:

Set in toilet room, complete ophir 17" X 21° lavatory complete plate P. 3845W set two of these lavatories as shown.

Install in shower stall a Hajoca plate # 360 No. 162A micked:

plated shower as per specification. Install in floor of shower

stall a Josem Plate W 1709 4 outlet 6 strainer and connect to sewer

RUDD HFATER:

In toilet room set and connect to supply, lavatories and show er. Supply, Lavatories One No. 4 Rudd gas water heater. Connect vent pipe to flue, also connect heater to gas supply by proper si size pipe to give adequate service.

Place paper holders for each toilet F. 2072 Kohler. Place towel racks each lavatory IS' N. P.

After the fixtures are set and properly vented and trapped, traps sealed, there will be an approved test applied to stand the entire satisfaction of the Architect or Owner. All in accordance with good plumbing practices:

NOTE:

All traps to be N. P. sure seal traps for lavatories.

## SPECIFICATION FOR FLECTRIC WIRING FOR FIRE HOUSE

FOR THE CITY OF RALFICH, NoC.

H. P. S. KELLER, ARCHITECTS

The work covered by this specification consists in furnishing all material and labor for installing a rigid conduit wiring system for incandescent large and distribution closet—complete and ready for the attachment of fixtures indiscretic wires. All wires to be brought in under ground conduit from service wires to distribution point.

All work to be done in the most approved manner and in accordance with the National Code and subject to the inspection and approval of the South Eastern Tarriff Association. The system must test free from short circuits and grounds. Contractor will furnish a certificate of inspection by local authorities.

All outlets for lights and switches to be located as directed by plans and specifications. This Contra tor will furnish all
fixtures, supports- nothing less than 2" X 5" allowed, nailed betw
een joists and studs, for outlet and switch boxes.

DISTRIBUTION:

Furnish and set a distribution box and tabletin west wall as shown. Set flush with face of wall about 5. From the floor. Distribution box to have F. A. Triumph steel front safety panel board. Size of cabinet to suit tablet and no larger. Give size to Contractor so that he may properly frame for same and make a neat job.

Fixtures will be furnished wired by the Owner and set under separate contract. Not over 700 watts to a circuit.

No wire smaller than I4 gauge B. &. S. shall be used.
MAIN SWITCH:

Furnish and put in place a combination metor and double pole .

knife switch and double pole cut out over panel box where service wires enter building. Switch to safely carry entire current when all the lights in the house are burning and cutout so installed as to protect same.

#### SWITCHES:

All switches outside of the distribution boxes used for the control of fixtures are to be flush switches and rust be furnished by the Contractor to match the finish hardware of the room and located according to plans. Set in Standard switch boxes. If Contractor is in doubt as to location of switches, consult the Architect before placing same. Center of first switch to be 8° from fonished opening. Observe this caution to prevent changes. The H. & H. d. lum toggle switch is to be used. G. F. consult receptacles where shown.

No wiring for alarm mystem included.

BUT . HEADER; WIRD A FOR BLECTED MATIC. DO ARE

OPENING, DEVISE OF AUGUSTADA

#### SPECIFICATION

FOR FIRE HOUSE ON JEFFERSON STREET, GLENWOOD, RAME N.O. FOR THE RALEIGH FIRE DEPARTMENT.

H. P. S. KELLER, ARCHITECT.
RALFIGH, N. C.

The Contractor will furnish evidence of having obtained his State licenses

The Omer reserves the right to reject any or all bids.

A certified check of two percent of the estimate, to accompany each bid.

The Contractor will, within ten days after signing the contract, deliver to the Owner a bond of some Solvent Trust, or Gauranty Company, satisfactory to the Owner, in the sum of twenty five percentum of the contract price, conditioned that the scal Guaranty or Trust Company guarantees the faithful performance of the contract and the completion of the work within the time provided for.

Contractor will figure and submit an alternate estimate for elevations as shown on sheet No. 8
GRADES:

The Contractor will grade that portion of the lot upon which building is set, as shown by grade lines on the elevations.

