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UNIT PLANS

Suggestions for the interior arrangement of low-rent dwellings

UNITED STATES HOUSING AUTHORITY

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UNIT PLANS

SUGGESTIONS FOR DWELLING ARRANGEMENTS FOR LOW-RENT HOUSING

FOREWORD

The following plan studies of various types of dwelling units and combinations of units have been prepared by the United States Housing Authority as an aid to the architect and the engineer in developing his own plans for low-rent housing units in the solution of a specific problem. In no case are the plans to be interpreted as standard or required plans.

The plan studies show various dwelling arrangements based upon minimum room areas set by the United States Housing Authority. The dimensions shown result from structural design which utilizes materials and structural systems to the greatest advantage.

The accompanying data and comments are intended to serve as a guide in evaluating the basic features of each plan and analyzing the comparative economy of the various types.

CONSIDERATIONS IN DEVELOPING UNIT PLANS

Unit plans are the basic elements of building composition.

In considering the merits of various unit plans, it is most important to realize that mathematical evaluation of a plan is of use only after the proper relationship of rooms and livability have been estab-

lished, for without primary consideration of these factors in the design of the plan, the comparative measurement of its economy is useless, even though favorable.

While it may be desirable to have rooms larger than the minimum areas set forth here, such additional space must be obtained with maximum economy in construction in order to maintain the low initial and maintenance costs essential to the success of a project. Although an increase in area does not increase the cost directly in proportion to the increase in area, since many mechanical and equipment items, stairs, etc. remain the same, the portion of the cost which increases directly with the increase in area represents over one half of the construction cost, and is therefore an appreciable factor.

Every item of economy, however minor, is an important consideration because of the repetitive use of plan elements in low-cost housing projects. Basic factors which govern the economy of a plan are (1) economic spans of beams and slabs in fireproof construction, (2) use of stock sizes of lumber without waste, (3) stair framing with run of joists in non-fireproof construction, and (4) back to back combinations of plumbing fixture groups with no offset in the plumbing stack.

MINIMUM ROOM SIZES

The following room sizes are the smallest which will generally be acceptable to the U.S.H.A:

1. Living Room: 150 square feet.
2. Kitchen: 60 square feet and a minimum width of 7 feet in kitchens of 60 to 70 square feet in area. Not less than 3 feet clear space is to be provided in front of kitchen equipment.
3. Kitchenette: not less than 3 feet clear space provided in front of kitchen equipment. Such equipment is to be equal to full kitchen equipment.
4. Dining Room: 100 square feet.
5. Dining Space: 60 square feet in addition to minimum areas of Kitchen or Living Room to which it is added.
6. First Bedroom: 120 square feet.
7. Second Bedroom: 90 square feet.
8. Third or Fourth Bedroom: 80 square feet.
9. The above minima must be enlarged within the aggregate net area of the Living Room, Kitchen, and Dining Space under the following conditions:

- a. For two bedroom units, this aggregate net area shall be not less than 240 square feet.
- b. For three or more bedroom units, this aggregate net area shall be not less than 260 square feet.

All of the above areas are exclusive of closets.

Closets should be no less than 22 inches in depth, and approximately 2 lineal feet per person should be provided as a general rule.

Seven feet ten inches may generally be regarded as the minimum room height from finished floor to lowest point of finished ceiling to provide for adequate sun-light penetration and air circulation.

ROOM COUNT

For purposes of comparison and standardization in evaluating projects, the following system for counting rooms is specified:

1. Living Room, Kitchen, Dining Room, and Bedroom will be counted as a whole room.
2. Kitchenette, when provided as an alcove extension to Living Room (in addition to the minimum area required for Living Room), will be counted as a half room.

3. Dining Space, when provided as an alcove extension to Living Room or Kitchen (in addition to the minimum areas required for such rooms), will be counted as a half room.
4. Bathrooms, Halls, Closets, Laundries, Utility Rooms, Storage Rooms, Community or Recreation Rooms will not be counted as whole or half rooms.

These items have been computed and given on each sheet of the plan studies. Dwelling units of corresponding types will compare favorably with the plan studies if the values for these items fall within the ranges given below:

CHECKING COSTS

The following factors have a direct quantitative bearing on costs, regardless of the material specifications:

1. Lineal feet of Exterior Wall, one story high, per countable room. (This does not include end walls.)
2. Gross Area per room. This is the total unit area, including exterior walls, (except end walls) and taken from center to center of partitions between units, divided by number of rooms.
3. Ratio of Net Area to Gross Area per room. The Net Area is the total area within the plaster lines of counted rooms only, divided by the number of such rooms.

	<u>Lineal Feet Exterior Wall Per Room</u>	<u>Gross Area Square Feet Per Room</u>	<u>Ratio of Net Area to Gross Area not less than</u>
Houses -- One Story	11.3-13.0	150-171	70.0%
Houses & Flats -- Two Story	11.3-13.7	151-178	62.2%
Apartments Tee Type -- Three Story	10.6-11.4	168-187	63.5%
Apartments Ribbon -- Three Story	11.3-14.0	152-181	63.0%
Apartments E11 Type -- Three Story	12.8-13.1	177-180	65.7%

SELECTION OF TYPE OF UNITS

Selection of units for a specific project must be based on consideration of:

1. Relation of the proposed site to the city pattern, and appropriate density of development.
2. Character of surrounding development.
3. Prevailing local customs and preferences with respect to dwelling unit types.
4. Effect of building code and other applicable regulations on the relative costs per dwelling unit of each type.
5. Prevailing local building techniques and their effect on relative costs per dwelling unit of each type.

The cost limitations imposed by the Act will determine the maximum average number of rooms per dwelling unit in most localities. Experience has

already shown the average number of rooms per dwelling unit is likely to be between four and five.

Unit plans should always be studied concurrently with group or block plans. The length of the building of assembled units should generally not exceed 200 feet as expansion joints may be necessary beyond this length and their cost may exceed possible economy through greater length. In selection of unit types the relation of the unit to ground areas and to common facilities should be studied. Certain types of units require a high percentage of project maintenance of ground areas whereas others may be planned with a high percentage of tenant maintenance. The disposition of project facilities such as laundries, storage space, garbage disposal and collection, and individual or central and group heating plants (located within the unit or elsewhere) will have direct bearing on the planning of the unit. The disposition of other facilities, such as management, social, educational, and health, will have an indirect influence on the selection of units.

EXPLANATION OF QUANTITY LISTS

The data sheet accompanying each of the following unit plan studies contains a quantity list by means of which a direct and simple cost comparison may be made among the various plan types in a particular area at a particular time.

For items listed that occur but once in a dwelling unit, a direct comparison may be made of quantities per dwelling unit; for other items, the most direct comparison may be obtained by dividing the quantities for a typical plan unit by the number of rooms contained in such unit, and comparing the quantities per room. Comparison of overall costs may be made by preparing estimates, as described herein, of the total costs of the units which are compared; these total costs may be divided by the number of rooms, or number of dwelling units, to arrive at Comparative Costs per room and per dwelling unit.

Thus the quantity lists, when applied to the unit plans indicated, may be used to arrive at a quick evaluation of the comparative economy of various general plan types in a particular situation.

The general form, adapted to particular plans, may also be used for the preparation of an actual estimate of "Dwelling Facilities" costs. For these purposes, the services of persons familiar with estimating and with costs are required to supply the appropriate unit prices covering labor and materials. Suitable allowances and percentages must be added to cover the costs of contractors

job expenses such as equipment rentals, taxes, costs of supervision, insurance and bond, as well as other contractors overhead and commission or profit. (This allowance may run as high as 15 to 20 per cent of the sum total of costs of all the items listed). A uniform factor covering these may be added to each unit price, or a lump sum may be added to the total of all items.

In addition, there must be added to the sum total of all these items, an allowance to cover the costs of architectural, engineering and landscape architectural fees, local Housing Authority expenses, and carrying charges. (This allowance may run as high as 10 to 12 per cent of the sum total of all the items listed plus the above allowance). A uniform factor covering this allowance may be added to each unit price, or a lump sum may be added to the total of all other items.

As an aid to the technically trained, experienced estimator who will prepare unit prices for use with the quantity lists for particular plans in a particular community, the following definitions explain the scope of work covered under each item in the Quantity List.

DEFINITIONS

General Excavation: Per cubic yard; length of unit x (width plus 4 ft.) x 3 ft. deep; for pipe space 4 feet below first floor level. 60

Foundation Wall & Footing: Per lineal foot; include wall footing, hand excavation of trench - length $5 \frac{20}{20}$ of footing x depth x 2 feet, and foundation wall

4 ft. high from top of footing to first floor level.

Exterior Wall: Per lineal foot; include wall from first floor level to top of roof slab (no deductions for windows or doors). Include masonry, studding, sheathing, dampproofing, plaster, paint, base, furring, as required. 10.00

Parapet Wall: Per lineal foot; include wall above roof slab. Include masonry, cant strip, waterproofing, flashing and coping. 3.00

Windows: Per square foot; assume windows are approximately 20 per cent of the exterior wall area. Include frames, sash, glass and glazing, paint, screens, shades and brackets, lintels, sills, stools, aprons, casings, hardware, waterproofing, caulking. Deduct cost of masonry only of exterior wall displaced by opening.

Floor and Roof (Gross): Per square foot of coverage. Include floor construction, finish of concrete slabs or wood sub-floor, supporting beams and columns for all floors and roof, paint on all ceilings, roof insulation, roofing, exterior gutters and downspouts, ceiling under roof, if any. ?

Floor Covering (Net): Per square foot of finished floor over net area. Special cement finish, asphalt or hardwood floor sanded and varnished or waxed.

1 Story Partitions: Per lineal foot of parti-

tion one story high. Include plaster, paint and base, studs and lath or block. 4.00

Corner Beads: Per corner bead one story high. 1.00

Closets: Include closet shelving, hookstrip and drapery brackets, etc. 3.00

Cased Opening: Buck, frame and trim, painted. 5.00

Doors Interior: Buck, frame and trim, door, painted and with hardware and threshold. 10.00

Heating: Per cubic foot of building. Cube is based on 9'-0" story height. Include all boiler plant equipment, yard distribution, radiators, piping and paint. 35

Stairs - One Story Flights: Per flight, in Houses and Flats. Include treads, wall rail, brackets, etc. and paint and painting. 40.00

Stairs - Complete: Stairs in apartment units, complete from entrance level to top. 40.00

Entrance Doors Front - Rear: For houses and flats. Include frame, trim, door, painted and glazed, hardware, screen door, caulking, weatherstripping, sill, lintel. Deduct cost of masonry displaced by opening. 12.50

Apartment Entrance Doors: Frame, trim, saddle, and door, painted, and hardware. 11.00

Main Entrance, Etc.: For apartment units. Include door, frame, trim, hardware, screen door, caulking and weatherstripping, sill and lintel, painting, glass and glazing. Entrance stoop and steps, mail boxes, special ornamentation. Deduct cost of masonry displaced by opening. 100.

Stoops - Front & Rear: Per stoop. Include stoop, steps, foundations etc. 40.

Covered Entry (Double): Per double entry. Include foundation wall and footing, additional exterior walls, floor and roof. Entrance door listed as Entrance Door Front. 50.

Extra for Bath: Per dwelling unit. Include furred ceiling, special finish over normal plaster and paint, and special floor finish over normal. 20.

Ranges and Refrigerators: Per dwelling unit, installed. 100.

Kitchen Shelving & Table: Per dwelling unit. 30.

Incinerators: Per incinerator. Include foundation, all masonry, furring, plaster, corner beads, painting, flashing, utility room in basement, interior basement stairs, partitions, doors and outside exit and incinerator metal work. 60.

Plumbing: Per dwelling unit. Include all fixtures and sanitary, water and gas piping in dwelling buildings. 100.

Electrical: Per dwelling unit. Include all wiring, outlets, fixtures, accessories in building. 50.

End Walls & Fire Walls: Per Lineal foot for full height of building. Include additional excavation, foundation wall, and footing, plaster, paint and base; deduct one-half cost of dividing partitions displaced by wall. For One Story Buildings allow 2 lineal feet of end wall per room. For Two Story Buildings allow 1.2 lineal feet of end wall per room. For Three Story Apartment Ribbon allow .6 lineal foot of end wall per room. For Three Story Apartment Tee allow 1.25 lineal feet of end wall per room. These allowances are based on an average length of building of approximately 150 feet. If a different average length is contemplated these quantities should be adjusted.

