SPECIFICATION
OF

COUNCIL RESIDENCE HALL

for METHODIST WOMEN

COLUMBIA, MO.

PREPARED BY

JAMES P. JAMIESON

and

GEORGE SPEARL

ARCHITECTS

1116 ARCADE BUILDING, ST. LOUIS

COM. 351

SPEC. NO. 8

PLEASE ATTACH THIS NOTICE & PRINT OF SHEET 'Y' TO FRONT OF SPECIFICATION.

NOTICE TO BIDDERS

GENERAL CONTRACT

COUNCIL RESIDENCE HALL FOR METHODIST WOMEN

COLUMBIA, MISSOURI.

BULLETIN NO. I

FEBRUARY 21 1924

Jamieson & Spearl, Architects, 1116 Arcade Bldg., St Louis, Missouri

STONE WALLS IN ALTERNATIVE BID

Contractor to note sheet 'X' accompanying specification

If stone walls are used the inner face throughout to have the joints filled with cement mortar and in basement to be pointed smooth.

GRANITOID:

Before granitoid floors are laid on fireproof slabs in rooms and halls specified on page 24, top of slab shall be thoroughly wetted and scrubbed with a broom and given coat of cement wash to insure adherence to the granitoid as floors not adhering to the slab will not be acceptable. and they must be free from cracks or other defects.

IRON WORK:

Contractor to include seven Tees 3-1/2" x 4" - 9.8 lbs. five 5 feet long, one 4-1/2' long and one 4'0" long, over double doors in stud partitions as detailed on sheet #6.

All openings in walls & tile partitions to have W.I. anchors, 7 for doors & 4 for windows.

4" x 3" x 5/16" Angles over all windows in rear wall first and second stories.

DUST CHUTE:

Contractor to include inatallation of dust chute 12" in diameter of #26 G.I. all as shown on sheet 'Y' dated February 21,1924, with doors lined with similar G.I. in first, second and third stories. Bottom of pipe to stop 30" above basement floor.

Door to be panelled and have wood trim and casing same as other doors with a pair of small butts and bronze spring catch at top.

Chute to be encased in metal lath and plaster as indicated.

PLASTERING

Window jambs to have rounded corners. Other corners to have G.I. metal beads.

PLUMBING:

Contractor to note sheet 8 giving location of kitchen equipment which is not in contract but to which plumber is to make connections as specified.

Circulating system not to be included for supplies to drinking fountains.

Contractor to include furnishing and installing the following medicine cabinets:*

24 - Sanisteel - #64 Recessed - Face Size 18-1/2" x 24-1/2"

6 - " - #74 Recessed - " " 16-1/2" x 22-1/2"

3 - " - #32 Surface - " " 16" x 22"

All-metal cabinets by other makers may be used if equal in size, quality and finish.

Allow for furring out wall with metal lath behind two Medicine Cabinets 22-1/2 square feet each.

Vent, waste and water pipes must be kept clear of the medicine cabinet recesses.

GENERAL:

The canopy shown over kitchen range and the connecting pipe from same are not in this contract.

HOLLOW TILE:

Reinforced lintels over doors and windows in tile partitions to have two 3/8" rods for 4 feet openings or less and two 1/2" rods for openings over 4 feet.

PLEASE ATTACH THIS NOTICE TO FRONT OF WIRING SPECIFICATION.

NOTICE TO BIDDERS:

ON GENERAL CONTRACT FOR

COUNCIL RESIDENCE HALL FOR METHODIST WOMEN

COLUMBIA, MISSOURI

BULLETIN NO. 2 February 25, 1924.

MILLWORK:

The safety gates and boxes for weights for safety gates at doors to lift shaft are not in contract. The doors to the lift shaft are all in contract as specified.

Contractor to include the wood cornice with picture moulding as detailed on sheet #6 for first floor hall and rooms, etc., noted on sheet 6.

IRON WORK:

Contractor to include 5" x 3" x 5/16" angles to carry backing over double windows as noted on sheet #5, 4" x 3" x 5/16" for single windows.

The bars for area gratings to be 1-1/4" x 1/4" (not 1/4" x 1/4" as on page 37 of specification.)

One section to be hinged as specified in each group of gratings on front terrace, making two hinges sections in all for these gratings.

PLASTER WORK:

Contractor to state what difference in price there will be for using tinted plaster on walls and ceilings of all rooms and halls specified to have cold water paint but retaining the oil paint in kitchens, bathrooms, etc., where so specified and omitting cold water paint.

PLUMBING: - Laundry TRays:

Contractor to include four laundry trays where shown in basement plan, as follows:-
1-4 part Nelsons Plate 5365-N Porcelain enamelled iron laundry trays with painted exterior, supported on galvanized pipe standards fitted with 1/2" A-16 polished brass Savill faucets, galvanized supply fittings, N.P. waste plugs and couplings, galvanized wringer bases. 1-1/2" wastes and traps to be furnished by plumber. Faucets to be fitted in supplies above tubs and compression stops placed in hot and cold supplies. Plumber to furnish G.I. P. standards.

ALTERNATIVE BID:

Contractor to state additional cost as follows:-
1) Changing north wall to have Bedford stone from grade line to gutter all as called for on other fronts including window and door jambs, heads mullions andsills, moulded base course and moulded cornice but no wall coping as the cut stone will stop at the gutter. In this case the concrete wall will be 8" thick as in other fronts.

2) For facing north wall with local stone all as specified for other fronts including the cut stone cornice, base course, window and door jambs, heads, etc., as in other fronts.

PLEASE ATTACH THIS SHEET TO FRONT OF SPECIFICATION

NOTICE TO BIDDERS

GENERAL CONTRACT

COUNCIL RESIDENCE HALL FOR METHODIST WOMEN

COLUMBIA, MISSOURI

BULLETIN NO. 3 February 29,1924.

PLUMBING:

Contractor shall include instead of the Sims Heater specified a 36" x 96" Sims #-5 B.H. heater on standard cradle with I-beam and gas pipe supports and to be set as close to the ceiling as possible. Tank to be covered as specified. See sheet 9.

The tank heater specified shall be omitted.

The heating contractor will install high pressure boiler heater as shown.

CUT STONE:

The Bedford stone ashlar specified is to be laid up with joints about 1/2" wide.

BRICK WORK:

The boiler flues shown are to be changed as follows: No T.C. flue lining. Exterior size of the chimney is to be as shown on drawings and it shall be formed with a square corner flue 2'4" x 2'8" lined with fire brick to the level of the third floor, fire brick to stand free from walls of chimney all as shown on sheet #9. Opening to be formed for breeching with reinforced concrete lintel **Include C.I. cleanout door also one 12" x 15" for kitchen flue.**

BIDS:

Date for receipt of bids is changed from Tuesday March 4th to Thursday March 6th, otherwise to be same as in "Notice to Contractors".

PLEASE ATTACH THIS SHEET TO FRONT OF SPECIFICATION

NOTICE TO BIDDERS

GENERAL CONTRACT

COUNCIL RESIDENCE HALL FOR METHODIST WOMEN

COLUMBIA, MISSOURI

BULLETIN No. 4

March 5, 1924.

Contractors may figure on using a machine mixer instead of hand mixing the concrete as specified. All that is required is to have the concrete thoroughly mixed.

Notice to Contractors

Sealed proposals for the

Construction of a Council Residence Hall for Methodist Women

at Columbia, Missouri, will be received by the Architects, Jamieson & Spearl, 1116 Arcade Building, St.Louis, Missouri,

11 A.M., Tuesday, March 4,1924

Bidders will submit with proposals a certified check for

One Thousand Dollars

payable to Mrs. R.H. Emberson, President, Building Committee, 1407 Bouchelle Avenue, Columbia, Missouri, to be forfeited if the bid proves not to be bona fide.

Envelopes containing proposals should be addressed to the architects, Jamieson & Spearl, 1116 Arcade Building, St.Louis, Missouri, and should be endorsed on outside of envelope

Bid on Construction of Council Residence Hall for Methodist Women

The bidder whose proposal is accepted will be expected to immediately enter into contract and furnish satisfactory bond in the full amount of the contract.

The right is reserved to reject any or all bids.

February 16, 1924.

Jamieson & Spearl
Architects.

S P E C I F I C A T I O N

OF THE WORKMANSHIP AND MATERIALS REQUIRED FOR THE ERECTION OF

COUNCIL RESIDENCE HALL FOR METHODIST WOMEN

COLUMBIA, MISSOURI

According to drawings dated February 5, 1924

Prepared by

James P. Jamieson

and

George Spearl

Architects

1116 Arcade Building

St. Louis, Mo.

I N D E X

GENERAL CONDITIONS

These general conditions must be carefully read by each subcontractor. They are considered as belonging to each subdivision of the specifications, and all sub-contractors are subject to their provisions.

The word "Contractor" refers to each subcontractor, excepting where the general contractor only is necessarily intended.

DRAWINGS:

The drawings herein referred to and accompanying these specifications consist of seven sheets, dated February 5,1924, a list of which is herewith given, and of such detail drawings and instructions as the architects shall provide during the progress of the work, to fully explain and carry out the requirements of these specifications and the above mentioned drawings.

Sheet No. 1 - Block Plan.

Sheet No. 2 - Footing Plan, Construction Details, Schedules.

Sheet No. 3 - Floor Plans.

Sheet No. 4 - Elevations, Sections & Roof Plan.

Sheet No. 5 - Exterior Details.

Sheet No. 6 - Interior Details.

Sheet No. 7 - Heating Plans & Riser diagram.

One blueprint on paper of each detail drawing will be furnished for general contractor and one blueprint for each subcontractor whose work is shown on said drawing. Any additional blueprints required or desired by the contractors must be paid for by them at cost.

The specifications and drawings are part and parcel of any contract for the whole or any part of the work. Changes from them may be ordered by the architects on behalf of the

wner, during the progress of the work, without in anyway
itiating the contract.

Figures where given on the drawings govern scale measurements and larger scale governs smaller.

Drawings and specifications are and are to remain the property of the architects. Drawings are numbered and will be charged to the contractor when given into his custody, and must be returned to the architects' office before final certificate is given.