WATER:

The Contractor will pay for all water used during construct-

#### FXCAVATION:

Excavate to depth shown on drawings for trenches under all walls, for piers, chimneys, floors - one foot clear space under wood floors, and for all sever and drain pipes. All trenches for w walls to be to line and all to firm earth, ready to receive the foundation. After walls are up, fill and pack earth around foundation walls to required height. Surplus earth disposed of by the Contractor.

#### FOUNDATIONS:

All rough foundation walls, piers and chimneys are to be built of a No. I quality hard burned brick. All brick to be wet on dry weather. Each brick to be laid in full bed of mortar.

Walls etc. to be bonded every 6th course. Build in six 4" T. C. pipes for ventilation under wood floors, also four C. I. vents in center partition, as shown. All rough brick walls shall be carried

Build the chimneys and flues as shown. Flues indicated are to be Terra Cotta with 4° brick withes between. All brick work bonded, plumb and true. See note for stove holes.

Build rough openings for fire places and line fire with fire brick in fire clay cement, the brick over openings supported by 4 X 4 X I/4° L's 4° in jambs. Turn trimmer arches on wand centers to width of breasts. Hearths to be of 4 X 4 red quarry tile gray cement joints. Face of chimneys and fire place to be of same face brick as exterior.

#### CEMENT MORTAR:

All brick work below grade and last five courses of chimneys to be laid in mortar composed of one part fresh Portland coment and two parts clean sharp screened sand— IO \$\omega\$ lime paste.

All other cormon brick work laid in mortar composed of three parts lime, two parts sand and one part Portland Cement. Place and build in all necessary steel work.

#### FACE BRICK:

Norwood Ruffs or equals

The exposed surraces of building, from vater-proofing course to cornices, the porch valls, piers chimneys and all other exposed brick work as shown by elevations, are to be faced with a rough textured brick with full color range - level running, or stretcher bond, with end joints perpendicular. Joints not over I/2" and raked I/4" deep. Face brick tied to sheathing with galvanized iron wall ties each alternate course. See: Fireplaces. Face brick laid in Carney cement. Clean brick work upon completion.

#### STRUCTURAL STEEL:

Brick work over opening, supported by angles as indicated and no bearing in jambs less than 4°. NOTE: Beam supporting lintel over entrance to apparatus room, also beam supporting face brick in gable, alternate design sheet No.8

Furnish and apply all sill bolts and all cast iron 4 X 8° vents in conter wall. Six required. See C. I. plates under door posts, apparatus room.

#### CINDERS:

Under floor in apparatus room lay 4° of clean conders, well tamped in place. Cinders to be wet before concrete is laid.

The floor of apparatus room and toilet; steps to living rooms and to rear outlet; and front porch; drive way to street, curb re urns and all concrete work as shown on block plan, sheet No.8 are to be of concrete. Base as shown. All concrete composed of one part fresh Portland Cement, two parts clean sharp sand and five parts broken stone or gravel. All this concrete work finished with a I top dressing—one of cement and one of sand, trowelled smooth and hard. NOTE: In toilet room and apparatus room, continue this top dressing to a height of 6°) on side walls with cove in angles and quarter round at top. Rake brick joints to give key. All these floors, steps, bases etc. to be made with dark cement. NOTE: Floor in shower bath to be of 4° X 4° red quarry tile in cement.

#### FRAMING TIMBER:

The whole of the framing timber in and throughout the building to be of Standard square edge and sound, long leaf or obiginal
growth yellow pine-full and square to the dimensions indicateddry straight grain, free from large or loose knots, sap, shakes or
other importection imparing its strength or durability.

All framing timber and scantling to be of sizes and distances apart indicated on the framing plans and sections as mentioned. Any other timber not shown on the drawings but required to carry out the evident intent of the plans in a proper manner, is to be furnished by the Contractor.

#### FRAMING:

All framing excepting 5/10 sills and rafters, to be sized. The building is to be framed, braced, spiked in the best manner, perfectly true and plumb and in accordance with the drawings.