Heating & Fuel Space: Per square foot. Based on one heating plant for 500 rooms. Include cost of chimney for heating plant in price per square foot of heating space. Allow 3 square feet of heating and fuel space per room assumed to include coal storage, machine room and boiler plant space.

Where individual stoves or gas heaters are used for each dwelling unit the heating items should be modified accordingly.

Tenant Storage Space: Per square foot. Include storage space, perambulator space, etc. Figure cost of all partitions, doors, exits, areaways, additional cost of foundation walls over 4 feet deep, basement sash. Allow 10 square feet per dwelling unit for storage and 10 square feet per dwelling unit for perambulator and bicycle space.

KEY TO ABBREVIATIONS

- C. Y. - Cubic Yards
- L. F. - Lineal Feet
- S. F. - Square Feet
- BEAD. - Corner Beads
- CLOS. - Closets
- OPG. - Cased Openings
- DOOR. - Doors
- FLGT. - Flight of Stairs
- STR. - Stair System Complete
- STP. - Stoops
- ENTY. - Covered Entry
- ENT. - Apartment Entrance Door
- INC. - Incinerator
- D. U. - Dwelling Unit
- Pl.2S - Partition plastered two sides.
- Pl.1S - Partition plastered one side.

GENERAL NOTES

The following notes apply generally to all plan studies:

- (1) Plan types are schematic and many variations within each general type are possible and desirable to meet specific local requirements.
- (2) Indications of windows and other similar items are diagrammatic only and are not intended to show either size or location.
- (3) No attempt has been made to show all possible partition arrangements between kitchen and living rooms. These may range from complete separation by partitions and door to complete openness. No one arrangement will answer every condition, and the desirability of privacy here should be weighed against the advantages in simplicity and economy of openness.
- (4) In general, sufficient furniture has been spotted on the plans to indicate that the size and shape of the rooms will permit a livable room arrangement.
- (5) All dimensions given are from finished plaster to finished plaster.

QUANTITIES

	Scheme A ⁶ 87		Scheme B		3 1/2 Room ⁷⁵¹	
		Cost		Cost		Cost
General Excavation	66 C.Y.	@ .60 = 24.60	63 C.Y.	-	71 C.Y.	- 42.60
Foundation Wall & Footing	39 L.F.	@ 3.68 = 146.80	37 L.F.	-	42 L.F.	- 151.20
1 Story Exterior Wall	39 L.F.	@ 10.00 = 390.00	37 L.F.	-	42 L.F.	- 420.00
Parapet Wall	39 L.F.	@ 3.00 = 117.00	37 L.F.	-	42 L.F.	- 126.00
Windows - 20% of Exterior Wall	70 S.F.	@ 48 = 40.00	67 S.F.	-	75 S.F.	- 17.00
1st. Floor & Roof (Gross)	512 S.F.	@ 35 = 179.20	495 S.F.	-	552 S.F.	- 194.20
Floor Covering (Net)	481 S.F.	@ 20 = 97.00	465 S.F.	-	518 S.F.	- 103.60
(Interior - Pl.2S)	41 L.F.	@ 3.00 = 13.00	42 L.F.	-	41 L.F.	- 12.30
Partitions (Dividing - Pl.1S)	7 L.F.	@ 15 = 10.00	7 L.F.	-	7 L.F.	- 10.00
One Story (Dividing - Pl.2S)	21 L.F.	@ 20 = 43.00	21 L.F.	-	21 L.F.	- 43.00
High (Bath - Pl.1S)	- L.F.	@ 20 = -	- L.F.	-	- L.F.	-
(Bath - Pl.2S)	12 L.F.	@ 20 = 24.00	12 L.F.	-	12 L.F.	- 24.00
Corner Beads	9 BEAD.	@ 1.00 = 9.00	12 BEAD.	-	7 BEAD.	- 7.00
Closets	4 CLOS.	@ 10 = 40.00	4 CLOS.	-	3 CLOS.	- 30.00
Cased Openings	- OPG.	@ - = -	- OPG.	-	- OPG.	-
Doors - Interior	4 DOOR.	@ 100 = 400.00	4 DOOR.	-	4 DOOR.	- 400.00
Heating	4,600 C.F.	@ .07 = 300.00	4,500 C.F.	-	5,000 C.F.	- 350.00
Stairs - One Story Flights	- FLGT.	@ 40 = 40.00	- FLGT.	-	- FLGT.	-
Entrance Doors Front	1 DOOR.	@ 25 = 25.00	1 DOOR.	-	1 DOOR.	- 25.00
Entrance Doors Rear	1 DOOR.	@ 13 = 13.00	1 DOOR.	-	1 DOOR.	- 13.00
Stoops - Front & Rear	2 STP.	@ 40 = 80.00	2 STP.	-	2 STP.	- 80.00
Covered Entry (Double)	- ENTY.	@ - = -	- ENTY.	-	- ENTY.	-
Extra for Bath	1 D.U.	@ 100 = 100.00	1 D.U.	-	1 D.U.	- 100.00
Ranges & Refrigerators	1 D.U.	@ 200 = 200.00	1 D.U.	-	1 D.U.	- 200.00
Kitchen Shelving & Table	1 D.U.	@ 45 = 45.00	1 D.U.	-	1 D.U.	- 45.00
Plumbing	1 D.U.	@ 500 = 500.00	1 D.U.	-	1 D.U.	- 500.00
Electrical - 3 Rooms	1 D.U.	@ 50 = 50.00	1 D.U.	-	1 D.U.	- 50.00
3 1/2 Rooms	- D.U.	@ - = -	- D.U.	-	1 D.U.	- 50.00

TOTAL

2376

2455.90

End Walls & Firewalls
Heating & Fuel Space
Tenant Storage Space

6 L.F. @ -
9 S.F. @ -
20 S.F. @ -

6 L.F. -
9 S.F. -
20 S.F. -

7 L.F. -
11 S.F. -
20 S.F. -

TYPE OF UNIT

3 Room and 3 1/2 Room
One Story Houses.

Designed to utilize wood
stud partitions with off
center bearing partition
to make full use of 12
and 14 foot length joist.

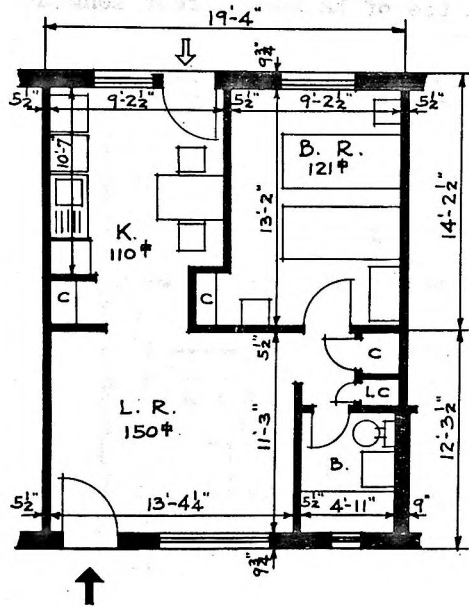
Plumbing arranged with
two groups of fixtures
on separate stacks.
These stacks, however,
can serve fixtures in
adjoining units.

UNITED STATES HOUSING AUTHORITY
TECHNICAL DIVISION
WASHINGTON, D. C.

PLAN NO. Ta-1

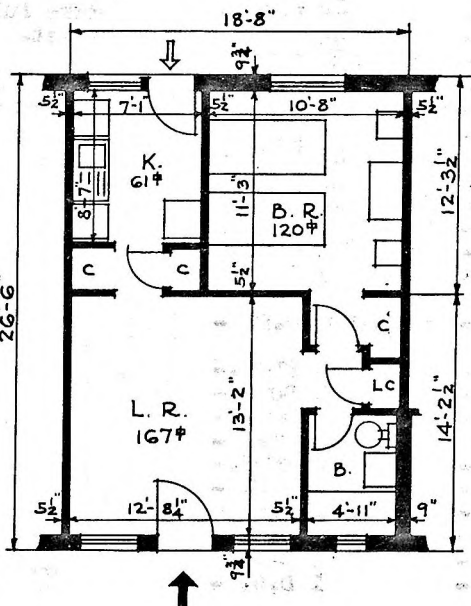
STATISTICS

SCHEME	"A"	"B"	"C"
GROSS AREA (SQ. FT. PER RM.)	171	165	158
NET AREA (SQ. FT. PER RM.)	127	116	116
RATIO (NET ÷ GROSS) %	74	70	74
EXT. WALL (LIN. FT. PER RM.)	13	12	12

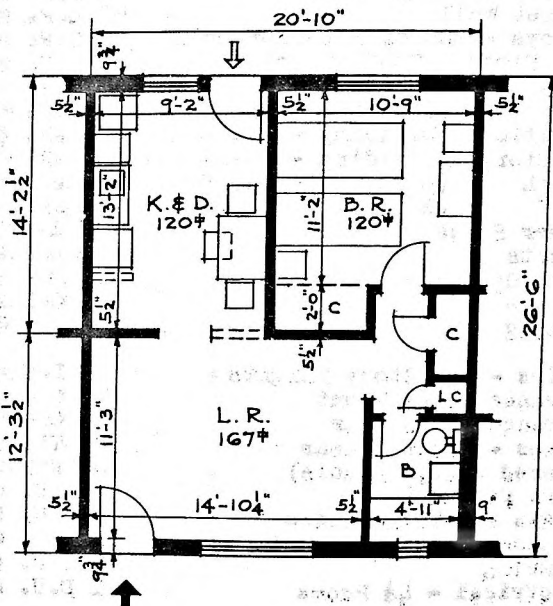


(A)

3 ROOM



(B)



(C)

3 1/2 ROOM

DEPARTMENT OF THE INTERIOR
UNITED STATES HOUSING AUTHORITY
WASHINGTON, D.C.

3 & 3 1/2 ROOM
ONE STORY HOUSES

PLAN NO.