Anything shown on the drawings and not mentioned in the specifications, or vice versa, is to be included in the contract, the drawings and specifications being taken as a whole and not separately as they illustrate and explain each other, and it is their true intent and purpose to include everything proper for the thorough and satisfactory completion of the work, except such things as are specially noted to the contrary in the specification.

The architects may reject any work not in accordance with the detail drawings whether it conform to the general drawings and specifications or not. In case contractor should object to any of the detail drawings, he must state his objection in writing to the architects before he starts the work.

Should any error in or disagreement between the drawings or the drawings and specifications exist, or appear to exist, the contractor must notify the architects in writing of the fact and have the same explained or adjusted before proceeding with the work.

MATERIAL & WORKMANSHIP:

All material and fixtures throughout are to be the best of their kinds, as approved by the architects. Should the specifications fail particularly to describe the material or goods to be used then it shall be the duty of the contractor to inquire of the architects what is to be used and to supply it at the contractor's expense, or else thereafter replace it to the architects' satisfaction.

All ties, nails, dowels, jamb screws, bolts, hangers, anchors, etc., required to make sound construction according to the best usage, must be put in, in proper quantity and weight, as directed, whether herein specially mentioned, shown on the plans or not; and each sub-contractor is to furnish such means of construction or support for his work unless it is clearly specified under "Ironwork".

Any work or material rejected by the architects must be immediately removed from the premises at the contractor's expense.

SAMPLES:

Samples of all materials and fixtures, or complete illustrations of the same, must be submitted to the architects at their office before being ordered or sent to the building, in case, under the terms of the specification, there is any choice in the market in such materials or fixtures, and must be approved by the architects before the goods are ordered.

THE ARCHITECTS:

In case of any doubt or difference of opinion as to the true intent of the drawings and specification, the decision of the architects shall be final and binding on both parties to the contract.

The architects shall have power to order the discharge of the foreman or any of the workmen on the building, who are, in the architects' opinion, unsatisfactory, and whose employment is not for the best interest of the work.

THE CONTRACTOR:

The contractor must have at the building from start to finish a competent foreman. This foreman shall give all lines and levels and shall be responsible therefore, and will be in general charge of the work. The contractor must provide all necessary materials, utensils, and laborfor the completion of the work and must bear all loss or damage for accident or injuries which may occur to the workmen or any other person or persons by or on account of

the prosecution of the work, whether from accident or carelessness on his part, until possession is taken by the Owner.

The contractor shall not delay any other contractor by neglecting to do his work at the proper time. He shall be responsible for and make good all defacements or injuries to trees or other properties done by him or by men in his employ, or through his or their negligence, or to any work on the building not in his contract. He shall place a rough strong fence 6'0" square around each tree adjoining the building or in danger of damage from building operations. He shall also remove certain trees described later.

Contractor shall provide plank drive from street over sidewalk, etc., into lot, protecting gutter, paving, etc., during building operations. Gutter, sidewalk, etc., to be left in present condition, on completion of contract.

He shall give every facility for the erection or the introduction of any material not included in his contract.

The contractor must at all times protect the building and material to be used in it from the weather. He shall bank up where necessary to prevent surface water from entering the building and any water in the trenches or in the basement to be bailed or pumped out by him. Temporary doors to be used in exterior doorways and the windows closed in as soon as possible by contractor.

He shall provide all necessary sheds, workmen's water closet, etc.

He shall furnish water for building purposes.

It shall be the duty of each contractor to provide at the proper time such material as has to be walled in for the purpose of his work, and if he requires openings or chases for his work, whether the same are shown on the plans or not, to see that they are properly constructed - and in case of failure to see that

such proper openings or chases are left, it shall be his duty to cut them out at his own expense, but only under the direction of the architects.

INSPECTION:

The contractor shall facilitate at the proper time the inspection of the work or any part of it at any time by the architects or any person appointed by them, and they shall be at liberty to make reasonable examinations or tests in whatsoever way they may deem best and in case any work is destroyed or damaged in the course of such examination or test, the contractor shall make the same good to the satisfaction of the architects.

The contractor shall provide an office on the grounds where all drawings and specifications are to be kept for reference.

CARE OF FINISHED WORK:

The contractor shall take particular care of all finished work as the building progresses and must protect it from injury or defacement during the erection and until the completion of the building, unless otherwise specified. He shall be responsible for all injuries or accidents to the work, no matter how they may occur, up to the time of its final completion and acceptance by the Owner, and shall make the same good to the Architects' satisfaction.

All rubbish must be swept up and removed from time to time by contractor when ordered by Architects and on completion when all stains shall be removed by him from every part and the whole left in a fit state for occupancy.

TEMPORARY HEATING:

The building must be kept dry and warm at all times when by being cold or wet it will suffer injury before completion. At all times after the building is enclosed, the temperature inside shall be maintained at not less than 65 degrees nor less than 15

degrees warmer than outside air in more moderate weather. Heating contractor shall install temporary radiators, this contractor shall take care of them until removed.

INSURANCE:

The building and all work in it covered by this specification shall be insured against fire and tornado by contractor until the building is accepted by the Owner. All insurance to be in companies satisfactory to the Owner, and in amounts satisfactory to the Owner.

LIABILITY INSURANCE:

The contractor shall maintain full accident insurance and Owner's contingent liability insurance protecting the Owner from damage of every character. Accident policies shall be carried on all workmen employed on the building.

All fire, tornado and liability insurance to be placed in companies selected by the Owner and all premiums shall be paid by the contractor.

SUB-CONTRACTORS:

Contractor shall submit to architects a list of proposed sub-contractors before contract is executed or as soon thereafter as practicable and no work shall be sub-let by the general contractor or any sub-contractor without the written approval of the architects.

BOND:

The contractor shall furnish corporate surety bond covering the contract, in an amount equal to amount of contract, in a company approved by the Owner.

GUARANTEE:

The contractor shall make good any defects that may appear in the building within one year following the date of the final payment.

EXCAVATION & GRADING:

REMOVING TREES:

Contractor to remove the following trees:

1 - 8" Maple
1 -10" "
1 - 8" Box Elder
1 -10" " "
1 -14" Elm on south side

The 14" elm on the west of the building is to be preserved, and the contractor to trim only such branches as interfere with the building and this trimming shall be done only under direction of the Owner or Architects.

No other trees to be cut or branches to be removed by contractor unless by special permission.

Contractor must examine site and satisfy himself as to the character of the material to be excavated and include all expense connected therewith.

The top soil to a depth of at least 8" to be stripped off the grounds for a distance of 10' from the walls, and off the area of the building and piled up temporarily where directed. After the building is completed this top soil to be spread over all fill around building to form new grades as shown.

Excavate to a depth of 6" below basement floor level. Excavate for boiler room and for elevator pit, basement entrance, window areas and terrace foundations as shown. Trenches for all walls and piers to be excavated to the depth shown and 16" clear of walls on each side where forms are required.

Excavation to be neat size for basement entrance area, also where it is practicable to use the clay bank of the excavation for the outside line of the wall.

All footing excavation to be of depth and width shown on drawings and to be accurately made.

Fill for old cistern to be placed in thin layers, thoroughly broken up and rammed solid.

After walls below grade are built the 16" space outside of walls shall be filled in with clay and packed solid. Old foundation on site to be removed to a depth of 2 feet where it extends beyond the limit of the new building and do any necessary filling to bring up to finished grade.

All necessary material from excavation shall be used for fill around building as shown. Fill shall be dumped in layers and solidly packed. For terrace, the fill shall be done as soon as possible to allow for settlement. Top soil shall be spread to form new grades shown on Block Plan and on elevations. All to be finished smooth and be free from building rubbish of any kind. Any surplus earth after grading is completed to be removed from the lot and dumped where directed by the Architects or Superintendent.

CONCRETE & MASONRY

CONCRETE:

All Portland cement shall be as specified under the head of "Cement". The following parts to be concrete:-

1 - Exterior wall footings and terrace wall footings.

2 - Basement walls from footing to a point 4" below finished grade on the east, south and west side

full thickness of the wall and backing from this point to the bottom of the first story as shown on section, sheet 2.

3 - Basement walls from footing to the bottom of the first story windows on the north side.

4 - Areas for ash hoist and basement entrance.

5 - Retaining wall around boiler room.

Concrete shall be composed as follows:

One part Portland cement as specified under the head of "Cement"; three parts clean, sharp sand, entirely free from loam or other imperfections; five parts of clean, screened macadam, free from dust and such as will pass through a 1-1/2" ring.

The sand and cement shall be carefully measured in a box and thoroughly mixed with a hoe and rake in tight boxes, and enough water added to make a thin mortar. This shall be added to the macadam on a tight platform and thoroughly mixed in. The amount of water shall be just sufficient to dampen the whole mass, and shall be applied as directed.

The whole batch shall be turned over three times and fully mixed; only so much concrete shall be made up at one time as can be immediately used.

The concrete shall be thoroughly rammed, the ramming to be done rapidly and continued until water lies on the surface at all parts. The rammer is to weigh not less than 50 lbs.

CONCRETE WALLS:

Forms where required to be of sound strong lumber, accurately built and strongly braced. Where practicable the bank may be used for exterior wall form. Reinforcement for terrace walls and negative reinforcement for main walls as called for on plans.

WATER PROOFING AND DAMP PROOFING:

No damp proofing or water proofing to be done while work is green or damp. None required for outer foundations of terrace.

All column footings and the top of the concrete walls at grade line to have one coat of Certain-teed roofing pitch, then one layer of Certain-teed roofing felt not less than 14 lbs. to the square, lapped 12", then a second coat of pitch. One layer of Certain-teed cap sheet, lapped 12", may be used in place of above.

The interior face of foundation walls from footing to grade shall be water proofed by the method of the Western Waterproofing Company or the Contract Waterproofing Company with guarantee from same.

BRICK AND HOLLOW TILE:

All cement used in connection with brick work shall be as specified under head of "Cement".

The bricklayer shall furnish and set all bricks and tiles necessary for erecting and completing the building, walls, etc., in full accordance with the specification and the accompanying plans.

Brickwork is indicated on the plans by hatching; tile by cross hatching.