No wood work is to be placed within one inch of any chimner and no large nails are to be driven into any chimner. Particular care is to be taken in plumbing and bracing frame.

contractoris to carefully mark out on sills for all openings as shown on plans and verify same. All sills and girders to be hall ved at corners, angles and spliced. All splices to be made over piers or on walls in every instance. All sills 20° ling and under to be in one piece. Joists out in between sills and flush with top and carried on a 2° X 5° joist carrier spiked to sill. All joists to be sized and to be level with top of sill. All to be well spiked to sills and girders, plates and partitions caps and where lapp ed. The corner posts are to be 4 I/2 X 6° sized. Girts 4 I/2 X 4° tenoned into posts and pinned or spiked. Common studding to be 2° X 4 I/2° spaced I6° on centers. No studding to be spliced.

Studding each side of openings to be doubled. Braces 4 I/2" X 4" at all corners and chales. Plates to be made as shown, breaking boint and securely spiked to posts, studding and to each other.

PARTITIONS:

All partitions throughout the building to be set according to floor plans, and cross bridged. All openings to be left out the proper width to receive door jambs. Furr partitions to conceal all soil pipes.

Bearing partitions on first floor to foot upon garders below and be capped with plate for the reception of coiling joists. Roof supports above to be set on plates. The stude at angles to be thoroughly spiked together before being placed in position, All door and window openings over 3: wide, to be thoroughly and substantially trussed, partitions set to straight edge. Grounds put up for finish throughout the building. All partitions that have not bearing walls under them, to have two rows of cross bridging.

Frame around hearths with headers and trimmers of double joists or as shown, well spiked together and at bearings.

This Contractor to do all cutting for plumbers, heating contractor. No important timbers to be out more than one foot from bearings.

DRIDGING:

Bridge floor joists once in span.

MAIN ROOF:

The main roof of the house is to be framed as shown. All valleys and ridges to be maintained porfectly straight. Rafters to be notched on the plates and spiked. See detail. Build in posts and purlins to support roof as shown and all to be tied and made perfectly secure and strong—cellar beams as shown.

SHEATHING:

The cutside frame of entire building to be sheathed horizontally with I3/I8 M & D Roofers laid close and nailed with two 8d
nails to each and every bearing. All splices to be made on stude.

Leave out for all openings as shown. Cover all roofs horizon tally
with I3/I6 M. & D. Roofers, laid close and nailed twice to each be
bearing with two 8d nails. All uneven places to be smoothed off
with a plane. Form saddle behind chirneys to turn water. All this
sheathing to be free from large or loose knots or knot holes.

Lay on first floor joists a sub floor as above well nailed.

SHEATHING PAPER:

Cover all sheathing on exterior side walls and roof with Newconset black water proof paper, allowing 3" lap, well secured to boarding. Also between sub and finish floors.

OUTSIDE FINISH:

All outside finish to be worked from clear kiln dried A grade yellow pine in strict accordance with the elevation and detail drawings and to be put up in a skillful manner with close joints and nails sunk for puttying.

CORNICES:

Main cornices to be supported by outlooks as per details.

All mouldings etc. to be smoothly out.

METAL WOPK:

All valleys to be lined with 34 guage Lynore Metal galvanized 8° each side and 6° valleys. All flaming on wood end brick walls is to be concealed and of Potts A. L. T. 40 lbs I. C. tin- also

33,

caddles.

All gutters, ridges, rain veter conductors and heads, are to be of galvanized iron worked to designs shown. Conductor pipes to be 2 I/2" X 3 I/2" and to be held in place by stamped ornament—al claups. All gutters to be secured in place by I" X I/8" galvanized strips 30" C's and must be level from end to end and without fall. All rain water leaders to be connected with 4" T. C's drain pipes at grade. Drain pipes are to be extended to street gutters.

#### VENTILATORS:

Place the four star type galvanized iron ventilators in roof where shown. The pipes from ventilators to be flared at bottom to connect with the IS X IS Louvre registers to be placed in ceixings. Series 200 Hart and Cooley white Japan registers to have chain controls from floor and are to be placed by general contract or. Creating and ridge mould for front perch of above galvanized iron. All flashings in brick work rust be let an inch at least into the joint and cemented tightly in place—whetere of galvanized diron or tine Flashing well nailed to wood work. Porch roof of Potts A. L. T. I. C. tine Required: A written guarantee to keep all roofs tight for one year from completion.