TA-1

0 1 2 3 4 5 10
SCALE IN FEET

DATE: 8 13-38

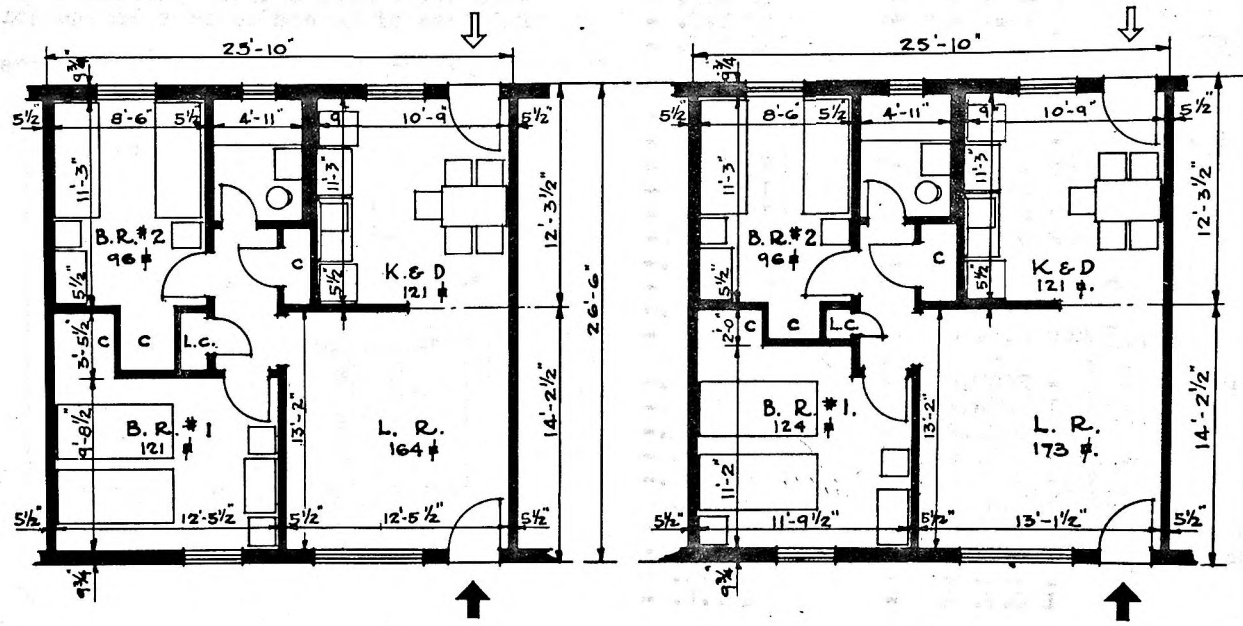
	QUANTITIES		Scheme A		Scheme B		TYPE OF UNIT
				Cost		Cost	
General Excavation	88	C.Y. @	-		88	C.Y. -	4 $\frac{1}{2}$ Room One Story Houses.
Foundation Wall & Footing	52	L.F. @	-		52	L.F. -	
1 Story Exterior Wall	52	L.F. @	-		52	L.F. -	Designed to utilize wood stud partitions with off center bearing partition to make full use of 12 and 14 foot length joist.
Parapet Wall	52	L.F. @	-		52	L.F. -	
Windows - 20% of Exterior Wall	93	S.F. @	-		93	S.F. -	Plumbing arranged with all fixtures served by one stack.
1st. Floor & Roof (Gross)	684	S.F. @	-		684	S.F. -	
Floor Covering (Net)	643	S.F. @	-		643	S.F. -	
(Interior - Pl.2S	59	L.F. @	-		55	L.F. -	
Partitions (Dividing - Pl.1S	-	L.F. @	-		-	L.F. -	
One Story (Dividing - Pl.2S	25	L.F. @	-		25	L.F. -	
High (Bath - Pl.1S	14	L.F. @	-		14	L.F. -	
(Bath - Pl.2S	12	L.F. @	-		12	L.F. -	
Corner Beads	5	BEAD.@	-		6	BEAD.-	
Closets	4	CLOS.@	-		4	CLOS.-	
Cased Openings	1	OPG. @	-		1	OPG. -	
Doors - Interior	5	DOOR.@	-		5	DOOR.-	
Heating	6,200	C.F. @	-		6,200	C.F. -	
Stairs - One Story Flights	-	FLGT.@	-		-	FLGT.-	
Entrance Doors Front	1	DOOR.@	-		1	DOOR.-	
Entrance Doors Rear	1	DOOR.@	-		1	DOOR.-	
Stoops - Front & Rear	2	STP. @	-		2	STP. -	
Covered Entry (Double)	-	ENTY.@	-		-	ENTY.-	
Extra for Bath	1	D.U. @	-		1	D.U. -	
Ranges & Refrigerators	1	D.U. @	-		1	D.U. -	
Kitchen Shelving & Table	1	D.U. @	-		1	D.U. -	
Plumbing	1	D.U. @	-		1	D.U. -	
Electrical - 4 $\frac{1}{2}$ Rooms	1	D.U. @	-		1	D.U. -	
TOTAL							
End Walls & Firewalls	9	L.F. @	-		9	L.F. -	
Heating & Fuel Space	14	S.F. @	-		14	S.F. -	
Tenant Storage Space	20	S.F. @	-		20	S.F. -	

UNITED STATES HOUSING AUTHORITY
 TECHNICAL DIVISION
 WASHINGTON, D. C.

PLAN NO. Ta-2

STATISTICS

SCHEME	"A"	"B"
GROSS AREA (SQ. FT. PER RM.)	152	152
NET AREA (SQ. FT. PER RM.)	112	114
RATIO (NET ÷ GROSS) %	73.4	75.1
EXT. WALL (LIN. FT. PER RM.)	11.5	11.5



(A)

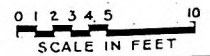
(B)

DEPARTMENT OF THE INTERIOR
 UNITED STATES HOUSING AUTHORITY
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4 1/2 ROOM
 ONE STORY HOUSES

PLAN NO.

TA-2



DATE: 8 15-38

QUANTITIES

Scheme A

Scheme B

TYPE OF UNIT

	Cost	Cost
General Excavation	105 C.Y. @	105 C.Y. -
Foundation Wall & Footing	62 L.F. @ -	62 L.F. -
1 Story Exterior Wall	62 L.F. @ -	62 L.F. -
Parapet Wall	62 L.F. @ -	62 L.F. -
Windows - 20% of Exterior Wall	112 S.F. @ -	112 S.F. -
1st. Floor & Roof (Gross)	824 S.F. @ -	824 S.F. -
Floor Covering (Net)	773 S.F. @ -	773 S.F. -
(Interior - Pl.2S	78 L.F. @ -	78 L.F. -
Partitions (Dividing - Pl.1S	- L.F. @ -	- L.F. -
One Story (Dividing - Pl.2S	25 L.F. @ -	25 L.F. -
High (Bath - Pl.1S	14 L.F. @ -	14 L.F. -
(Bath - Pl.2S	12 L.F. @ -	12 L.F. -
Corner Beads	12 BEAD.@ -	13 BEAD.-
Closets	7 CLOS.@ -	5 CLOS.-
Cased Openings	- OPG. @ -	- OPG. -
Doors - Interior	6 DOOR.@ -	6 DOOR.-
Heating	7,400 C.F. @ -	7,400 C.F. -
Stairs - One Story Flights	- FLGT.@ -	- FLGT.-
Entrance Doors Front	1 DOOR.@ -	1 DOOR.-
Entrance Doors Rear	1 DOOR.@ -	1 DOOR.-
Stoops - Front & Rear	2 STP. @ -	2 STP. -
Covered Entry (Double)	- ENTY.@ -	- ENTY.-
Extra for Bath	1 D.U. @ -	1 D.U. -
Ranges & Refrigerators	1 D.U. @ -	1 D.U. -
Kitchen Shelving & Table	1 D.U. @ -	1 D.U. -
Plumbing	1 D.U. @ -	1 D.U. -
Electrical - 5½ Rooms	1 D.U. @ -	1 D.U. -

TOTAL

End Walls & Firewalls	11 L.F. @ -	11 L.F. -
Heating & Fuel Space	17 S.F. @ -	17 S.F. -
Tenant Storage Space	20 S.F. @ -	20 S.F. -

5½ Room One Story Houses.

Designed to utilize wood stud partitions with off center bearing partition to make full use of 12 and 14 foot length joist.

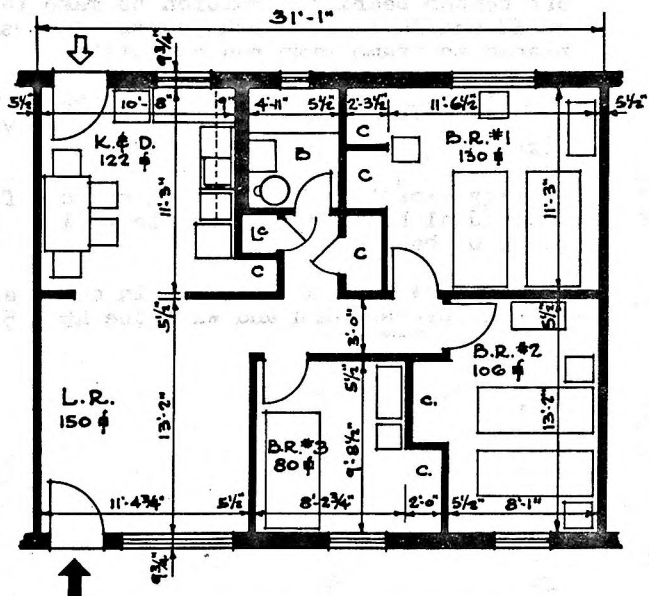
Plumbing arranged with all fixtures served by one stack.

UNITED STATES HOUSING AUTHORITY
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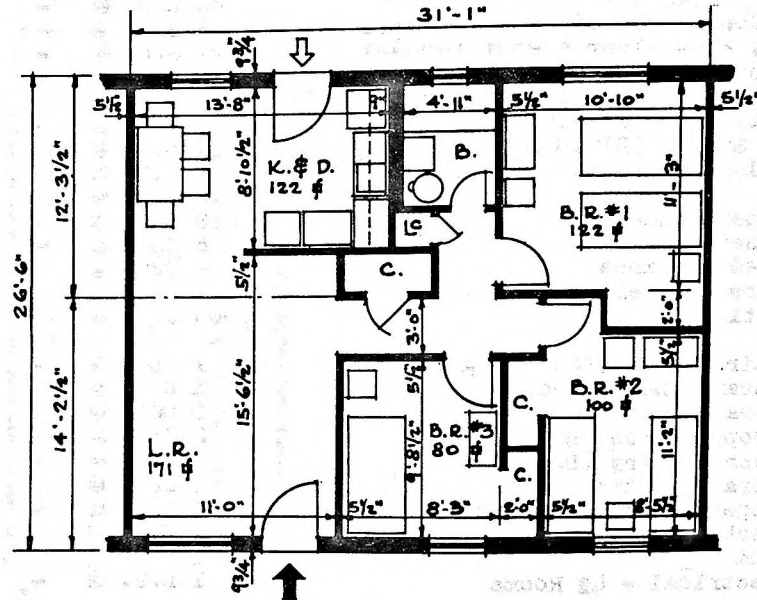
PLAN NO. Ta-3

STATISTICS

SCHEME	"A"	"B"
GROSS AREA (SQ. FT. PER RM.)	150	150
NET AREA (SQ. FT. PER RM.)	107	108
RATIO (NET ÷ GROSS) %	71.3	72
EXT. WALL (LIN. FT. PER RM.)	11.3	11.3



(A)



(B)

DEPARTMENT OF THE INTERIOR
UNITED STATES HOUSING AUTHORITY
WASHINGTON, D.C.

5 1/2 ROOM
ONE STORY HOUSES

PLAN NO.

TA-3



DATE: 8 15-36

QUANTITIES

Cost

General Excavation	50 C.Y. @	-
Foundation Wall & Footing	30 L.F. @	-
2 Story Exterior Wall	30 L.F. @	-
Parapet Wall	30 L.F. @	-
Windows - 20% of Exterior Wall	106 S.F. @	-
1st. 2nd. Floor & Roof (Gross)	391 S.F. @	-
Floor Covering (Net)	734 S.F. @	-
(Interior - Pl.2S	74 L.F. @	-
Partitions (Dividing - Pl.1S	18 L.F. @	-
One Story (Dividing - Pl.2S	41 L.F. @	-
High (Bath - Pl.1S	- L.F. @	-
(Bath - Pl.2S	12 L.F. @	-
Corner Beads	10 BEAD.@	-
Closets	6 CLOS.@	-
Cased Openings	- OPG. @	-
Doors - Interior	7 DOOR.@	-
Heating	7,000 C.F. @	-
Stairs - One Story Flights	1 FLGT.@	-
Entrance Doors Front	1 DOOR.@	-
Entrance Doors Rear	1 DOOR.@	-
Stoops - Front & Rear	2 STP. @	-
Covered Entry (Double)	- ENTY.@	-
Extra for Bath	1 D.U. @	-
Ranges & Refrigerators	1 D.U. @	-
Kitchen Shelving & Table	1 D.U. @	-
Plumbing	1 D.U. @	-
Electrical - 4½ Rooms	1 D.U. @	-
TOTAL		
End Walls & Firewalls	5.4 L.F. @	-
Heating & Fuel Space	14 S.F. @	-
Tenant Storage Space	20 S.F. @	-

TYPE OF UNIT

4½ Room Two Story House.

Designed to utilize wood stud partitions with off center bearing partition to make full use of 12 and 14 foot length joist. Stairs placed to frame with run of joist.

Plumbing arranged with all fixtures served by one stack. This stack can also serve fixtures in an adjoining unit.

Utility closet in Kitchen can be used for individual heating unit on first floor in place of basement space.

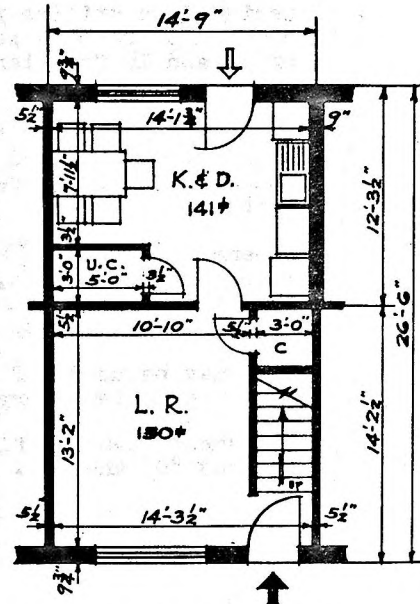
Unit may be used efficiently in combination with a reverse plan and with the 4½ - 5½ room two story house.