BRICK:

All bricks except face bricks, shall be good straight hard brick, equal to sample approved by architects. No salmon brick to be used.

Face brick of north wall from top of concrete foundation as shown on elevations shall be common red brick, well burned and free from broken or unshapely bricks. Alternative price to be given for using buff brick or firebrick in place of above.

HOLLOW TILE:

The backing up of all face brick and ashlar and all interior partitions so shown on plans shall be hollow terra cotta blocks of standard make equal to sample to be approved by the Architects. Blocks to be hard burned, with smooth faces where the walls are not plastered, and elsewhere deeply grooved.

Lintels over openings of interior walls of tile shall be formed by filling tile with concrete of Portland cement, sand, and small gravel mixed as for floor slabs, and reinforcing same with bars to be furnished by this contractor.

Where required for chases, tile to be set vertically and face broken out.

Where radiators are hung on tile walls, the tile to be filled with concrete to hold the expansion bolts of the hangers.

No cracked or badly broken tile will be acceptable under this specification.

LAYING: If laid in dry warm weather, all brick and tile shall be well sprinkled with a hose; in damp, frosty weather, they shall be kept dry. All brick and tile must be laid with solid joints and completely bonded every fifth course, or as shown on drawings. No empty spaces whatever shall be left in the wall unless shown on the plans, but all proper openings and chases for pipes must be left as directed by the architects or by contractors for heating, plumbing or lighting, authorized by the arhhitects to give such directions.

CHASES: It shall be the duty of the bricklayer to ascertain where all chases or openings for such pipes are to go and not to wait for information to be given him.

All spaces left after the insertion of pipes, flues, etc., shall be properly bricked up as may be directed.

All walls shall be properly covered during the progress of the work and any damaged work shall be rebuilt.

Thickness of walls to be as marked on drawings, and all walls to be built straight and plumb.

Note chases required for steam pipe risers and other pipes. These shall be run from below first floor as required by Heating Contractor. Note horizontal chases for runouts where called for.

ANCHORS, ETC:

The bricklayer must build in all irons, lugs, bolts, anchors, frames, etc., necessary to secure any work which may be furnished by other contractors, and galvanized wall ties for bonding the ashlar to the tile backing. To be 3/16" x 3/4" crimped pattern 8" long and to be spaced 24" apart horizontally and 13" apart vertically.

MORTAR:

All brick, except where otherwise specified, shall be laid in mortar composed of three parts best lime mortar to one part cement mortar, made of Portland cement and sand, 1 to 3.

All brick and tile below first floor to be in Portland cement mortar, 1 of cement to 3 of sand, with 10% lime mortar added. Any brick arches throughout to be laid up in Portland cement moratar 1 to 3.

All lime to be of the very best, fresh burnt, and the sand clean sharp sand, free from loam or other imperfections.

All exposed joints, on exterior, to be made with key jointer, and on inside (in basement) to be struck with trowel.

CEMENT:-

This specification is intended to cover all cement used in the building except in plastering.

Where "Portland" cement is specified, it shall be Red Ring, Atlas, Continental, Lehigh, or other Portland cement approved by the architects in writing.

FIREPLACES:

FAce and jambs to be of selected Alton matt brick exterior, with firebrick back and bottom. Hearths tile or granitoid as shown. All to be as detailed with arch over openings. Brick for key in basement fireplace arch to be ground.

CHIMNEY THROAT:

The drawing room fire place to have cast iron chimney throat and damper covert pattern # 54, set as shown on detail.

T.C. FLUES:

Basement fireplace 15", first story fireplace 12",boiler flue 30". Tank heater flue 10". All sizes inside diameter. Flue for kitchen 12" x 12", kitchen vent flue 8" x12".

CLEANING:

Face brick and exposed tile to be cleaned and left clean on completion.

CUT STONE

Note general conditions as they apply to all parts of this specification.

All cut stone shown on drawings to be included whether herein particularly mentioned or not.

SHOP DRAWINGS:

Complete shop drawings shall be submitted to the architects for approval before any work is done.

SETTING:

All beds must be true and level and all stones shall be in the true plane of the wall and all joints of an even thickness as specified under "Jointing". Setting shall be done by contractor approved in list of subcontractorsand by workmen accustomed to this class of work.

FELT STRIP:

All stone copings to be bedded on a sheet of Certainteed cap sheet 1/2" narrower in width than the top of the wall.

MATERIAL:

All cut stone shall be Bedford Indiana limestone from approved quarry and equal to approved samples to be submitted by contractor.

Nothing but standard buff Bedford shall be used for all moulded, turned and carved work and for quoins, window and door jambs, mullions and heads and for columns and pilasters and sound Bedford stone for the ashlar work. Note stones 24" o.c. bonding ashlar, over concrete slabs, see sheet 5.

FINISH:

All window sills, caps, mullions and jambs, the string courses, cornices and columns, the terrace balustrade, the copings and weatherings, quoins on all corners and the key stone of Living Room fireplace to be rubbed. Exposed face of ashlar to be machine tooled in equal parts, one horizontal and one vertical, seven lines to the inch. Ashlar jointed as shown in detail sheet 5.

Cut stone is clearly shown on detail sheets and elevations by dots. The sizes are shown on the details and sections. In no case shall any stone have less depth in wall than shown on sections.

Window jamb stones and quoins on all corners to have the ends hammered off as shown on details and elevations.

CARVING & MODELS:

The ornament so shown shall be carved by skilled and experienced carvers, and to the satisfaction of the architects.

The cartouche over front entrance and the column caps to be done from models made under the supervision of the architects. Allow the sum of $125.00 for models and 10% additional for packing and shipping from St. Louis if so required by the contractor. Panels to be cut from drawings. All lettering to be included. To be V-shaped sunk letters cut by carvers. Note key stone of first story fireplace. All carving to be included in this contract and also the cost of models, shipping and freight charges.

PROTECTION:

Cut stone to be boxed by the carpenter. Any chipped or damaged stone must be taken out and replaced by cut stone contractor. Should concrete come in contact with cut stone, waterproof paper shall be applied to back of the stone before the concrete is poured.

PAINTING:

All surfaces of cut stone not exposed shall be painted to within 1/2" of the face with Elaterite or other approved material to prevent staining.

ANCHORS:

All cut stone to be securely anchored in place with heavy W.I. anchors at each joint. Anchors for ashlar are specified to be furnished and set by the bricklayer. Other stone to have anchors supplied by cut stone contractor, none to have section less than 3/16" x 1". Mullions to have 3/8" x 3" dowels top and bottom.

Copings and finials to have iron dowels, clamps and anchors.

All anchors to be painted or dipped in asphalt paint.

GROOVES:

The cut stone contractor must cut grooves in copings, etc., where required to secure roofers work, see details.

CORNER STONE:

To be about 20" x 14" x 14" hollowed out for copper box and having "1924" in sunk cutting.

JOINTING:

All cut stone shall have 3/16" joints neatly raked out and pointed as directed. Pointing shall be done around window and door frames. All cut stone pointing must be uniform in color, using non-staining cement. All joints in and around cut stone shall be filled solid and joints in string courses, etc., to be poured full of non-staining cement grout and pointed.

NOTE:

See item of alternative proposal for making ashlar of local limestone, with local limestone quoins at corners (not at window jambs).

ALTERNATIVE BID

In addition to bidding on the work as shown by the drawings and previously specified, the contractor will make an alternative bid including the following changes.

CONCRETE WALLS:

The exterior foundation walls on the east, west and south sides to be 14" thick and to extend from the footings to a point 4" below the finished grade lines. The north wall to remain as shown on drawings, with end returns of local stone.

CUT STONE:

The ashlar around the front entrance bay of the first story to remain as drawn. All other ashlar and the quoins at the corners of building, bays and chimneys to be omitted. Corner mullions of bays to remain as drawn.

HOLLOW TILE:

All hollow tile of east, west and south sides to be omitted. Limestone backing to replace them. The hollow tile on north wall to remain as shown on drawings.

LIMESTONE WALLS:

From a point 4" below the finished grade line the outside walls on the east, west and south sides to be built of local limestone 14" thick to the bottom of the first story windows, and 12" thick to the bottom of the roof joists and 8" thick from that point to the bottom of the coping.

The stone for facing to be of approved color, and size satisfactory to the architects or superintendent and all carefully laid as directed below.

All stone to be fresh fracture, and shall have the face as near the plane of the wall as possible and no stone shall project or recede more than 3/4" from the plane of the wall.

Horizontal joints 1" wide recessed 1" to be level throughout.

Each stone shall be longer than it is high and shall have corners knocked off as directed.

The stones shall range in height from 2" to 7" in the body of the wall and large and small stones shall be evenly distributed. Large stones to be used at corners.

All face joints to be raked out 1" deep while mortar is soft.

BOND:

All face stone to be carefully bonded with the stone backing. Not less than one through stone to every six sq. ft. of face.

POINTING:

Joints not recessed 1" deep shall be cut out with chisel to that depth. Wall to be well wetted while pointing is done.

In pointing the upper edge to be pressed back under the stone, lower edge to be cut.

Mortar for pointing to be Portland cement mortar and pointing sand approved by the architects. Samples shall be put on until one is approved. Cement to be as specified under heading of "cement". Any cracked or discolored pointing shall be taken out and replaced.

PROTECTION:

All walls to be properly protected during the progress of the work and any damaged work to be rebuilt.

MORTAR:

All stone walls below the first floor to be laid up in Portland cement mortar one part to three parts sand. All stone walls above first floor level, unless otherwise marked to be laid in mortar, one part of best lime mortar to one part of Portland cement mortar, composed of one of cement to three of sand. All cement to be as specified under heading of "Cement".
All sand to be Missouri River clean sharp sand free from mud or other foreign material.

FURRING STRIPS:

The outside stone walls in the first, second and third stories to be furred with 7/8" x 1-7/8" strips, 16" centers, nailed to wood plugs driven into walls, not built in: plugs to be not over three feet on centers. No furring on north wall.

WATERPROOFING:

The waterproofing of east, west and south walls in the first, second and third stories will be omitted. North wall to remain as previously specified.