Frame out for all porch roofs as shown on drawings. Provide
for level ceilings. Bed mould to be broad and well membered at
splices and maters. Plates to be eased. Leave fillet on soffit as
plate at least 3 / I6 of an inch each side. Valence Ceiling.
SEE: PORCH FLOOR.

#### WINDOW FRANCES:

The windows to be made as shown, box frames ( see details) for double hing sain I I/8 pulley stiles of sfear hard pine with pockets to give access to weights. Pulleys to be anti-friction, Sargent Silver Lake sash cord and cast iron weights. Casements also to det ail. All frames are to be square and well braced before setting in walls.

#### PRIMING FRAMES:

The carpenters are to prime all outside door and window frames, all over, before they are set, with one good coat of lead and lindseed oil paints.

#### SASH:

All sashes where to be custom made of clear, well seasoned white pine, glued and wedged in the best manner and divided into lights as shown on the elevation drawings. All sash to b be I 3/4" thick. Attic to be I 3/8" thick.

GLASS:

Glass for all doors and windows to be clear A.A. D. S. American window glass, flawless, puttind and sprigged in balanced sagh and with wood strips in casement sash and doors.

OUTSIDE DOORS FRAMES:

All outside door frames to be made from clear well selected stock, reputed as shown. See details. All to be set plumb and square. Doors to be I 3/4" thick. See details and notes on drawings. Door to apparatus room as detailed.

Put grounds for 3/4" plastering around all doors and windows and two behind base in living quarters. Put on metal corners to all projecting angles, full height.

In apparatus room, sheet rock will be used for side walls and ceiling. Use joint tape and cement to cover joints, all well secured.

#### LATH:

GROUNDS AND FURRING:

All lath to be XX Century Copper bearing metal lath well socured stude and joists and wired at joints where necessary.

PLASTERING:

Living quarters, only.

The walls, chilings and all furred places as lathed and left for plastering, to be plastered with rod top Ivory Comont Plaster,

be perfectly straight. Plaster wainscot 5: high in toilet room to be of Koene's cement plaster trowelled to a smooth, hard surface for painting.

#### INTERIOR FINISH:

All stock for interior finish of every kind to be of the very best quality of White sap pine, free from knots and black sap thoroughly kill dried. All to be smoothed, scraped and sand-papered by hand before putting up. No interior finish of any kind is to be taken into the hullding until the plastering is thoroughly dry. Flooring to be taken direct from the dry kill to the building. All noulded work to be struck in accordance with detail sections. All interior trim is to be painted.

#### FINISH FLOORS:

Floors are to be laid over one thickness of paper. The finish floors will be B & Better rift pine face I3/I6 tightly driven blind nailed, planed and scraped and sand papered to a smooth clea sur ace, and shellaced one coat.

#### DOORS:

All exterior doors to be made as per details. All interior doors first floor are to be Not Iwhite pine doors to sizes and thi oknesses indicated on plans. Main door to apparatus room to be made of "A" grade cypress. All doors over seven feet high to be hung on three loose pin butts.

#### DOOR FRAMES:

All inside doors to have I 3/8° frames with rebate strip. See deteil. Frames to be blocked, solid for hinges. All frames to be set square and plumb.

#### BASES:

All rooms and halls in house to have base as per detail.

Put down oak strips to all hearths.

DOOR AND WINDOW TRIM:

The doors and windows to be trimmed as shown on drawings and details.

#### SPLICING OF FINISH FTC:

Splicing of door or window trim will not be allowed and joints

of bases, mouldings etc. must be carefully matched. Brad all mounted dinish in quirk of mould and set in all mails for puttying.

PICTURE MOULD:

Picture mould to be furnished and placed by Contractor in all rooms of living quarters.

#### PLUMBING STRIPSA

Put up neat beaded strips of wood as finish of rooms for plumbing pipes where exposed.

#### HARDWARE:

The Contractor is to allow the sum of \$250.00 for the hard-ware trimmings of all doors and windows and the fittings in partry—exclusive of all sash cords, weights, pulleys—and does not include the fittings to door to apparatus room. All other finish hardware is included. This allowance is to cover the net cost to the Contractor and the Owner shall be permitted to select the hardware wherever he chooses and have the benefit of any deduction from this allowance. The Contractor is to put it on in a careful and workmanlike manner. He is also to provide and put on such other builders and finish hardware as is called for by the plans and specifications.