UNITED STATES HOUSING AUTHORITY
TECHNICAL DIVISION
WASHINGTON, D. C.

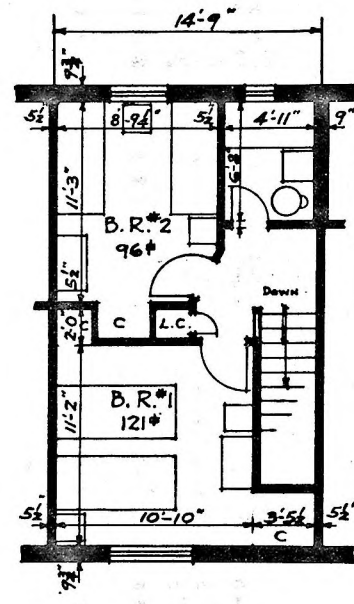
PLAN NO. Ta-4

STATISTICS

GROSS AREA (SQ. FT. PER RM.)	174
NET AREA (SQ. FT. PER RM.)	113
RATIO (NET ÷ GROSS) %	64.9
EXT. WALL (LIN. FT. PER RM.)	13.1



FIRST FLOOR PLAN



SECOND FLOOR PLAN

DEPARTMENT OF THE INTERIOR
 UNITED STATES HOUSING AUTHORITY
 WASHINGTON, D. C.

4 1/2 ROOM
 TWO STORY HOUSE



PLAN NO

TA-4

DATE: 8 15-38

QUANTITIES

	Scheme A	Cost
General Excavation	114 C.Y. @	-
Foundation Wall & Footing	67 L.F. @	-
2 Story Exterior Wall	67 L.F. @	-
Parapet Wall	67 L.F. @	-
Windows - 20% of Exterior Wall	242 S.F. @	-
1st. 2nd. Floor & Roof (Gross)	890 S.F. @	-
Floor Covering (Net)	1671 S.F. @	-
(Interior - Pl.2S	166 L.F. @	-
Partitions (Dividing - Pl.1S	36 L.F. @	-
One Story (Dividing - Pl.2S	87 L.F. @	-
High (Bath - Pl.1S	- L.F. @	-
(Bath - Pl.2S	27 L.F. @	-
Corner Beads	19 BEAD.@	-
Closets	11 CLOS.@	-
Cased Openings	- OPG.@	-
Doors - Interior	15 DOOR.@	-
Heating	16,000 C.F. @	-
Stairs - One Story Flights	2 FLGT.@	-
Entrance Doors Front	2 DOOR.@	-
Entrance Doors Rear	2 DOOR.@	-
Stoops - Front & Rear	4 STP. @	-
Covered Entry (Double)	- ENTY.@	-
Extra for Bath	2 D.U. @	-
Ranges & Refrigerators	2 D.U. @	-
Kitchen Shelving & Table	2 D.U. @	-
Plumbing	2 D.U. @	-
Electrical - $4\frac{1}{2}$ Rooms	1 D.U. @	-
$5\frac{1}{2}$ Rooms	1 D.U. @	-
TOTAL		
End Walls & Firewalls	12 L.F. @	-
Heating & Fuel Space	30 S.F. @	-
Tenant Storage Space	40 S.F. @	-

TYPE OF UNIT

$4\frac{1}{2}$ - $5\frac{1}{2}$ Room Two Story Houses
2 Dwelling Units - 10 Rooms.

Designed to utilize wood stud partitions with off center bearing partition to make full use of 12 and 14 foot length joist. Stairs placed to frame with run of joist.

Plumbing arranged with all fixtures of each dwelling unit served by one stack. These stacks can also serve fixtures in adjoining units.

Scheme A: Oversize Kitchen-Dining Spaces with utility closets, which can be used for individual heating unit on first floor in place of basement space.

Unit may be used efficiently in combination with the $4\frac{1}{2}$ two story house and repetitively.

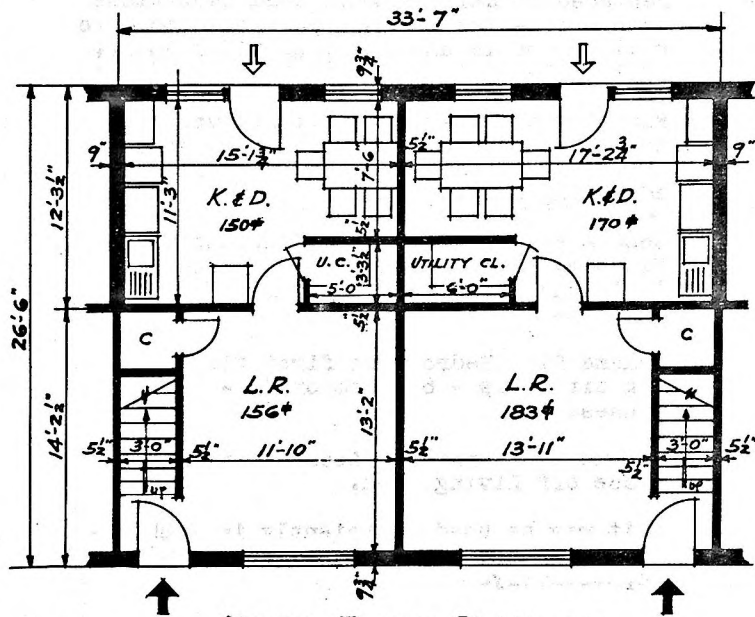
See Sheet Ta-6 for first floor plans of Schemes "B" and "C".

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WASHINGTON, D. C.

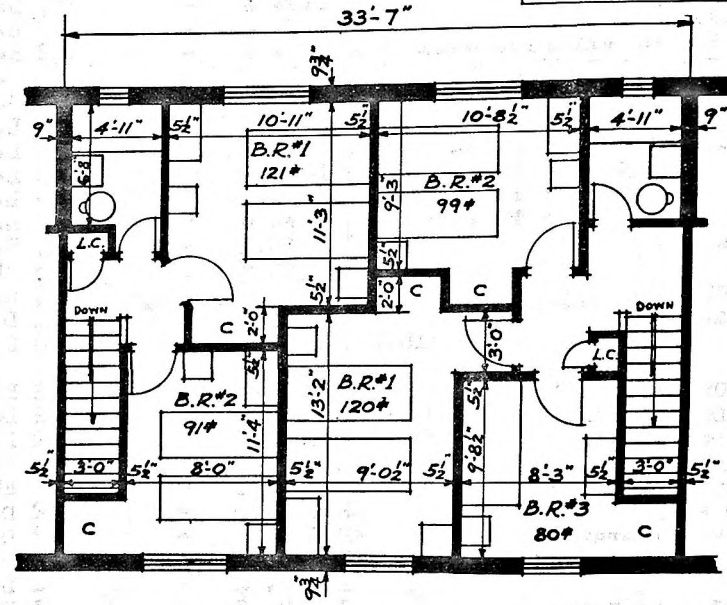
PLAN NO. Ta-5

STATISTICS

SCHEME	"A"
GROSS AREA (SQ. FT. PER RM.)	178
NET AREA (SQ. FT. PER RM.)	117
RATIO (NET ÷ GROSS) %	65.7
EXT. WALL (LIN. FT. PER RM.)	134



FIRST FLOOR PLAN
SCHEME "A"



SECOND FLOOR PLAN
FOR SCHEMES "A-B-C"

SEE PLAN NO TA-6
FOR SCHEMES B & C

DEPARTMENT OF THE INTERIOR
UNITED STATES HOUSING AUTHORITY
WASHINGTON, D.C.

4 1/2 & 5 1/2 ROOM
TWO STORY HOUSES

PLAN NO.

TA-5

0 1 2 3 4 5 10
SCALE IN FEET

DATE: 8-15-38

QUANTITIES

	Scheme B	Cost	Scheme C	Cost
General Excavation	114 C.Y. @	-	114 C.Y. -	-
Foundation Wall & Footing	67 L.F. @	-	67 L.F. -	-
2 Story Exterior Wall	67 L.F. @	-	67 L.F. -	-
Parapet Wall	67 L.F. @	-	67 L.F. -	-
Windows - 20% of Exterior Wall	242 S.F. @	-	242 S.F. -	-
1st. 2nd. Floor & Roof (Gross)	890 S.F. @ .30	-	890 S.F. -	-
Floor Covering (Net)	1671 S.F. @ .15	-	1671 S.F. -	-
(Interior - Pl.2S	172 L.F. @ .45	-	166 L.F. -	-
Partitions (Dividing - Pl.1S	36 L.F. @	-	36 L.F. -	-
One Story (Dividing - Pl.2S	87 L.F. @	-	88 L.F. -	-
High (Bath - Pl.1S	- L.F. @	-	- L.F. -	-
(Bath - Pl.2S	27 L.F. @	-	27 L.F. -	-
Corner Beads	21 BEAD. @ 1.00	-	25 BEAD. -	-
Closets	11 CLOS. @ .25	-	13 CLOS. -	-
Cased Openings	- OPG. @ 1.00	-	4 OPG. -	-
Doors - Interior	15 DOOR. @ 1.00	-	11 DOOR. -	-
Heating	16,000 C.F. @ .40	-	16,000 C.F. -	-
Stairs - One Story Flights	2 FLGT. @ .40	-	2 FLGT. -	-
Entrance Doors Front	2 DOOR. @ .25	-	2 DOOR. -	-
Entrance Doors Rear	2 DOOR. @ .20	-	2 DOOR. -	-
Stoops - Front & Rear	4 STP. @ .25	-	4 STP. -	-
Covered Entry (Double)	- ENTY. @ .40	-	- ENTY. -	-
Extra for Bath	2 D.U. @ .40	-	2 D.U. -	-
Ranges & Refrigerators	2 D.U. @ 1.50	-	2 D.U. -	-
Kitchen Shelving & Table	2 D.U. @ .40	-	2 D.U. -	-
Plumbing	2 D.U. @ 1.00	-	2 D.U. -	-
Electrical - 4 1/2 Rooms	1 D.U. @ 1.60	-	1 D.U. -	-
5 1/2 Rooms	1 D.U. @	-	1 D.U. -	-

TOTAL

End Walls & Firewalls	12 L.F. @	-	12 L.F. -	-
Heating & Fuel Space	30 S.F. @	-	30 S.F. -	-
Tenant Storage Space	40 S.F. @	-	40 S.F. -	-

NOTE: Quantities for Scheme B are based on using two No.1 Utility Rooms. If No.2 Utility Room or Bedroom is used the quantities must be adjusted accordingly.

TYPE OF UNIT

4 1/2 - 5 1/2 Room Two Story Houses
2 Dwelling Units = 10 Rooms.

Designed to utilize wood stud partitions with off center bearing partition to make full use of 12 and 14 foot length joist. Stairs placed to frame with run of joist.

Plumbing arranged with all fixtures of each dwelling unit served by one stack. These stacks can also serve fixtures in adjoining units.

Scheme B: Utility Room connected with Kitchen, part of which can be used for individual heating unit on first floor in place of basement space.

Scheme B1: Bedroom on first floor making either 4 1/2 - 6 1/2 room or 5 1/2 - 5 1/2 room houses.

Scheme C: Separate Kitchen with Dining Space off Living Room.

Unit may be used efficiently in combination with the 4 1/2 two story house and repetitively.