LATHING & PLASTERING:

The furred walls will be lathed and plastered as specified for stud partitions.

FIREPROOFING:

The following parts to be reinforced concrete.

1 - Window area walls.

2 - Retaining walls of front terrace.

3 - Footings for columns #21 and 26 in exterior wall and all interior column footings.

4 - Exterior columns from the first floor level to the bottom of roof beams R1 - R2 - R3 - R4, and to the bottoms third floor beams elsewhere.

5 - Interior columns from footings to bottom of roof beams R1 -2-3-4 and from footings to bottom of third floor beams elsewhere.

6 - The beams and floors of the first, second and third stories, the roof beams R-1-2-3-4 and the slabs of the stairs and landings.

See construction plans on sheet 2. Note concrete columns. Steps to front terrace shall be concrete same as floors.

Contractor shall include all reinforced concrete and bars and steel tile in connection with same. Complete detail drawings showing spacing and sizes of all reinforcement, etc., to be furnished by contractor for approval of architects within two weeks of date of contract for building. These shall be in exact accordance with the details given on architects' drawings. Work to be done only from drawings approved and signed by architects.

WIRING FOR ATTACHING METAL LATH:

The wires for suspending metal lath to be attached by the contractor for the same to the rods of the beams, and to be run through holes bored in the forms.

WALL TIES:

Provide and secure to the inside of the column forms by light nailing, galvanized wall ties which are to have one end embedded in the columns, and the other when straightened out bond the stone and tile to the column. Ties to be 3/16" x 3/4" crimped pattern 12" long and to be spaced not over 13" apart vertically.

CONCRETE:

All to be as follows: - 1 of Portland cement, 2 of sand, and 4 of 3/4" lime stone or gravel free from flint and dust. Smaller size to be used for columns, beams, etc., when ordered. Concrete to be mixed as directed on tight platforms and turned over not less than 3 times. It shall be thoroughly mixed then immediately placed and thoroughly spaded, rammed and tamped until water flushes to top.

Concrete beams and slab to be poured at one time. Work stopped at points selected by architects or superintendent.

STEEL TILE:

The contractor may use 26 guage if the tile are to be left in place or 22 guage if they are to be removed. Tile to be of maximum width shown by schedules on the drawing, with variations of narrower tile as required to fill the spaces. Any spaces too narrow for tile t be either filled in solid or have wooden forms.

The tiles to be accurately spaced and to be lightly nailed to the forms to prevent disturbance while working over them.

Steel tile to be corrugated and to have closed ends for bearing on walls. All tile to be depth called for in schedules.

Any holes or voids found in concrete after centreing is removed shall be filled with cement and sand 1 to 3.

CEMENT & SAND: -

AS already specified.

REINFORCEMENT:

All steel used in concrete, including reinforced walls and columns, etc., and in tile lintels, shall be deformed bars of section called for. See details for steel in beams and columns. Bars to be bent where so shown. They shall have elastic limit of not less than 50,000 lbs. per square inch and minimum of 12-1/2% of elongation.

All reinforcement to be accurately spaced and held in place with approved bar spacer.

Mill test showing quality of bars to be equal to specification shall be furnished to architects.

CENTERING:

Contractor for the fireproofing to furnish and erect wood centering for his work. Centering to be tight and supported in an approved manner and to be strong enough not to give under the rammer.

TESTS:

Test shall be made as follows:- Place to be selected by architects shall be loaded as directed with sacks of sand or other similar material to equal 100 lbs. distributed load per square foot of area, and the maximum deflection at the center of the span shall not be more than 1/480th of the span, a maximum of 6000 lbs. of material to be used.

The architects reserve the right to test any or all of the panels in case the place tried fails under the test. All

Work failing under same shall be replaced at contractor's expense.

The contractor shall provide all facilities and necessary implements for making tests.

GRAVEL CONCRETE FILL:

This is required under all wood floors. None required for cement floors as in kitchen, bathrooms, corriders, second and third story toilets, and terrace. It shall be 2" of concrete levelled flush with top of sleepers and shall be one of cement, 2 of sand and 7 of gravel (size 1/2" to 1") all mixed same as other concrete.

HOLES, ETC.

Contractor to leave all holes, etc., necessary for the installation of other mechanics' work. He shall build in all sleeves, anchors, etc., furnished by other contractors to secure their work. He shall inquire what holes, sleeves, anchors, etc., are required in ample time before beginning to pour concrete, but if another contractor fails to tell this contractor just what is wanted, the contractor failing to do this shall cut the holes, etc., at his own expense, (but only with the consent of the Fireproofer) and shall also make good all work damaged.

This contractor to set wires in concrete to secure sleepers for wood floors.

In bathrooms, etc., as specified above, granitoid floors will be put in by granitoid contractor.

GRANITOID:

Basement floor shall have all pieces of lumber, rubbish, etc., removed. There shall be 3" of cinders well rammed, 2-1/4" of concrete and 3/4" top coat, all to slope to floor drains where directed and to be cut into blocks about 6 feet square. Floor as above in elevator pit.

Floor over old cistern fill to have reinforcing bars, 3/8" drain, 9" centers both ways.

Terrace steps to have apron 6" wide and 16" deep at bottom and 4" x 12" beam at top with three 3/8" rods, hooked ends. Step slab to be reinforced with 3/8" rods 9" centers.

Steps leading to terrace, steps and platform at rear entrance and at basement entrance, also steps and platforms of interior stairway, will be granitoid, 3/4" top coat applied to concrete slab of stairs and concrete steps while they are green. This top coat shall be carried around edge of slab and ends of steps. Treads of interior stairs to have nosing and safety tread.

Steps to be formed at basement entrance in concrete on 8" cinder foundation. Area walls at basement entrance and areas to have 3" granitoid copings. Sills of all entrance doors, also steps in boiler room, to be granitoid. All steps and platforms to have aprons 16" deep.

TERRACE FLOOR:

Foundation of terrace to be 8" thick, of cinders, gravel or crushed stone well rammed. Terrace floor to be granitoid 4" thick reinforced with 3/8" rods 12" centers running both ways.

The border of terrace and center insert to be gray. The field to be red.

Border jointed as shown. Field marked off into 12" squares running diagonally as shown.

Floors where wood is not called for as in kitchen, bathrooms and toilets shall be of granitoid 3" thick, cut as directed. Floor of stair hall and corridors of second and third stories same as above.

Play room hearth to have granitoid colored red and divided into 12" squares..

Concrete for above shall be 1 of cement, 2 of sand and 4 of gravel, free from dust.

Top coat to be 3/4" thick, 1 of cement and 1 of sand.

Bottoms of shower stalls with curbs shall be formed as detailed all in water-proofed concrete, reinforced with 3" mesh expanded metal, waterproofing to be De-Hydratine No. 80, Ceresit, or other material approved by architects in writing. Top of slab under shower bottoms to have 2 coats of Elaterite.

GRANITOID SUB:

On main stairs and landings and hall, second and third stories, kitchen and all bath, sink and toilet rooms. Sub also on all plastered walls in basement. Sub on stud partitions to be on metal lath.

Curb:

Make 6" curb on four sides of refrigerator recess. To be reinforced with expanded metal.

CARPENTER WORK:

The carpenter is to construct and set all centres and give all necessary measurements and directions to other

contractors and workmen. He is to frame where required for pipes, etc., any other cutting to be done by the other mechanics but only with his consent.

He is to furnish and put up all rough grounds, frames, etc.,

TIMBER & LUMBER:

All timber and lumber such as posts, girders, studs, plates, rafters, furring strips, etc., shall be yellow pine, free from shakes, sap and large or loose knots.

JOISTS:

The first, second and third floors are fireproof. Ceiling and roof are of joist construction; for sizes, etc., see plans and section. Double joist framing for pent house, trap door, scuttle, etc.,

ANCHORS:

All walls shall be anchored to ceiling joists with 3/16" x 1-1/2" W.I. straps 6 feet apart.

Window and door frames to have W.I. anchors.

See details for anchors for wall plate under roof joists.

PARTITIONS:

All partitions 2" thick are metal lath and channels. 6" Cross hatched partitions are of tile. 4" 6" Partitions shown solid are of studs.

FLOOR STRIPS:

2" x 4" Y.P. sleepers with bevelled edges, all 16" o.c. for first, second and third stories, except where granitoid floors are specified, to be securely fastened to wires built into concrete by Fireproofer. All to be set level, ready to receive strip fill.

FURRING STRIPS:

See item in alternative proposal for Y.P. furring strip 7/8" x 2" 16" o.c. for east, south and west walls, if local stone is used.

ROOFS:

Construction is clearly shown on drawings, all to be Y.P. properly spiked together. Note pent house.

SHEATHING:

Main roof and sides and top of pent house to be sheathed with 7/8" yellow pine boards not over 8" wide, nailed at each edge to every deck joist or stud.

GUTTER BACKING:

See details for construction of gutter on north wall, with sheathing for same.

LINING:

The stud walls of trunk room #13/ and the kitchen coal bin to be lined with 7/8" yellow pine tongued and grooved surfaced boards of fair quality free from black knots, and blind nailed at each bearing.

SCUTTLE:

To be formed in deck, to have 6" high curb, and cover strongly made with sides covering curb 3".

FLOORING:

There is wood floor in first, second and third stories, except where granitoid is specified. Finished flooring will be nailed direct to sleepers over one layer of waterproof building paper.

All finished flooring except where "A" grade oak is called for, shall be grade "B" or better, flat grain white oak, to be kiln dried, 13/16" thick and 2-1/4" face driven up tight and secret nailed. To break joint at every board. In drawing room 102, alcoves 100 - 101, parlor 112 - 109, entrance hall and

First story corriders the floor shall be sap clear best grade plain white oak flooring 13/16" x 2-1/4" face, kiln dried, end matched, driven up tight and secret nailed.

All flooring must be laid with close side and end joints and shall be planed, scraped and sandpapered smooth.

ROUGH FRAMES:

See details for rough frames for doors, all anchored to tile, etc.

GROUNDS:

Milled grounds 7/8" thick on studs, 5/8" thick on brick or T.C., at trims, washboards, and picture mouldings. Same at 2" metal lath and channel partitions for trims, washboards and picture mouldings and for shelves and pin rails in closets.