#### PAINTING:

All nail holes and where required and necessary will be puttied. All wood work will receive three good coats of lead
and cil paint (Carter Lead Company or John T. Levis Bros.) pure
load and cils. Colors selected by the Owner. All metal such as
tin and calvanized iron will receive one coat of matallic paint an
and three coats of finish paint.

#### MANTELS:

Build mantel shelves as directed and detailed, and secure to brick work with Metal Anchors.

#### TOILET ENCLOSURES ETC .:

Build toilet enclosures and lockers as detailed. Apply hooks in toilets and lockers.

#### MAIN DOORS TO APPARATUS ROOM:

These door to be equipped with the Alith Prouty opening device. Electromatic No. 1020 with one switch from seat of car and one switch in rear of apparatus room. Motor wired for 110 volts; 60 cycle, 3 phase alternating cutrent.

As an alternate to the Electromatic, figure for opening device as shown on sheet No. I I767 3. Allith Prouty details.

( Allith Prouty Co. Danville, Ill.)

SHOWER BATHS:

The shower bath enclosure shall be of Ribbon slate to sizes and height shown with N. P. clamps and slated doors

There is at present in The Build ng and Loan Building in Raloigh State stalls which can be adjusted to suit the requirements in this case. There slate slabs can be purchased including doors and clamps. See Mr. James Allison, Bldg. Loan office.

PLUMBING SPECIFICATION

FIRE HOUSE, CITY OF RALFICH, N. C.

H. P. S. KRILLER, ARCHITECT.

RALFICH. N. C.

SCOPE OF WORKS

This section of the work is subject to the Raleigh Building Code. The work is to be executed according to these specifications in every detail, and the Plumbing Contractor is to furnish and install material and fixtures as shown on plans and mentioned herein. This Contractor is to employ a competent foreman whose duty it will be to direct the workmen and should be accessible should it be necessary to consult him at any time during the performance of this works

It will be incumbent upon this contractor to proceed with the work in such a manner as will facilitate the performance of the work of all other workmen on the building and this contractor is to see to it that this part of the work is installed as the building progresses and is in no way to interfere with or retard any part of the construction which will be dependent on the completion of the plumbing installation.

It is intended that bless specifications cover the installation of a thorough sanitary system of plumbing and waste disposal and supply and in no wise will this contractor deviate from these specifications, unless they conflict with the city ordinances governing plumbing, and not then until the Architect has been conferred with and his approval obtained. No beams shall be cut for pipes without permissions

SEWER:

Connect with sewer in alley to wester PLUMBING:

The Contractor shall find, provide and fix good and complete as the progress of the work requires it, all the necessary fix-

tures for a cold water supply as indicated on the plans and in this specification— also all soil pipes ( waste) lead and iron pipes required fro plumbing. One sewerage systems All soil pipes from terra cotta sewer to roof shall be either cast iron or lead pipes as required. No terra cotta pipes will be allowed under the building or within five feet of same. All cast iron fittings shall be sound and smooth on the inside, free from cracks and samd holes, and of uniform thickness and average weight per ft. All to be cast iron as per regulations.

Where pipes are supported by johnts, supports shall be not less than  $\mathbb{I}/4^{\bullet}$  in diameter and well secured to joints.

Run from sewer in allow a 4° ptera cotta pipe with heavy cemented joints, swa bing after. Extebd same to curb line. There connect with 4° Standard cast iron soil pipe and extend same to points required for connection with the various fixtures. These C. I. soil pipes to be extended through the roof and properly flashed with lead flashings. Leave out all necessary "Y" branches, also brass plug clean outs where required.

All joints in C. I. pipe to be filled with picked oakum; run with moulten lead and coulked tight in the best manner and tested with the water test to stand at least 34 hours.
WATER SUPPLY:

connect with and run from main water supply a I I/2" line of galvanized iron pipe. Connect with all the fixtures in the building. All pipes are to be properly graded so as to empty when cut off. Each line of fixtures to have shut off cocks. Put in hose compand connection nections for Rudd Heater. One hose connection for street front and one for rear. N. P. sill cooks.