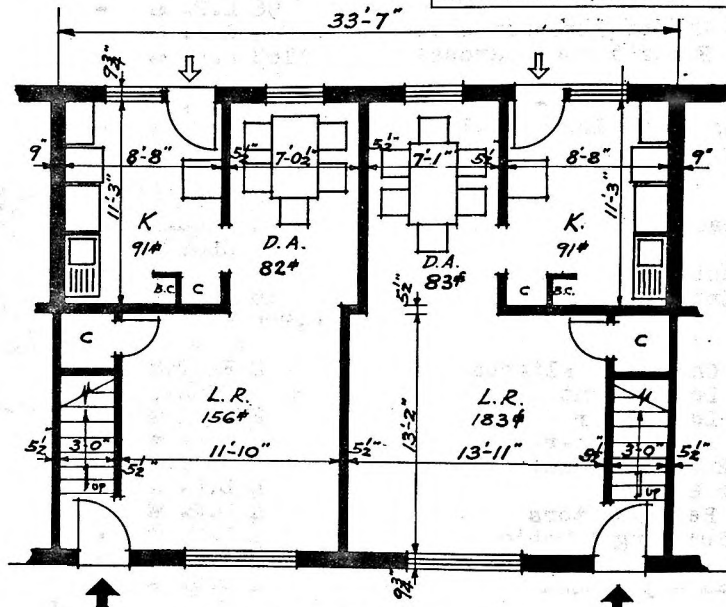
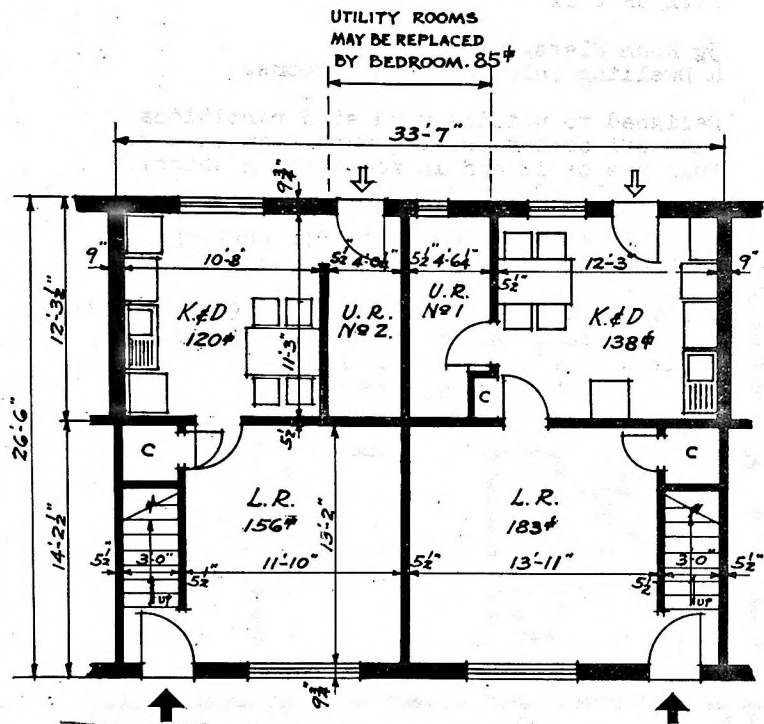
See Sheet Ta-5 for second floor plan.

UNITED STATES HOUSING AUTHORITY
TECHNICAL DIVISION
WASHINGTON, D. C.

PLAN NO. Ta-6

STATISTICS

SCHEME	"B"	"C"
GROSS AREA (SQ. FT. PER RM.)	178	178
NET AREA (SQ. FT. PER RM.)	111	120
RATIO (NET ÷ GROSS) %	62.2	67.2
EXT. WALL (LIN. FT. PER RM.)	13.4	13.4



FIRST FLOOR PLAN
SCHEME "B"

SEE PLAN NO TA-5 FOR SECOND FL.

Break down

$12'' \text{ Wall } 9.5 \text{ @ } .605 = 5.75 \times 67 = 385$
 $8'' \text{ Wall } 9.0 \text{ @ } .495 = 4.56 \times 67 = 305$

 690

FIRST FLOOR PLAN
SCHEME "C"

SEE PLAN NO TA-5 FOR SECOND FL.

$12'' \text{ Wall } 9.5 \times .45 = 4.28 \times 67 = 288$
 $8'' \text{ Wall } 9 \times .34 = 3.06 \times 67 = 205$

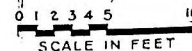
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DEPARTMENT OF THE INTERIOR
UNITED STATES HOUSING AUTHORITY
WASHINGTON, D.C.

4 1/2 & 5 1/2 ROOM
TWO STORY HOUSES

PLAN NO.

TA-6



DATE: 8 15-38

QUANTITIES

		Cost
General Excavation	150 C.Y. @	-
Foundation Wall & Footing	96 L.F. @	-
2 Story Exterior Wall	96 L.F. @	-
Parapet Wall	96 L.F. @	-
Windows - 20% of Exterior Wall	344 S.F. @	-
1st. 2nd. Floor & Roof (Gross)	1163 S.F. @	-
Floor Covering (Net)	2173 S.F. @	-
(Interior - Pl.2S)	122 L.F. @	-
Partitions (Dividing - Pl.1S)	- L.F. @	-
One Story (Dividing - Pl.2S)	157 L.F. @	-
High (Bath - Pl.1S)	56 L.F. @	-
(Bath - Pl.2S)	34 L.F. @	-
Corner Beads	36 BEAD.@	-
Closets	12 CLOS.@	-
Cased Openings	- OPG. @	-
Doors - Interior	16 DOOR.@	-
Heating	20,900 C.F. @	-
Stairs - One Story Flights	2 FLGT.@	-
Entrance Doors Front	4 DOOR.@	-
Entrance Doors Rear	2 DOOR.@	-
Stoops - Front & Rear	6 STP. @	-
Covered Entry (Double)	- ENTY.@	-
Extra for Bath	4 D.U. @	-
Ranges & Refrigerators	4 D.U. @	-
Kitchen Shelving & Table	4 D.U. @	-
Plumbing	4 D.U. @	-
Electrical - 3½ Rooms	4 D.U. @	-
TOTAL		
End Walls & Firewalls	16.8 L.F. @	-
Heating & Fuel Space	42 S.F. @	-
Tenant Storage Space	80 S.F. @	-

TYPE OF UNIT

3½ Room Flats, Two Story
4 Dwelling Units @ 3½ = 14 Rooms.

Designed to utilize wood stud partitions with off center bearing partition to make full use of 12 and 14 foot length joist. Stairs placed to frame with run of joist.

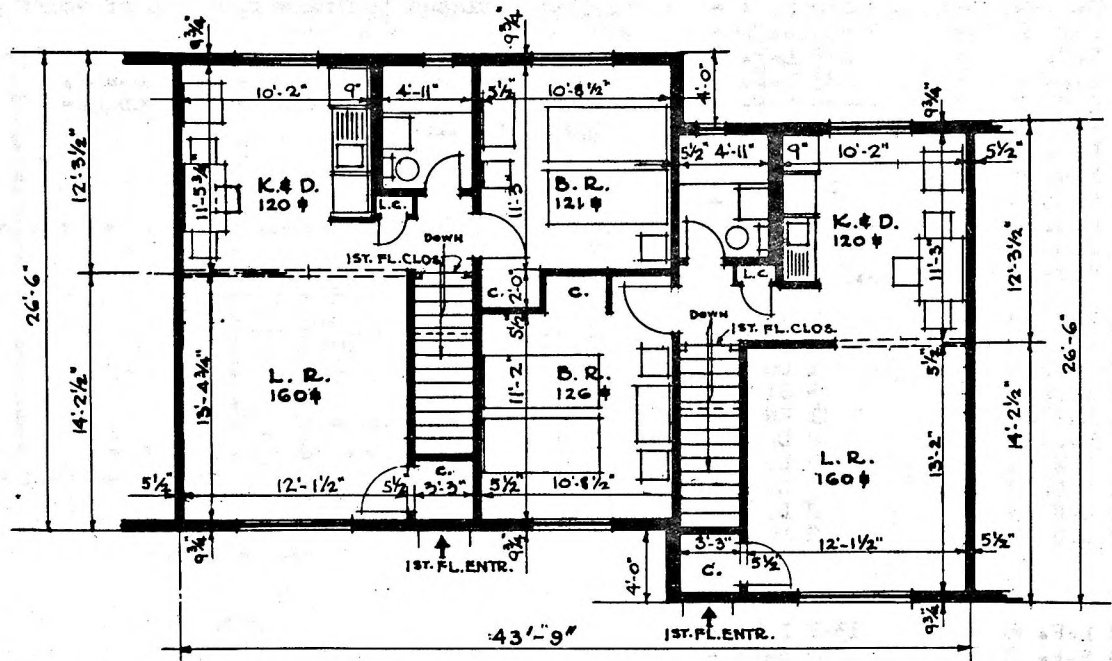
Plumbing arranged with all fixtures of each dwelling unit served by one stack.

Partition between Kitchen and Living Room may be arranged for degree of privacy desired.

UNITED STATES HOUSING AUTHORITY
TECHNICAL DIVISION
WASHINGTON, D. C.

PLAN NO. Ta-7

STATISTICS	
GROSS AREA (SQ. FT. PER RM.)	166
NET AREA (SQ. FT. PER RM.)	115
RATIO (NET + GROSS) %	69
EXT. WALL (LIN. FT. PER RM.)	13.7



SECOND FLOOR PLAN

FIRST FLOOR SIMILAR

DEPARTMENT OF THE INTERIOR
 UNITED STATES HOUSING AUTHORITY
 WASHINGTON, D.C.

3 1/2 ROOM
 TWO STORY FLATS

PLAN NO.
TA-7

0 1 2 3 4 5 10
 SCALE IN FEET

DATE: 8-15-38.

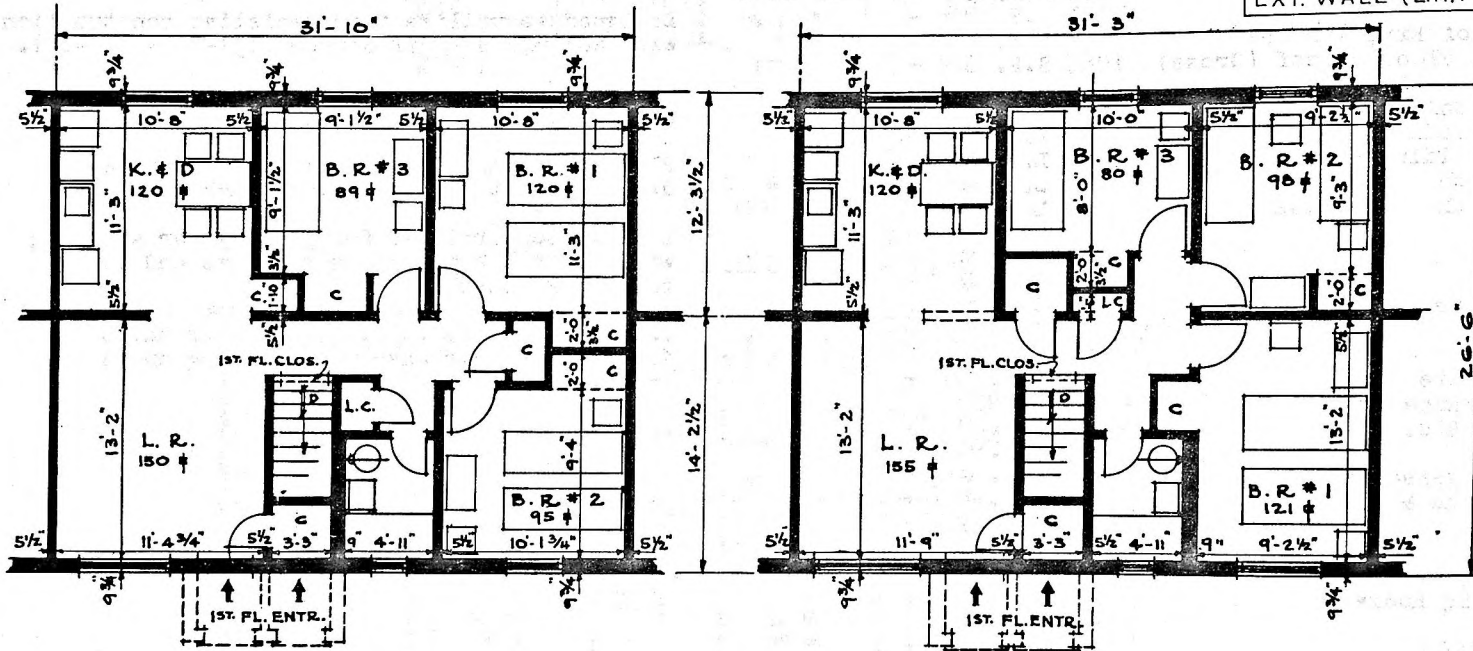
	QUANTITIES		Scheme A		Scheme B		TYPE OF UNIT
			Cost		Cost		
General Excavation	108	C.Y. @	-	106	C.Y. -		5½ Room Flats, Two Story
Foundation Wall & Footing	64	L.F. @	-	63	L.F. -		2 Dwelling Units @ 5½ = 11 Rooms.
2 Story Exterior Wall	64	L.F. @	-	63	L.F. -		Designed to utilize wood stud partitions
Parapet Wall	64	L.F. @	-	63	L.F. -		with off center bearing partition to make
Windows - 20% of Exterior Wall	229	S.F. @	-	225	S.F. -		full use of 12 and 14 foot length joist.
1st. 2nd. Floor & Roof (Gross)	843	S.F. @	-	828	S.F. -		Stairs placed to frame with run of joist.
Floor Covering (Net)	1584	S.F. @	-	1555	S.F. -		
(Interior - Pl.2S	174	L.F. @	-	173	L.F. -		Plumbing arranged with two groups of fixtures
Partitions (Dividing - Pl.1S	23	L.F. @	-	23	L.F. -		on separate stacks. One stack,
One Story (Dividing - Pl.2S	50	L.F. @	-	60	L.F. -		however, can serve fixtures in an adjoining
High (Bath - Pl.1S	28	L.F. @	-	28	L.F. -		unit.
(Bath - Pl.2S	24	L.F. @	-	17	L.F. -		
Corner Beads	28	BEAD.@	-	26	BEAD.-		
Closets	14	CLOS.@	-	12	CLOS.-		
Cased Openings	-	OPG. @	-	-	OPG. -		
Doors - Interior	14	DOOR.@	-	14	DOOR.-		
Heating	15,200	C.F. @	-	14,900	C.F. -		
Stairs - One Story Flights	1	FLGT.@	-	1	FLGT.-		
Entrance Doors Front	2	DOOR.@	-	2	DOOR.-		
Entrance Doors Rear	1	DOOR.@	-	1	DOOR.-		
Stoops - Front & Rear	3	STP. @	-	3	STP. -		
Covered Entry (Double)	1	ENTY.@	-	1	ENTY.-		
Extra for Bath	2	D.U. @	-	2	D.U. -		
Ranges & Refrigerators	2	D.U. @	-	2	D.U. -		
Kitchen Shelving & Table	2	D.U. @	-	2	D.U. -		
Plumbing	2	D.U. @	-	2	D.U. -		
Electrical - 5½ Rooms	2	D.U. @	-	2	D.U. -		
TOTAL							
End Walls & Firewalls	13.2	L.F. @	-	13.2	L.F. -		
Heating & Fuel Space	33	S.F. @	*	33	S.F. -		
Tenant Storage Space	40	S.F. @	-	40	S.F. -		