BOXING CUT STONE:

All cut stone corners, projecting members and elsewhere requiring it, shall be protected by the carpenter as soon as set.

OAKUM PACKING:

To be driven in tight around all window and door frames in exterior walls.

MILLWORK:

OUTSIDE:

All outside mill work, not otherwise specified, frames, mouldings, etc., to be of white pine or cypress.

FRAMES:

Frames for first story entrance door, etc., and door to stair landing on north, as detailed.
For basement entrance door 2" x8" moulded rebated and secured by jamb screws, two to each jamb and one at head.

Frames for all casement windows of 2" x 6" stuff, moulded, made for 1-3/4" hinged sash.

Double hung window frames to have Y.P. pulley stiles, see details.

All window frames to be for double hung sash, except windows shown without meeting rails.

SASH:

All window sash in casement windows to be W.P., 1-3/4" thick. Double hung sash to be W.P., 1-3/8" thick, hung with best Silver Lake or Sampson Spot cord and sash pulleys 2-1/4" in diameter. In mullions the mullion box to have one weight for two upper sash and one weight for two lower sash, upper end of weight to have pulley for sash cord; iron weights, or lead weights if necessary.

OUTSIDE DOORS:

Front entrance doors 2" thick, veneered with plain white oak selected close grain on white pine core made for glass with loose moulding. Other outside doors solid white pine, 1-3/4" thick, otherwise as for front door.

INSIDE FINISH:

The inside finish of main entrance hall 114 and corridors off the same and rooms 109 - 112, to be plain white oak selected for uniformity of close grain.

The woodwork of the drawing room 102, alcoves 100 - 101, except the doors, to be cypress for painting. Doors as specified below. Inside finish in bathrooms and toilets cypress for painting. All other inside finish to be cypress of the first quality and perfectly dry, for staining.

INTERIOR DOORS:

All doors not otherwise specified to be 1-3/4" thick, all stock veneered on white pine cores and having two vertical panels. To be without warp and sandpapered smooth.

Doors from corridors and entrance hall first story and from parlor 112, to be plain oak veneer on the side with oak trim and birch veneer on the sides with painted and stained trim. All other interior doors to be birch veneer both sides.

Doors from basement hall to hall #6 and to play room; from corridor 15 to 16, from drawing room to corridor and room 112, corridor to dining room; from kitchen to basement stairs; west corridor first story to hall 116, hall 222 to room 219 and small glass panels in double acting doors from kitchen to dining room, to be made for glass panels with muntins and loose mouldings as detailed on sheet 6.

Trap door to loft of size shown, cypress panelled 1-1/8" thick, and to have trim to match doors. Small doors to plumbing pipes of bath tubs 1-1/8" panelled cypress, with small plain trim. Interior doors in basement same as others. Doors from boiler room to ash area, to be 7/8" T. & G. with 1-1/8" cleats and diagonal brac screwed on.

TRANSOMS:

1-3/8" Transom sash, hinged at bottom to open in, over doors from corridors and halls to rooms where marked "T" on plans.

LIFT DOORS:

Doors to lift shaft in first, second and third stories, shall be wood same as other doors. Doors to lift in basement to be metal clad five panelled doors with metal frame and trim.

DUMB WAITER DOORS:

In basement and first story of hollow metal or metal clad with metal frame all as detailed, with metal chains, pulleys, weights, lifts and bolts. Hinged door, frame, etc., of metal, with hinges and fastenings, 2'-6" x 3'-0" at top of shaft.

CASINGS:

See details for door jambs in 2" partitions.

7/8" Casings of doors with 1/2" rebate strip nailed on, and sills, etc., of windows, all as shown on details. Sash beads to be secured by round headed bronzed screws.

Windows will have plaster jambs, and small wood moulding next frame.

TRIM:

Trim of doors as shown on details.

WASHBOARDS:

8" High in all rooms without wainscot, 6" high in closets as shown on details, quarter round next floor. No wood base where cement sub is specified.

Thresholds with bevelled edges for all doors to rooms and closets, W.O. where oak floor is used.

PICTURE MOULDING:

7/8" x 1-3/4", as detailed in all rooms, first, second and third stories, except bathrooms and kitchen. None in halls. To be securely nailed in place. For painting in rooms with painted trim, for staining in other rooms.

CORNICE:

The drawing room 102, parlors 112 and 109, entrance hall 114 and adjoining corridors and the dining room to have moulded wood cornice as shown on sheet 6. Wood to match balance of trim.

WAINSCOTING:

The dining room and first story entrance hall and adjoining corridors to have 5/8" wood wainscot with three ply panels, moulded base and cap all of wood to match balance of trim.

PANEL STRIPS:

The drawing room to have moulded rail and base and panel- formed with light moulded strip nailed to the plaster over canvas. To be same wood as balance of trim.

PANELLED OPENINGS:

The openings from the hall to corridors, from corridors to parlors and from drawing room to alcoves, to have panelled joints and arches with cornices,caps, keys,columns as shown on sheet 6. All wood to match balance of trim.

SHELVES:

All closets to have three 7/8" shelves around 3 sides of closets on cleats and 7/8" x 8" pin rail under bottom shelf. Narrow closets to have shelves on two ends. One 1-1/8" hardwood pole in each closet off bedrooms. Closets 7 and 12 shall have four tiers of shelves and pin rail under. All slop sink closets to have one shelf and pin rail.

1-1/8" Counter in fudge kitchen to be fitted up as detailed, 7/8" x 10" back and ends,top cut out for sink. Top and back covered with zinc turned around edges. Also place four open shelves on wall of fudge kitchen.

Linen closets to have four shelves about 12" apart and 24" from the floor. Shelves supported on cleats.

Telephone closet to have one shelf.

Case in first story to have five drawers, two sliding shelves, four 1-1/8" panel doors and four shelves on cleats. Front to be made of 1-1/8" stuff with moulded cornice. Ends to be 7/8" thick. No backs.

Pin rail in laundry, in coat room 2 and locker room 4.

SHOWER SEAT:

Shower compartment in bath F to have seat.

WOOD PARTITIONS:

Partitions so shown and marked between toilet and lavatory compartment and between that and shower at bath rooms "F" in first story and toilet rooms of #2 and #4 in basement, to be 1-1/8" plain styles and top and bottom rails and 5/8" panels. These partitions to be secured to wall by N.P. small angles and supported as required with N.P. standards and sockets, all furnished and erected by carpenter. Doors from halls and bedrooms direct to toilets, lavatories and bathrooms shall be same as other room doors.

RAILS:

Bathrooms shall have 7/8" x 3-5/8" plain rail on plastered walls, kitchen same except behind equipment.

The carpenter must provide all other woodwork, lumber and finish implied by the drawings or necessary to make the building complete.

STAIRS:

All fireproof construction, cement finish, with white oak handrail, fastened to iron with screws at top landing, see details.

Wall hand rails of white oak on stock iron brakets for flights of stairs from first to third stories. Moulded for main stairs 1-1/2" round stock pattern for service stairs.

MANTEL:

Parlor to have mantel as detailed firmly secured in place, all wood to match other finish. Fireplace in play room to have wood shelf and brackets.

Wood of mantels to be cypress. For staining in play rooms and for painting in drawing room.

INTERIOR SASH:

1-3/8" Fixed sash as detailed at side of first story entrance hall door on north side. Transom sash over this door hinged. Balance of transom sash over side lights fixed.

COAL PARTITIONS:

To be built of 7/8" T.&G. lumber free from black knots on frame of 2" x 4" - 24" o.c. Boards sliding in grooves for doors.

IRONING BOARDS:

Furnish and set complete four Murphy cabinet ironing boards in the laundry.

HARDWARE

THE hardware throughout to be best quality of the kinds below specified. SAmples must be submitted to the architects before the work is required at the building, to remain in their possession until the work is completed, and all hardware shall equal samples.

All the following and any other hardware needed to make all the work complete, ready, and suitable for use, is to be furnished, whether specially herein mentioned or not.

FINISH:

Exterior trim, trim in bathrooms, kitchens and toilets also sash locks to be wrought real brass, dull finish except bathrooms and toilets which shall have polished nickle finish Elsewhere unless otherwise specified finished faces to be plated. Lock faces real brass.

Butts and locks for two metal doors to elevator shaft in

basement, and hardware for doors to dumb waiter to be furnished to makers of doors, all to match other hardware.

LOCKS:

Outside and inside double doors are to have rebated face on locks. All the interior doors, except those otherwise specified shall have mortice locks, equal to Corbin's No. 1362 M.K. Linen closets and kitchen stores and closet off office #110 and off room #111 same. Linen closets to be keyed alike. Closet doors not otherwise specified to have latch equal to Corbin's No. 090 with safety closet spindle inside. All interior single acting double doors to have rebated latch Corbin #88½; doors to sitting room #219 have lock #2362.

Front, rear and basement entrance doors to have cylinder lock equal to Corbin No. 2341.

Doors to bathrooms off halls, doors to bathrooms off bedrooms and to toilets and washbasins direct from halls, and door to closet off parlor #112 shall have latch Corbin 159 with thumb piece on bathroom or closet side. Where bathrooms have two doors, each to have latch Corbin's No. 159½ and thumb piece both sides with split bolt.

All locks shall have screwless or split spindles and 2½" plain spun knobs with rose and key plate Corbin No. 2560. Push plates on both sides of double acting doors to be 3" x 15" plain wrought real bronze. On front entrance doors lever handles Corbin No. 1010 on other entrance doors, 2-1/2" spun knob with rose.

Toilet and lavatory wood partitions as specified in 'Mill Work' to have each two pair bronzed N.P. angles about 2" x 2" x 2" with small bolts to secure to wall. Also furnish N.P. standard and sockets as shown for partitions, also N.P. rod and sockets at shower stalls. Doors to have Bommer D.A. hinges, strike and indicator bolt.