All connections between lead and impipes to be made with Standard brass ferrules and wiped joints.

The following "A" grade fixtures will be furnished and placed in the building and to be properly connected with cold, water—trapped, vented and left in per fect working order—all as per numbers, and as illustrated. All fixtures to be so arranged as to

be disconnected from system without shutting off water. FLOOR DRAINS:

Floor drains to be placed as shown on plans and to be as per plate P. 883I C 3\* Douglas.
WATER CLOSETS:

In each toilet room, set and connect the John Douglas Co. Stratford Plate 2620 C chima bowl, with quartered oak open from seat, these to be provided with weights or springs to hold same up Rach closet seat flush to be Sloan's Co. nickel plated Royal flush valve with back inlets—one inch ground union with straight stop, chima Oscillating handle, I I/2° diameter. Fibow flush connections spud couplings, wall and spur flanges—all properly connect de LAVATORIES:

Set in each toilet room, case Ophir 17" X 21" lavatory complete?

plate P. 3845W set two of these lavatories as shown.

SHOWER:

Install in shower stall a Hajoca plate w 360 No. 162A micked plated shower as per specification. Install in floor of shower stall a Josem Plate W 1709 4 outlet 6° strainer and connect to sewer RUDD HFATER:

In toilet room set and connect to supply, lavatories and show er. Supply, Lavatories one No. 4 Rudd gas water heater: Connect vent pipe to flue, also connect heater to gas supply by proper si size pipe to give adequate service.

Place paper holders for each toilet F. 2072 Kohler. Place towel racks each lavatory IS' N. P.

After the fixtures are set and properly vented and trapped, traps sealed, there will be an approved test applied to stand the entire satisfaction of the Architect or Owner. All in accordance with good plumbing practices:

All traps to be N. P. sure seal traps for lavatories.

NOTE:

set there enter the drinking foundable of a sec Stundard.

# SPECIFICATION FOR FLECTRIC WIRING FOR

FOR THE CITY OF RALFICH. NoCo

H. P. S. KELLER ARCHITECTS

The work covered by this specification consists in furnishing all material and labor for installing a rigid conduit wiring system for incandescent large and distribution closet—complete and ready for the attachment of fixtures and service wires. All wires to be brought in under ground conduit from service wires to distribution point.

All work to be done in the most approved manner and in accord ance with the National Code and subject to the inspection and approval of the South Fastern Tarriff Association. The system must test free from short circuits and grounds. Contractor will furnish a certificate of inspection by local authorities.

All outlets for lights and switches to be located as directed by plans and specifications. This Contra tor will flurnish all fixtures, supports- nothing less than 2" X 5" allowed, nailed between joists and studs, for outlet and switch boxes.

#### DISERIBUTION:

Furnish and set a distribution box and tabletin west wall as shown. Set flush with face of wall about 5. from the floor. Distribution box to have F. A. Twimph steel front safety panel board. Size of cabinet to suit tablet and no larger. Give size to Contractor so that he may properly frame for same and make a neat job.

Fixtures will be furnished wired by the Owner and set under seperate contract. Not over 700 watts to a circuit.

No wire smaller than I4 gauge B. &. S. shall be used. MAIN SWITCH:

Furnish and put in place a combination metor and double pole

knife switch and double pole cut out over panel box where service wires enter building. Switch to safely carry entire current when all the lights in the house are burning and cutout so installed as to protect same.

#### SVITCHES:

All switches outside of the distribution boxes used for the control of fixtures are to be flush switches and rust be furnished by the Contractor to match the finish hardware of the room and located according to plans. Set in Standard switch boxes. If Contractor is in doubt as to location of switches, consult the Architect before placing same. Center of first switch to be 8° from fonished opening. Observe this caution to prevent changes. The H. & H. de lum toggle switch is to be used. G. F. consult receptacles where shown.

No wiring for alarm system included.

BUT . NEL CORREST WIRE A FOR BLECTED MATIC. DOUR.

OPENING DEVIAL OF AUGUSTAUS.