UNITED STATES HOUSING AUTHORITY
 TECHNICAL DIVISION
 WASHINGTON, D. C.

PLAN NO. Ta-8

STATISTICS

SCHEME	"A"	"B"
GROSS AREA (SQ. FT. PER RM.)	154	151
NET AREA (SQ. FT. PER RM.)	104	104
RATIO (NET ÷ GROSS) %	67.9	69
EXT. WALL (LIN. FT. PER RM.)	11.6	11.3



(A)

SECOND FLOOR PLAN
FIRST FLOOR PLAN SIMILAR.

(B)

SECOND FLOOR PLAN
FIRST FLOOR PLAN SIMILAR.

DEPARTMENT OF THE INTERIOR
UNITED STATES HOUSING AUTHORITY
WASHINGTON, D. C.

5 1/2 ROOM
TWO STORY FLATS

PLAN NO.

TA-8

0 1 2 3 4 5 10
SCALE IN FEET

DATE: 8 15-58

QUANTITIES

Cost

General Excavation	244 C.Y. @	-
Foundation Wall & Footing	121 L.F. @	-
3 Story Exterior Wall	121 L.F. @	-
Parapet Wall	121 L.F. @	-
Windows - 20% of Exterior Wall	640 S.F. @	-
1st. 2nd. 3rd. Floor & Roof (Gross)	1964 S.F. @	-
Floor Covering (Net)	5498 S.F. @	-
(Interior - Pl.2S	538 L.F. @	-
Partitions (Dividing - Pl.1S	-- L.F. @	-
One Story (Dividing - Pl.2S	309 L.F. @	-
High (Bath - Pl.1S	135 L.F. @	-
(Bath - Pl.2S	66 L.F. @	-
Corner Beads	69 BEAD.@	-
Closets	33 CLOS.@	-
Cased Openings	5 OPG. @	-
Dcors - Interior	54 DOOR.@	-
Heating	53,000 C.F. @	-
Stairs - Complete	1 STR. @	-
Apartment Entrance Doors	9 DOOR.@	-
Main Entrance Etc.	1 ENT. @	-
Extra for Bath	9 D.U. @	-
Ranges & Refrigerators	9 D.U. @	-
Kitchen Shelving & Table	9 D.U. @	-
Incinerators	1 INC. @	-
Plumbing	9 D.U. @	-
Electrical - 3 Rooms	6 D.U. @	-
4 1/2 Rooms	3 D.U. @	-
TOTAL		
End Walls & Fire Walls	39.4 L.F. @	-
Heating & Fuel Space	95 S.F. @	-
Tenant Storage Space	180 S.F. @	-

TYPE OF UNIT

3 - 4 1/2 - 3 Room Apartments, Tee, Three Story
6 Dwelling Units @ 3 and 3 @ 4 1/2 = 3 1/2 Rooms.

Designed to utilize fire resistive construction with columns set off center (15'-6" - 11'-6").

Stairs placed to make use of the main structural beam for framing.

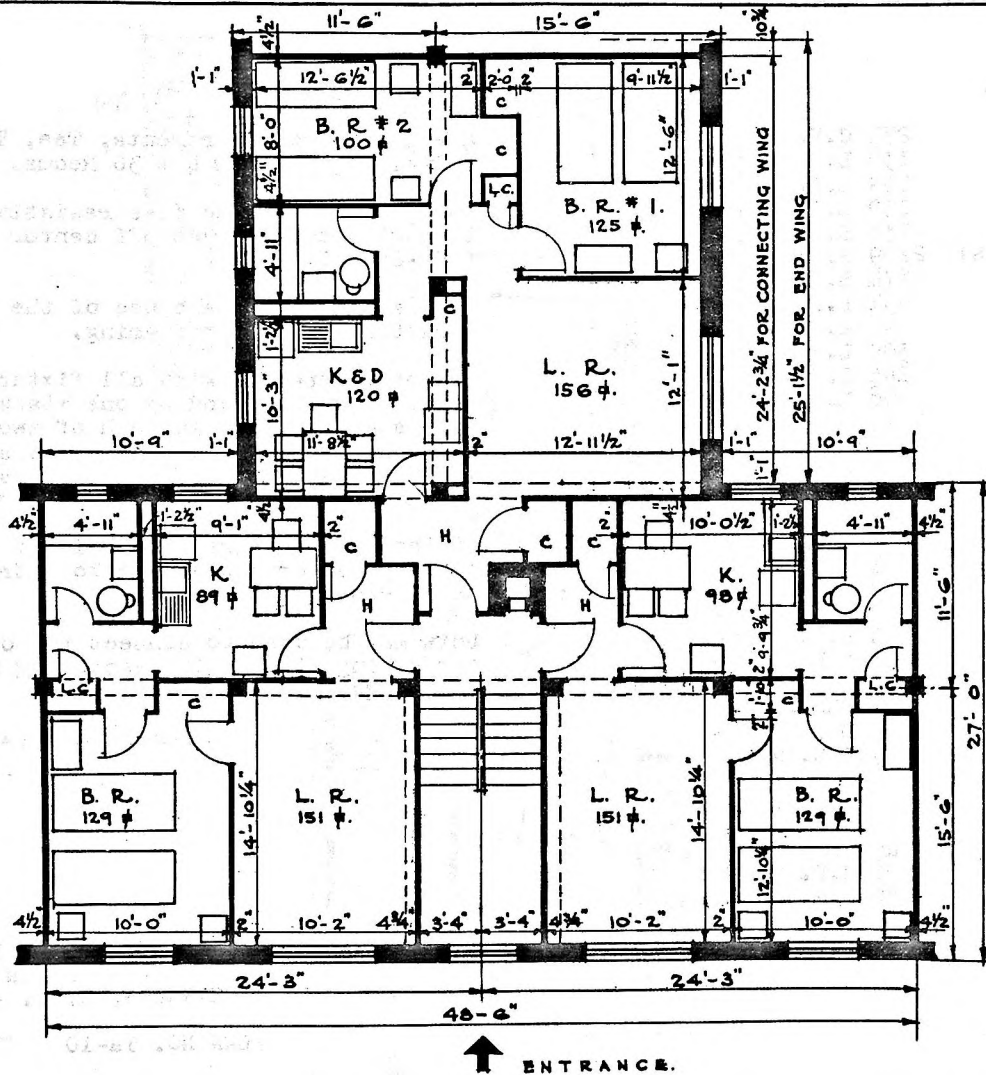
Plumbing arranged with all fixtures of each dwelling unit served by one stack.

Living Room arranged for privacy for sleeping with alternate access to bedrooms and bath through kitchen.

Unit may be used to connect two or three intersecting ribbons in assembling units into buildings.

UNITED STATES HOUSING AUTHORITY
TECHNICAL DIVISION
WASHINGTON, D. C.

PLAN NO. Ta-9



STATISTICS

GROSS AREA (SQ. FT. PER RM.)	187
NET AREA (SQ. FT. PER RM.)	119
RATIO (NET ÷ GROSS) %	636
EXT. WALL (LIN. FT. PER RM.)	11.3

DEPARTMENT OF THE INTERIOR
 UNITED STATES HOUSING AUTHORITY
 WASHINGTON, D.C.

3-4½-3 APT.
 -TEE-

PLAN NO.

TA-9

0 1 2 3 4 5 10
 SCALE IN FEET

DATE: 8-15-38

↑ ENTRANCE.

QUANTITIES		Cost
General Excavation	275 C.Y. @	-
Foundation Wall & Footing	139 L.F. @	-
3 Story Exterior Wall	139 L.F. @	-
Parapet Wall	139 L.F. @	-
Windows - 20% of Exterior Wall	738 S.F. @	-
1st. 2nd. 3rd. Floor & Roof (Gross)	2209 S.F. @	-
Floor Covering (Net)	6174 S.F. @	-
(Interior - Pl.2S	531 L.F. @	-
Partitions (Dividing - Pl.1S	-- L.F. @	-
One Story (Dividing - Pl.2S	309 L.F. @	-
High (Bath - Pl.1S	246 L.F. @	-
(Bath - Pl.2S	108 L.F. @	-
Corner Beads	75 BEAD.@	-
Closets	36 CLOS.@	-
Cased Openings	24 OPG.@	-
Doors - Interior	57 DOOR.@	-
Heating	59,600 C.F. @	-
Stairs - Complete	1 STR. @	-
Apartment Entrance Doors	9 DOOR.@	-
Main Entrance Etc.	1 ENT. @	-
Extra for Bath	9 D.U. @	-
Ranges & Refrigerators	9 D.U. @	-
Kitchen Shelving & Table	9 D.U. @	-
Incinerators	1 INC. @	-
Plumbing	9 D.U. @	-
Electrical - 4 Rooms	9 D.U. @	-
TOTAL		
End Walls & Fire Walls	45 L.F. @	-
Heating & Fuel Space	108 S.F. @	-
Tenant Storage Space	180 S.F. @	-

TYPE OF UNIT

4 - 4 - 4 Room Apartments, Tee, Three Story
9 Dwelling Units @ 4 = 36 Rooms.

Designed to utilize fire resistive construction with columns set off center (15'-6" - 11'-6").

Stairs placed to make use of the main structural beam for framing.

Plumbing arranged with all fixtures in one dwelling unit served by one stack, and two groups of fixtures in each of two dwelling units on separate stacks. This separation is justified by the added advantage in room arrangement.

Living Room arranged for privacy for sleeping with alternate access to bedrooms and bath through kitchen.