HINGES:

All doors not otherwise specified to have 4" butts Stanley No. 241. Two on every door. Entrance doors to have each three 4½" butts sherardized plated. Double acting doors Rixon No. 15 checking floor hinges in cement boxes. Doors to bath tub pipes and for trap door to loft 2-1/2" butts and mortise bolt Corbin No. 0657¼. Door to ash hoist area to have two bolts Corbin #1580 Doors to case in closet off room #111 to have butts, fastener and bolts on double doors.

All casement sash to have 3" galvanized butts with brass pins and Rixon's friction stay, also Corbin fastener No. 2164, except those sash hinged at bottom which shall have butts as above and transom chains Corbin No. 199-1/2 and spring transom catch Corbin No. 2278-1/4 with pole, bronze tipped. Sash to two vent shafts to have friction stay, also butts and fastener as above.

BOLTS:

Double doors, except double acting doors, shall have top and bottom flush extension bolts Corbin #2852 sufficiently long to be reached from the floor easily.

SASH LIFTS AND LOCKS:

Double hung sash shall each have two hook lifts, similar to Corbin No. 2189.

All shall have locks.

All sash locks shall be Corbin No. 1832-1/2.

TRANSOMS:

All interior and hinged exterior transoms, see 'Millwork', shall have 3" butts and transom openers, having rods not less than 5/16", long enough to be in easy reach.

DOOR STOPS:

There shall be door stops of oak with rubber tips for all doors.

CHECKS:

There shall be Norton size C door check with bracket and holder arm on main entrance door.

HOOKS:

Strong hooks as follows:

2 Dozen in cloak room
4 In fudge kitchen
2 In each bathroom)Corbin W. 1033, white enamel finish.
2 In each toilet)

Eight in each closet Corbin N. 1033.
Twelve in laundry

STEEL & IRON WORK:

MATERIAL:

The sections and sizes which are indicated or called for shall be of Standard pattern, from approved mills.

ANGLES:

Note angle lintels over openings in brick faced walls.

ANCHORS:

See details and specification of carpenter work for anchor straps, bolts, jamb screws, etc.,required.

G.I. RAILINGS:

1-1/2" Galvanized pipe railing as shown at north entrance to basementand for shortdistance at foot of service stair. All to be anchored to walls, etc.,and have standard connections.

✓ Standards built into granitoid coping or to have flanges and
✓ expansion bolts.

STAIR RAILING:

Stair well at third story of main stair shall have wrought iron railing all as detailed. 1-1/2" Square verticals at ends anchored to concrete and walls. 1-1/4" Channel top and bottom (top channel to be screwed to wood handrail),7/16" square verticals 4" o.c. between top and bottom rails.

AREA GRATINGS:

The areas in front terrace and ash area to be covered with gratings. To be bars 1/4" x 1/4", set 1-1/2" o.c. with tie rod and spools. Frames 3/8" x 2" pivotted and resting on bent plates built into concrete and having galvanized chain fastening.

COAL CHUTES:

Place in openings to coal bins Majestic coal chutes, size M-101.

SAFETY TREADS:

Main stairs from basement to third story to have 4" wide Feralun iron safety treads style A painted with aluminum paint. To have suitable anchors for securing to the concrete slab.

GRILLES:

Four small frontwindows to have wrought iron grilles as detailed fastened at top and bottom to the window frames. One to be fastened to stone.

FIRE ESCAPE:

This extends as shown to third floor with run of balanced stairs at bottom and iron ladder on side of chimney to give access to roof.

Framing: Angle irons for framing platforms shall be 3" x 3" x 3/8". No angle to be used less than this size and thickness.

Stringers: These shall be 7" x 3/8".

Platforms: Of 1/4" x 1-1/4" bars set 1-1/2" on centres, 3/8" rod for spools, 3 rows for four foot platforms.

Steps: 9/16" Square bars 1-3/8" on centres edge up.

Ladder: 9/16" Square bars secured to 1/2" x 2" sides, secured to wall with brackets.

Balanced Stair: This shall be evenly balanced and all strongly supported.

Brackets: All 1-1/4" square material, except where of balanced stair is carried, where 2" square shall be used.

Railing: All pipe work to be 1-1/4" inside diameter, to have stock fittings for connections and neat sockets against the walls. There will be top and intermediate pipe rails 1-1/4" inside diameter. Intermediate pipe rail to be half way up and space between it and the bottom to be filled in with 2" mesh #8 wire with 3/8" round frame. All to be securely fastened to the pipe.

All work and material must conform to the Fire Escape Law of Missouri.

The angle and width of stairways shall be as shown on drawings.

All supports shall be absolutely secure and brackets, etc., anchored to the walls. All platforms, etc., must be level and the whole left in firm rigid condition.

VENTILATION GRATES:

Where shown on drawings place stock cast iron ventilating gratings to admit air to attic space.

PAINTING: (By Contractor for Steel & Iron)

All steel and iron work must be thoroughly cleaned and have 1 coat of red lead at shop and all shall receive a second coat at the building. None on galvanized pipe railing.

No material will be accepted which is or has been corroded or which is not free from scale or dirt.

PLASTERING:

The following parts of the basement to be plastered: Ceiling of play room, bath room C, toilets A & B, Coat room 2, laundry 3, Help's Room 5, Service entrance 6, basement stairway and Hall 15, Fudge Kitchen14, and Janitor's room 8 on metal lath

Both sides of wood partitions in basement except the partitions betwean 14 and 13; 13 and 12; Bath C and 9 and boiler room and 9 which will be plastered one side only, all to be on wood lath.

The walls and ceiling of dumb waiter shaft and walls of lift to be plastered on metal lath and channels.

The exterior walls of Janitor's room 8, cloak room 2, to be plastered from the top of the concrete wall to the ceiling, over Elaterite waterproofing.

METAL LATH:

The ceiling of the play room 1, cloak room 2, toilet A, laundry 3, hall 15, help room 5, service entrance, janitor 8, bath c, and fudge kitchen 14, and all ceilings of the first and second stories will have 24 guage Northwestern Expanded Metal Co's 1/2" mesh lath, painted and secured to the reinforcement of the beams by galvanized wire, attached to the reinforcement rods before concreting is done and left projecting through the forms.

Where stud partitions meet tile or concrete, joint to be covered with metal lath, lapping at least 6" on each. Same at internal angles between wood lath and tile or concrete.

Cover all pipe chases with sheets of metal lath, lapping not less than 6" on each side.

All partitions marked 2" in thickness to be built of 3/4" Painted channels 12" centers and with metal lath on one side only. Channels to be anchored to walls, floors and ceilings.

WOOD LATH:

2" partitions are solid plaster, metal lath and channels. Note double metal lath partitions where shown on plans, for plumbing pipes, and double metal lath covering supply pipes in showers where so indicated on plans.

Lath on third story ceiling and all stud partitions in basement, first, second and third stories shall be No. 1 Y.P. lath, placed 3/8" apart. Lath to break joint every fifth lath and to have solid nailing at all angles, etc.

Interior of lift and dumb waiter shafts to be plastered on metal lath, throughout. Note wood lath called for in "Alternative Bid" for all furred stone walls.

WATERPROOFING:

All exterior walls from the floor of the first story to the ceiling of the third story, exterior walls of Janitor's room 8 and cloak room 2 and the outside of the tile walls surrounding the light shafts, to be painted two coats of Elaterite. The second coat to be put on a little in advance of the plastering and to be tacky when plastering is applied. Contractor to examine the walls before painting and fill any holes between the tile.

Note that in "Alternative Bid" the Elaterite waterproofing is omitted on the east, west and south walls of the first, second and third stories, but remains on the north wall.

INTERIOR PLASTERING:

THE plastering to be 3 coat laid off work. It may be lime putty ganged throughout with Best Bros. Keene's cement, or Acme patent plaster or U.S. Gypsum plaster; whichever is used, the ingredients, mixing and application shall be carried out strictly in accordance with manufacturer's directions. (Note shower stalls to be Portland cement plaster). Finish coat to be white.

The plasterer must make sure that all supports, lathing, etc., are firm and secure and report any thing he considers insecure or inaccurate before he begins the work.

Lime must be thoroughly slaked, screened and seasoned before using to avoid pitting. It must stand in slaking pit at least 1 month before being used.

The first coat must be thoroughly scratched, and all to have proper proportion of cattle hair or other approved binder, to give first class work. All shall be thoroughly and carefully floated, perfectly hard and true ready for finishing coat.

Particular attention must be paid to have all walls and ceilings perfectly straight, and all arrises true and plumb.

All plaster in kitchens, baths, and toilets to be smooth hard finish. All other work unless specially ordered smooth, shall be finished in slightly rough sand finish, all straight and true.

JAMBS:

Window heads and jambs are to be plastered, as shown on details.

CORNERS:

All external vertical corners to have galvanized corner beads except at window jambs where they will be slightly rounded.

All beams and pilasters to be plastered.

The plasterer is to patch in the most careful manner all work in the building after other mechanics have finished.

CEMENT PLASTER:

Backs, sides and fronts of shower stalls to a height of 6' -6" to be Portland cement plaster gauged with hydrated lime, put on as directed and worked to a smooth even surface free from cracks. This plaster to be kept wet until thoroughly set. Internal and external corners to be slightly rounded. Sockets for curtain rod to be set in at opening to shower. See details. Any cracked work in showers shall be removed and replaced.

EXTERIOR PLASTERING:

The tile walls of the light shafts to be plastered with scratch coat, brown coat of lime mortar gauged with Portland cement, and finish coat of Portland cement and sand. Exterior plaster to be done over Elaterite water-proofing.

BACK PLASTERING:

All joints around door and window frames and sills must be carefully back plastered to absolutely stop all the air.

PLUMBING:

All work to be done and necessary pipes, etc., to be put in sufficient to make plumbing complete for all fixtures, etc., as shown on drawings, whether such pipes, etc., are specially mentioned herein or not. All expense connected with water supply, tapping main, sewer connection, street repair, etc., caused by plumbing shall be included by plumber.

COLD SUPPLY:

All sizes given are inside diameter. All interior supplies shall be standard galvanized wrought iron pipe.

A 1-1/2" extra heavy lead supply with stop cock to be taken through wall from main in street. To be at least 3 feet under grade. Meter to be in boiler room on the west wall. 1-1/2" Main shall extend to point where 1-1/4" branches are run, one to east and two to west end of building, all exposed in basement, except in play room where all possible water pipes are to run between concrete beams. Exposed pipes run close to ceiling.