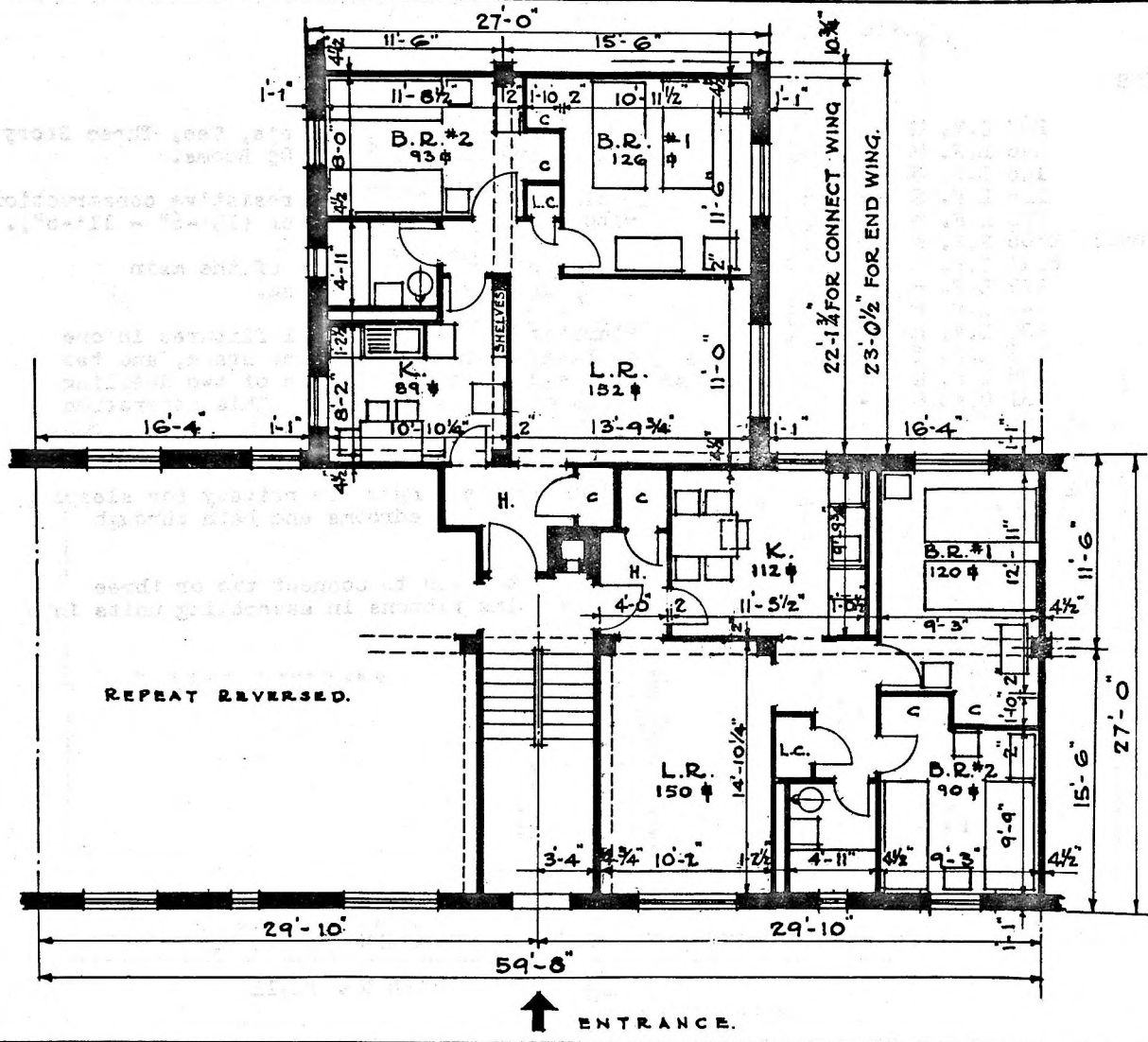
Unit may be used to connect two or three intersecting ribbons in assembling units into buildings.

UNITED STATES HOUSING AUTHORITY
TECHNICAL DIVISION
WASHINGTON, D. C.

PLAN NO. Ta-10

STATISTICS

GROSS AREA (SQ. FT. PER RM.)	184
NET AREA (SQ. FT. PER RM.)	117
RATIO (NET ÷ GROSS) %	63.5
EXT. WALL (LIN. FT. PER RM.)	11.4

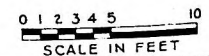


DEPARTMENT OF THE INTERIOR
 UNITED STATES HOUSING AUTHORITY
 WASHINGTON, D.C.

4-4-4 APT.
 -TEE-

PLAN NO.

TA-10



DATE: 8-15-38

QUANTITIES

			Cost
General Excavation	287	C.Y. @	-
Foundation Wall & Footing	146	L.F. @	-
3 Story Exterior Wall	146	L.F. @	-
Parapet Wall	146	L.F. @	-
Windows - 20% of Exterior Wall	776	S.F. @	-
1st. 2nd. 3rd. Floor & Roof (Gross)	2306	S.F. @	-
Floor Covering (Net)	6441	S.F. @	-
(Interior - Pl.2S)	572	L.F. @	-
Partitions (Dividing - Pl.1S)	--	L.F. @	-
One Story (Dividing - Pl.2S)	309	L.F. @	-
High (Bath - Pl.1S)	246	L.F. @	-
(Bath - Pl.2S)	108	L.F. @	-
Corner Beads	81	BEAD. @	-
Closets	39	CLOS. @	-
Cased Openings	21	OPG. @	-
Doors - Interior	54	DOOR. @	-
Heating	62,300	C.F. @	-
Stairs - Complete	1	STR. @	-
Apartment Entrance Doors	9	DOOR. @	-
Main Entrance Etc.	1	ENT. @	-
Extra for Bath	9	D.U. @	-
Ranges & Refrigerators	9	D.U. @	-
Kitchen Shelving & Table	9	D.U. @	-
Incinerators	1	INC. @	-
Plumbing	9	D.U. @	-
Electrical - 4½ Rooms	9	D.U. @	-
TOTAL			
End Walls & Fire Walls	50.6	L.F. @	-
Heating & Fuel Space	122	S.F. @	-
Tenant Storage Space	180	S.F. @	-

TYPE OF UNIT

4½ - 4½ - 4½ Room Apartments, Tee, Three Story
9 Dwelling Units @ 4½ = 40½ Rooms.

Designed to utilize fire resistive construction
with columns set off center (15'-6" - 11'-6").

Stairs placed to make use of the main
structural beam for framing.

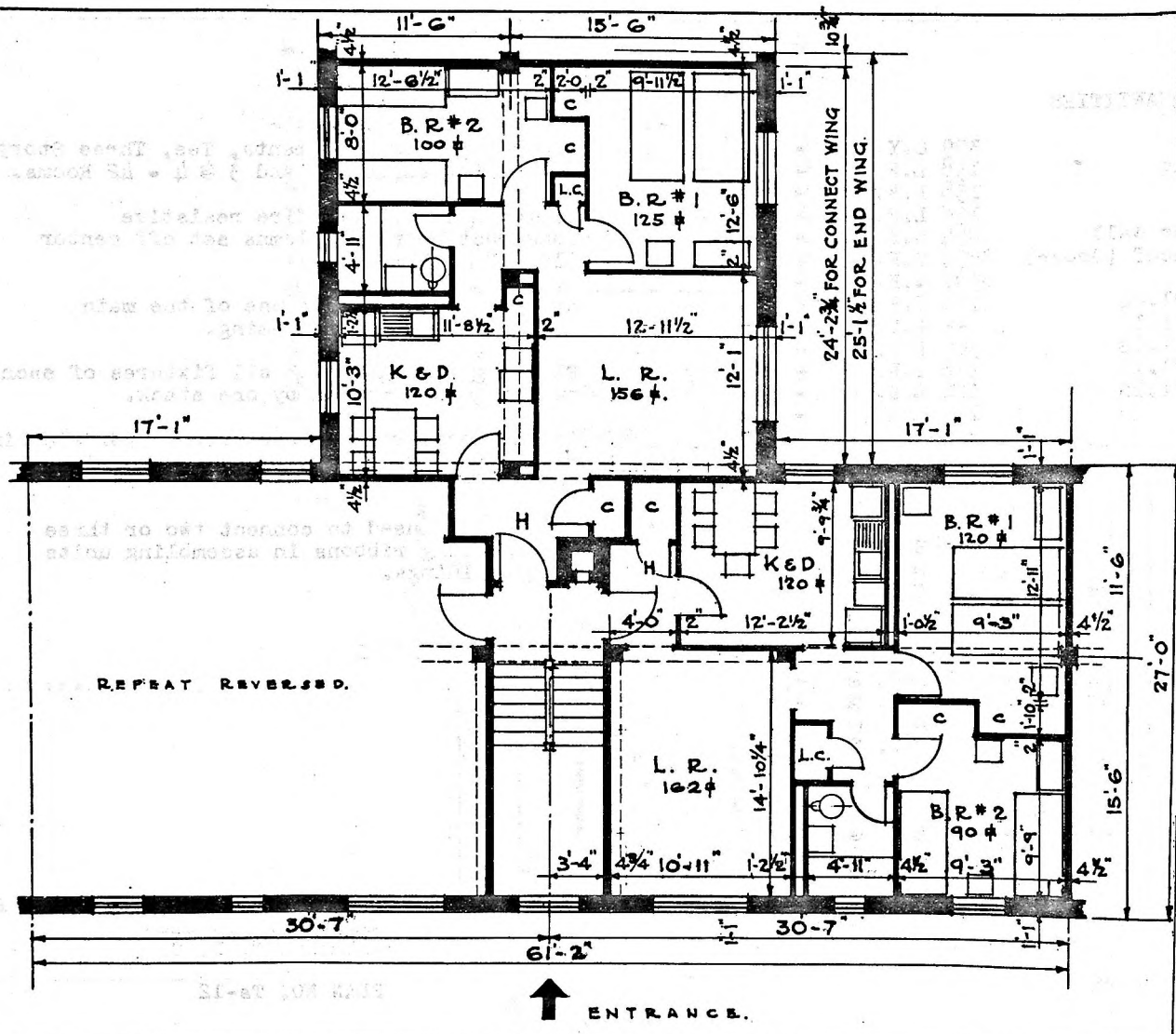
Plumbing arranged with all fixtures in one
dwelling unit served by one stack, and two
groups of fixtures in each of two dwelling
units on separate stacks. This separation
is justified by the added advantage in room
arrangement.

Living Room arranged for privacy for sleeping
with access to bedrooms and bath through
kitchen.

Unit may be used to connect two or three
intersecting ribbons in assembling units into
buildings.

UNITED STATES HOUSING AUTHORITY
TECHNICAL DIVISION
WASHINGTON, D. C.

PLAN NO. Ta-11



STATISTICS	
GROSS AREA (SQ. FT. PER RM.)	171
NET AREA (SQ. FT. PER RM.)	110
RATIO (NET ÷ GROSS) %	64.4
EXT. WALL (LIN. FT. PER RM.)	10.6

DEPARTMENT OF THE INTERIOR
 UNITED STATES HOUSING AUTHORITY.
 WASHINGTON, D.C.

PLAN NO.
TA-11

4 1/2-4 1/2-4 1/2 APT.
 - TEE -

0 1 2 3 4 5 10
 SCALE IN FEET

DATE: 8-15-38

QUANTITIES		Cost
General Excavation	309 C.Y. @	-
Foundation Wall & Footing	158 L.F. @	-
3 Story Exterior Wall	158 L.F. @	-
Parapet Wall	158 L.F. @	-
Windows - 20% of Exterior Wall	844 S.F. @	-
1st. 2nd. 3rd. Floor & Roof (Gross)	2475 S.F. @	-
Floor Covering (Net)	6907 S.F. @	-
(Interior - Pl.2S	738 L.F. @	-
Partitions (Dividing - Pl.1S	-- L.F. @	-
One Story (Dividing - Pl.2S	309 L.F. @	-
High (Bath - Pl.1S	126 L.F. @	-
(Bath - Pl.2S	108 L.F. @	-
Corner Beads	105 BEAD. @	-
Closets	48 CLOS. @	-
Cased Openings	21 OPG. @	-
Doors - Interior	63 DOOR. @	-
Heating	66,800 C.F. @	-
Stairs - Complete	1 STR. @	-
Apartment Entrance Doors	9 DOOR. @	-
Main Entrance Etc.	1 ENT. @	-
Extra for Bath	9 D.U. @	-
Ranges & Refrigerators	9 D.U. @	-
Kitchen Shelving & Table	9 D.U. @	-
Incinerators	1 INC. @	-
Plumbing	9 D.U. @	-
Electrical - 4 Rooms	3 D.U. @	-
5 Rooms	6 D.U. @	-
TOTAL		
End Walls & Fire Walls	52.5 L.F. @	-
Heating & Fuel Space	126 S.F. @	-
Tenant Storage Space	180 S.F. @	-

TYPE OF UNIT

5 - 4 - 5 Room Apartments, Tee, Three Story
6 Dwelling Units @ 5 and 3 @ 4 = 42 Rooms.