1" To hose outlets, one 3/4" riser for each first story bath room, and another 3/4" riser for each pair of second and third story bathrooms over one another. Same for kitchens. 3/4" To slop sinks, and to bath room in basement. 1-1/2" Supply to hot water generator and to water heater.

For lavatories next bathrooms, branches to be run from bathroom risers. Separate 1/2" riser from basement to the drinking fountains where shown, to run from water cooler in basement. Run 3/4" Cold supplies to pot and vegetable sink, and glass sink in kitchen as located later. 3/4" to cooler in hall 6.

All supplies hot or cold, buried in cement floors to be wrapped in tar paper.

HOT SUPPLY:

Same kind of pipe as cold supplies. 1-1/2" Main to be run from hot water generator in basement to water heater. There shall be 3/4" return pipe with valves and waste, connected so as to give circulating system to all fixtures. End of return lines to be run up to fixture so as to insure air relief and a working circulatingsystem.

3/4" Risers to bathrooms, slop sinks and kitchen sinks, all as specified for cold supply, and at each riser there shall be 1/2" return to give complete circulating system to all fixtures having hot supply - these are bath tubs, showers, lavatories and sinks.

Run 3/4" hot supplies to pot and vegetable sink, glass sink, steam table and two coffee urns in kitchen, as located later.

VALVES, ETC:

All branches and risers on hot and cold supplies shall have valves and waste in basement with brass tags numbered and a printed list shall be framed behind glass and hung in basement, giving numbers of rooms, etc., supplied by each line.

COVERING:

All cold supplies on outer walls (they will only be allowed on outer walls where impossible to place them elsewhere) and above lath ceilings where they would sweat, and all supply pipe to drinking fountains shall have 3/4" hair felt anti-sweat covering, fittings to have moulded covering, canvassed.

Where exposed in basement, covering to be painted.

All hot supplies and returns throughout to be covered with 3/4" asbestos air cell covering, with moulded and canvassed fitting covering, banded and painted where exposed.

WASH PAVES:

Four wall hydrants shall be placed on outside walls of building, where noted on plans.

TILE DRAINS:

All storm water and soil sewers not less than 4'6" away from the building to be the best grade of salt glazed pipe. All sewers to be trapped and vented and vents to have perforated cast iron covers cemented to top; top to be flush with finished grade. Main sewers to have fall as indicated on Block Plan. Other sewers to have fall of not less than 12" to 100 feet (greater fall where possible) and in no case shall they be less than 3 feet 6 inches below finished grade. Sewers to enter the building at sufficient depth to give proper fall to all floor drains and other pipes run under the basement floor. Block plan shows position and size of sewers. This contractor shall include all shown. Storm water sewer from north conductors to run to the northwest portion of the lot and discharge on the surface. To have 2'6" x 3'0" granolithic apron as shown 4" thick on 10" bed of cinders and end of pipe to be cast iron and be protected with iron grating as detailed.

All joints to be carefully cemented tight with Portland cement mortar one of cement to two of sand. All bends and connections to be made with pipe made for that purpose. All drain pipe shall be bedded solidly on the bottom which must be natural undisturbed clay. Trench bottom to be scooped out for bells of pipe to give bearing full length of pipe. All pipe to have fall. All back filling

shall be solidly packed.

IRON PIPE:

No plumbing pipes shall be allowed exposed in first, second or third stories, nor in play room of basement when they will be carried between the floor beams to the wall on the east side of the play room. Where exposed in basement they shall be run so as not to interfere with headroom, windows, etc. All vent and soil pipes not of lead to be of extra heavy cast iron pipe. Joints to be run in lead moulds and driven up tight on oakum. All bends, connections, etc., to be made with pipe made for that purpose, and in all cases the pipe shall be securely fastened in place with iron staves and where pipe runs under basement floor it shall rest on solid foundation.

Back filling to be thoroughly packed. Provide proper cleanouts at bottom of all 4" soil pipe stacks. W.C. soil and vent pipes to be 4" and to extend through roof full size. Separate wastes into Y for closets and other fixtures. Care shall be taken where pipes run through roof that no leaks occur and pipes shall be flashed and counter-flashed with 4-lb lead. Vents to have copper screens in top with 3" deep tight fitting copper collar.

All iron soil pipes shall extend 4'6" away from building. All soil pipe in walls and ceilings adjoining the drawing room, alcoves, parlors, and dining room to be wrapped with deadening felt 3/4" thick.

TESTS:

After all wastes are connected, entire plumbing system to be tested in the Architects' or Superintendent's presence and proven tight.

LEAD PIPES:

All waste and vent pipes not of cast iron to be of lead pipe, of proper size, and weight as follows; 1-1/4" - 2-1/2 lbs.

per foot; 1-1/2" - 3-1/2 lbs. per foot; 2"- 5 lbs. per foot.

DRINKING FOUNTAINS:

1-1/2" galvanized waste pipe to be run from fountains, one each near center of basement, first, second and third story halls.

FLOOR DRAINS:

Drains for refrigerator & ice cream cabinet:

To be Josam No. 300 floor drains with 4" concave strainer and 2" outlet.

Drains for Elevator Shaft & Boiler room:

Size 12" x 12" Nelsons Plate 5756-N extra heavy cast iron bell trap with hinged cover.

Drains in areas, terrace and light shaft:

4 in areas, 2 on terrace and 2 in light shafts, 1 in hall 6.

Size 9" x 9" Nelsons Plate 5756-N extra heavy cast iron bell trap with hinged cover.

Drain in floor of laundry:

Size 12" x 12" Nelsons Plate 5756-N extra heavy cast iron bell trap with polished brass top and hinged strainer.

AIR CHAMBERS:

All fixtures to have large airchambers on supplies, concealed where possible.

FIXTURES:

The following fixtures are from the N.O.Nelson Mfg. Co., catalogue. Bidders may submit figures for similar fixtures from other makers.

TUBS:

Bath Tubs: Recess type, fittings back wall, drain either right or left hand end.

Nelsons Plate 3850-N size 5'0" Porcelain enamelled one piece Marnon recess bath with enameled exterior, fitted with combination compression concealed top nozzle supply and waste fitting with china cross handles, china escutcheons, 1/2" valves, drain at right hand end.

Nelsons Plate 3851-N Size 5'0" Porcelain enameled one piece Marnon recess bath, as above, except with drain at left hand end.

BATH TUBS:- Recess Type, Fittings right or left hand end.

Nelsons Plate 3848-N Size 5'0" Porcelain enameled one piece Marnon recess bath, fitted with concealed combination compression top nozzle supply and waste fittings, china cross handles, china escutcheons, 1/2" Valves, drain and fittings right hand end, enameled exterior.

Nelsons Plate 3849-N Size 5'0" Porcelain enameled one piece Marnon recess bath, as above, except with drain and fittings at left hand end.

All bath tubs to be enameled outside and in.

LAVATORIES:

Lavatories:-FLAT BACK:

Size 18" x 21" Nelsons Plate 4120-N Porcelain enameled iron one piece lavatory on concealed wall hanger, fitted with Glaubers H-803-A N.P. self-closing faucets with N.P. indexed handles, 3/8" N.P. I.P.S. supplies to wall with stops, N.P. cast brass vented P.trap, N.P.chain and rubber stopper. All N.P. cast brass set screw escutcheons.

Lavatories:-Recess

Size 18" x 24" Nelsons Plate 4132-N Porcelain enameled iron one piece lavatory on concealed wall hangers, fitted with Glaubers H-803-A N.P. self-closing faucet with N.P. indexed handles, 3/8" N.P. I.P.S. supplies to wall with stops, N.P. cast brass vented "P" trap, N.P. chain and rubber stopper. All N.P. cast brass set screw escutcheons.

Lavatories:-Corner (Left Hand)

Size 18" x 24" Nelsons Plate 4130-N Porcelain enameled iron one piece lavatory with left hand end, supported on concealed wall hangers, fitted with Glaubers H-803-A N.P. self-closing faucets with N.P. indexed handles, 3/8" N.P. I.P.S. supplies to wall with stops, 1-1/4" N.P. cast brass vented "P" trap, N.P. chain and rubber stopper. All N.P. cast brass set screw escutcheons.

Lavatories? Corner (Right Hand)

Size 18" x 24" Nelsons Plate 4131-N Porcelain enameled iron one piece lavatory with right hand end, complete as described above.

SLOP SINKS:

Size 18" x 22" Nelsons Plate 5343-N Porcelain enameled iron roll rim slop sink with 15" integral back, painted exterior, on adjustable iron trap standard with brass cleanout plug, 3" iron pipe outlet, fitted with N.P. quick compression flanged faucets with lever handles. Supplies to have stops.

SINK
IN FUDGE KITCHEN:

Size 18" x 30" Nelsons Plate 5270-N Porcelain enameled iron flat rim sink, fitted with N.P. quick compression flanged faucets with china lever handles, 1-1/4" N.P. cast brass vented "P" trap, drainboards to be furnished by Mill contractor. To fit under zinc covered wood tops, complete with hot and cold supply with stop valves. Outside painted. To have hot and cold supply.

FOUNTAINS:

Three required. Nelsons Plate 4385-N Porcelain enameled iron drinking fountain with integral back, concealed hanger, push button tumbler fill, vitreous china bubbler with concealed pressure regulator, china indexed push button, 3/8" N.P. I.P.S. supply to wall with stop, N.P. outlet strainer, and 1-1/4" N.P. cast brass "P" trap. All cast brass escutcheons.

SHOWERS:

Nelsons Plate 3956-N All brass shower with Niedecken exposed type mixer with N.P. brass handle, flow control valve with china handle, 1/2" union connections to wall, 4" N.P. cast brass shower head with removable air inlet valve, adjustable ball joint connection with N.P. riser and wall support.

Nelsons Plate 5792-N shallow pattern Josam shower drain and trap with 6" N.P. strainer, and 2" outlet, expanding metal pan as shown on plans to be clamped to drain, N.P. curtain rod with heavy white duck curtain and N.P. slide rings. To be fitted with shampoo connection, complete with valve, rubber hose and sprinkler.

TOILETS:

Nelsons Plate 4693-N Vitreous china syphon wash down closet, vitreous china low down tank, with NONCO high grade trimmings and china handle trip lever, 2" N.P. brass flush connection, 3/8" N.P. I.P.S. supply with stop, Birch Mahogany can't split seat and cover, with heavy cast brass hinges, cast brass floor flange with bolts and china bolt, caps, N.P. cast brass set screw escutcheon on supply.

FITTINGS FOR KITCHEN EQUIPMENT:

The kitchen equipment will be furnished by others, but the plumber to set up the same and connect to hot and cold water and to the sewer.

The pot and vegetable sink to have N.P. hot and cold supplies with stops to each section and N.P. 3/4" faucets A3 Savill, four in all.

To have 1-1/2" N.P. waste and grease trap Nelson Plate 5323-N cast iron with water jacket 15-1/2gal. capacity complete with trimmings.

The dishwasher to have 3/4" N.P. supply with gate valve and 1-1/2" N.P. waste with grease trap Nelson Plate 5323-N cast iron with water jacket 9 gal. capacity complete with trimmings.

The glass sink to have N.P. hot and cold supplies with stops and 1/2" N.P. faucets , four in all. To have 1-1/2" N.P. waste and S trap.

The steam table to have N.P. supply with gate valves and 1-1/4" N.P. waste with S trap.

The coffee urns each to have N.P. hot supplies with gate valves and 1-1/4" N.P. waste and S trap.

All the above fixtures to be vented as required. All to be located as shown by setting plan to be furnished later by the manufacturer.

TANK HEATER:

For heating the water in the tank when the steam boiler is not in operation furnish a Kewanee #500 hot water supply boiler or equal with a capacity of 500 gallons per hour.

To have 16 gauge black iron smoke pipe with damper to the flue.

Make 1-1/2" valved connections to the water supply and to the water tank. Place 1" water relief valve on the heater.

Place draw cock on heater with connection to the boiler room floor drain.

The heater to be covered with 1-1/2" asbestos blocks wired on, a surfacing coat of plastic asbestos, canvassed and painted with 2 coats of asbestos paint.

Paint the smoke pipe, and exposed parts of the heater with 2 coats of black asphaltum paint.

HOT WATER GENERATOR:

Contractor shall furnish and erect, supported from the floor on pipe stand, at point shown on plan in boiler room in basement, a #7 Sims B.H. type heater, with 48" x 96" tank, having a storage capacity of 754 gallons and a heating capacity of 560 gallons per hour with steam at atmospheric pressure. To contain heating coil of 56 feet of 1-1/2" brass pipe. Steam connection to boiler will be made by heating contractor. This tank shall have 2" drain, with valve, run to sewer outlet in this room. The water connection to be 1-1/2" with valve; also make connections with the tank heater and to circulating pipe.

This heater shall be covered with 2" asbestos cement covering wired on and canvassed and painted one coat of cold water paint of a color selected by the Architects.

WATER COOLER:

4260-N in hall 6 with 1/2" circulated supply to glass sink in kitchen and 4 drinking fountains. To have connection to floor drain.

MARBLE:

At back and ends of all bathtubs against wall there shall be polished marble strip 8" x 7/8", . Marble to be sound white marble, Italian, Alabama or Vermont, firmly bedded in place in cement.

GAS FITTING:

All expense for 2" supply from main on street, through basement wall, to be included by contractor.

All pipes in building to be new wrought iron of the inside dimensions given. All fittings to be malleable iron, all outlets capped and pipes proved and leaks stopped to the satisfaction of the superintendent before pipes are covered up. All pipe laid to drain properly and to be securely fastened in place.

The meter will be located in basement boiler room. From this point there will be 2" main to tank heater, ready for connection to instantaneous gas heater. There will be 1-1/4" riser to kitchen in first story and 1" connection to Fudge kitchen, with brass valves in basement. No connections to be made to fixtures.

ROOFING:

GALVANIZED IRON & TIN WORK:

All galvanized iron shall be of No. 24 Toncan metal or Ingot iron, painted 1 coat red lead on hidden sides by roofer. See detail sheet for G.I. capping at walls of vent shafts. Cover of scuttle to have galvanized iron on top and edges, over layer of heavy felt, edges to be carefully turned under and left smooth.

CONDUCTORS & GUTTERS:

Conductors to be of No. 24 galvanized iron, 3" x 4" run down and cemented into bell of drain pipes at grade. They shall have galvanized wire strainer baskets at top.

Gutter on north side to be 22 gauge galvanized iron, half round 8" diameter and extending 3" under felt, and to be supported by steel gutter hangers spaced not over 2'6" apart. Gutter to have 3/8" galvanized iron tubing and shall have twisted straps of galvanized iron across top 30" apart. Gutter to have pitch to conductors.

SKYLIGHT:

Over elevator shaft to be 18" x 36" with #24 gauge galvanized iron frame and ribs. To be glazed with 3/8" rolled wire glass. Ribs to be standard make with condensation gutters, and skylight to have ventilating ridge, arranged to keep out rain and to have rustless mosquito screen protection. Skylight to be properly flashed all around.

COMPO ROOFING:

Main and pent house roofs and sides of pent house shall be type 'B' Certainteed construction roofing, put on under supervision and instructions of manufacturers. To be carried up the back of the parapets and connected into groove cut in the stone coping. At gutter to be securely fastened with cleat.

ZINC:

See 'Millwork' for shelf with 10" back and ends in basement fudge kitchen to be covered with zinc turned around edges. All joints soldered smooth and edges fastened and left smooth.

VENTILATORS:

Four 16" diameter G.I. Star or similar ventilators with wide G.I. flashing under compo roofing of deck.

PAINTING AND GLAZING:

EXTERIOR:

All exterior woodwork except front doors to be prepared, putty stopped, and painted three coats of best strictly pure white lead and linseed oil paint, in colors as directed. All exterior iron work of grilles, gratings, fire escape and coal chutes shall have two coats lead and oil finished dead black on top of paint by others. No paint on galvanized pipe rail at basement entrance. No paint on galvanized gutters or conductors.

INTERIOR:

Enamel, varnish, shellac and filler shall be Certainteed make.

All exposed plumbing pipes not nickled, to be painted one good coat in basement, elsewhere 2 coats. All woodwork in drawing room 102 and alcoves 100 - 101 shall have five coats as follows: Wood smoothed, holes puttied, knots, etc., shellaced. First coat lead and oil and turpentine; second and third coats, lead and turpentine and enamel first coater; fourth coat lead and turpentine and enamel first coater half and half; fifth coat eggshell enamel.

All doors to drawing room to be enameled same as finish, on drawing room side.

All woodwork in bathrooms, toilets, lavatory compartments, sink closets and kitchens shall have four coats as above, fourth coat to be unadulterated enamel left in the gloss. Front of slop sinks and outside of laundry tubs enameled same as wood.

The oak woodwork of doors, trim, wainscot, etc., in main entrance 114, corridors off same and rooms 109, 112 to have one coat of penetrating stain, one coat of shellac, one coat of paste filler colored as directed and another coat of shellac and one coat wax, well rubbed on.

The outside and inside of the front doors to have one coat of paste filler colored as directed, and three coats of exterior varnish rubbed dull. Stair handrails same as front doors.

All interior doors not specified enameled and not in oak rooms, but including doors to bathrooms, toilets and kitchens shall be stained to an even color, filled and varnished 1 coat, then 1 coat flat finish varnish.

in
Mantel piece/drawing room enameled same as finish.
Mantel shelf and brackets in play room to be stained, shellaced, varnished and waxed .

Interior of sash in painted rooms shall be painted same as other woodwork. In stained rooms, interior of sash, the sash bead at sill and the inside sill or stool shall have 2 coats exterior varnish instead of wax finish.

No painting on coal bin partitions or lining of trunk room.

Shelving in rooms 7 and 12 to have one coat of stain only.

Balance of woodwork in rooms 2, toilet A, 3,4,, toilet B, 5,6,7,8, bath C, 9,10,11, 12,13, to have three coats of paint.

Iron brackets for handrail and iron work of rail at head of main stair to have three coats paint finished dead black. Metal doors to elevator and dumb waiter to be painted three coats to match color of woodwork.

All interior woodwork not otherwise specified, shall be stained, shellaced and have one coat of wax well rubbed in. Woodwork in dining room is included in this.

Shelving and pin rails to be stained only.

Stair and landings are cement.

All wood floors (See 'Carpenter Work' for same), to be filled with paste wood filler, color as directed, then two good coats of floor varnish for floors of dining room and drawing room 102, alcoves 100,101, parlors 109 and 112 and entrance hall and first story corridors and one coat for balance of oak floors, all rubbed smooth, then one coat of wax well rubbed with weighted brush. Before varnishing, floors shall be gone over and color equalized.

Walls and ceilings in kitchen, bathrooms, toilets (Not including those in basement), sink closets and compartments and recesses with wash basins, shall have 2 coats oil paint, sized with Hockaday sizing coat mixed with color and 2 coats of Certainteed enamel. (For shower stalls see below).

All other rooms in first, second and third stories, closets, halls, and main stairway from basement to top, to have walls and ceilings sized with Hockaday sizing coat mixed with color and painted 2 coats Certainteed cold water paint. This applies also to soffits of stairs and landings. Walls, etc., of service stairs to be painted and ceiling and plastered walls of basement entrance hall No. 6. No paint on other walls and ceilings in basement.

CEMENT PAINT:

Cement floors in corridors, second and third stories main and service stairs and landings from basement to third story, bathrooms, toilets, sink closets, and lavatory compartments when thoroughly set and dry shall have three coats Certainteed light gray floor paint, all put on according to makers' directions. Floors, etc., must be thoroughly cleaned before paint is applied.

Floors and curb of shower stalls shall be treated as above. Interior of shower stalls (6'6" high) and outer face of 2" cement plaster side of stalls to be given 2 coats of cemcoat in gloss white, as made by L. Sonneborn Sons, 262 Pearl St., New York.