Designed to utilize fire resistive construction with columns set off center (15'-6" - 11'-6").

Stairs placed to make use of the main structural beam for framing.

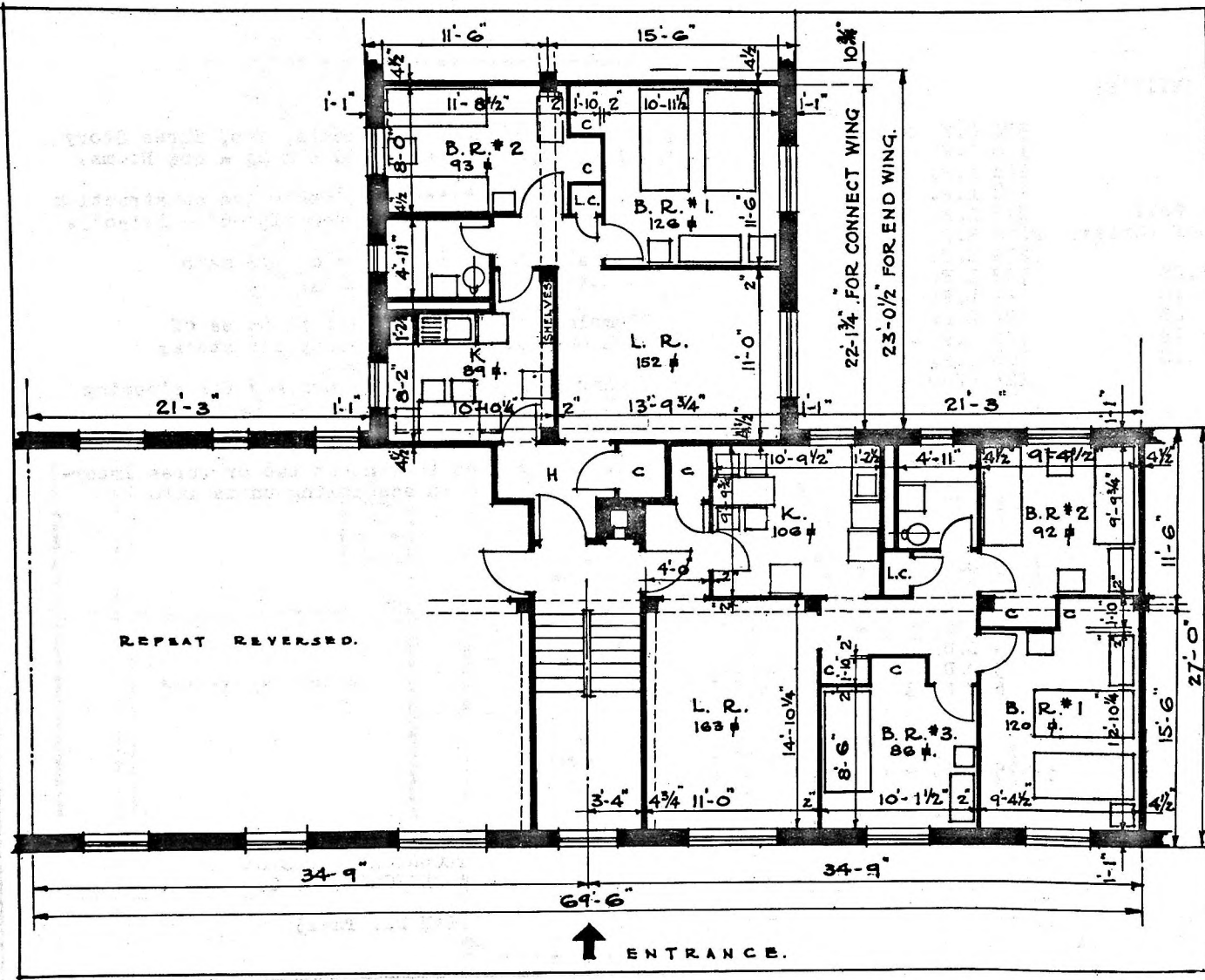
Plumbing arranged with all fixtures of each dwelling unit served by one stack.

Living Room arranged for privacy for sleeping with alternate access to bedrooms and bath through kitchen.

Unit may be used to connect two or three intersecting ribbons in assembling units into buildings.

UNITED STATES HOUSING AUTHORITY
TECHNICAL DIVISION
WASHINGTON, D. C.

PLAN NO. Ta-12



STATISTICS	
GROSS AREA (SQ. FT. PER RM.)	177
NET AREA (SQ. FT. PER RM.)	114
RATIO (NET ÷ GROSS) %	64.4
EXT. WALL (LIN. FT. PER RM.)	11.2

DEPARTMENT OF THE INTERIOR
UNITED STATES HOUSING AUTHORITY
WASHINGTON, D.C.

5-4-5 APT.
-TEE-

PLAN NO.
TA-12

SCALE IN FEET

DATE: 8 15 38

QUANTITIES		Cost	
General Excavation	326 C.Y. @	-	
Foundation Wall & Footing	168 L.F. @	-	
3 Story Exterior Wall	168 L.F. @	-	
Parapet Wall	168 L.F. @	-	
Windows - 20% of Exterior Wall	897 S.F. @	-	
1st. 2nd. 3rd. Floor & Roof (Gross)	2608 S.F. @	-	
Floor Covering (Net)	7275 S.F. @	-	
(Interior - Pl.2S	792 L.F. @	-	
Partitions (Dividing - Pl.1S	-- L.F. @	-	
One Story (Dividing - Pl.2S	309 L.F. @	-	
High (Bath - Pl.1S	126 L.F. @	-	
(Bath - Pl.2S	108 L.F. @	-	
Corner Beads	123 BEAD. @	-	
Closets	54 CLOS. @	-	
Cased Openings	9 OPG. @	-	
Doors - Interior	72 DOOR. @	-	
Heating	70,400 C.F. @	-	
Stairs - Complete	1 STR. @	-	
Apartment Entrance Doors	9 DOOR. @	-	
Main Entrance Etc.	1 ENT. @	-	
Extra for Bath	9 D.U. @	-	
Ranges & Refrigerators	9 D.U. @	-	
Kitchen Shelving & Table	9 D.U. @	-	
Incinerators	1 INC. @	-	
Plumbing	9 D.U. @	-	
Electrical - 4 1/2 Rooms	3 D.U. @	-	
5 1/2 Rooms	6 D.U. @	-	
TOTAL			
End Walls & Fire Walls	58.75 L.F. @	-	
Heating & Fuel Space	140 S.F. @	-	
Tenant Storage Space	180 S.F. @	-	

TYPE OF UNIT

5 1/2 - 4 1/2 - 5 1/2 Room Apartments, Tee, Three Story
 6 Dwelling Units @ 5 1/2 and 3 @ 4 1/2 = 46 1/2 Rooms.

Designed to utilize fire resistive construction
 with columns set off center (15'-6" - 11'-6").

Stairs placed to make use of the main
 structural beam for framing.

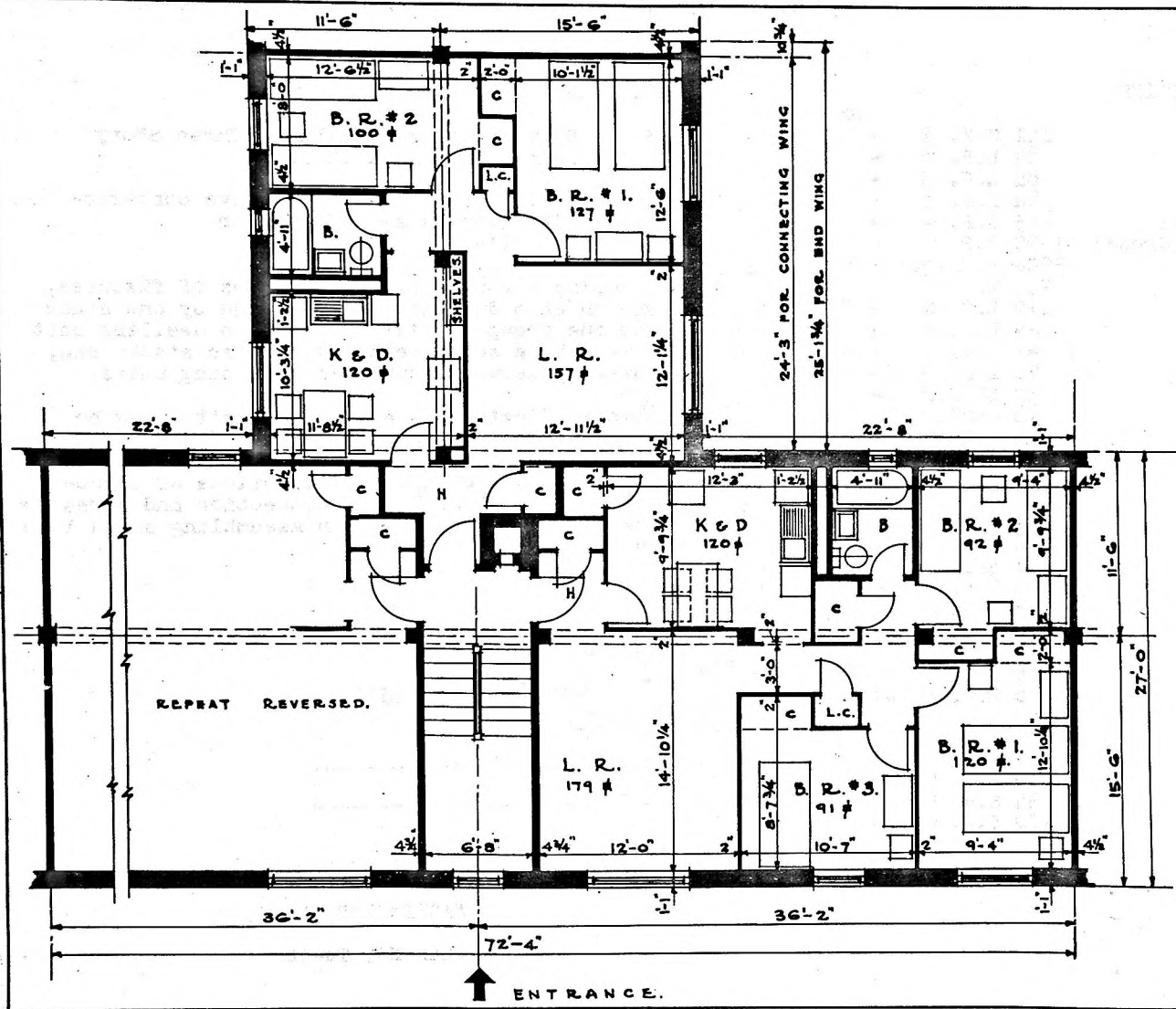
Plumbing arranged with all fixtures of
 each dwelling unit served by one stack,

Living Room arranged for privacy for sleeping
 with alternate access to bedrooms and bath
 through kitchen.

Unit may be used to connect two or three inter-
 secting ribbons in assembling units into
 buildings.

UNITED STATES HOUSING AUTHORITY
 TECHNICAL DIVISION
 WASHINGTON, D. C.

PLAN NO. Ta-13



STATISTICS	
GROSS AREA (SQ. FT. PER RM.)	168
NET AREA (SQ. FT. PER RM.)	110
RATIO (NET ÷ GROSS) %	65.5
EXT. WALL (LIN. FT. PER RM.)	10.8

DEPARTMENT OF THE INTERIOR
 UNITED STATES HOUSING AUTHORITY
 WASHINGTON, D. C.

5 1/2-4 1/2-5 1/2 APT.
 -TEE-

PLAN NO.
TA-13

0 1 2 3 4 5 10
 SCALE IN FEET

DATE: 8 15-38

QUANTITIES

Cost

TYPE OF UNIT

General Excavation	141	C.Y. @	-
Foundation Wall & Footing	84	L.F. @	-
3 Story Exterior Wall	84	L.F. @	-
Parapet Wall	84	L.F. @	-
Windows - 20% of Exterior Wall	453	S.F. @	-
1st. 2nd. 3rd. Floor & Roof (Gross)	1099	S.F. @	-
Floor Covering (Net)	3036	S.F. @	-
(Interior - Pl.2S	296	L.F. @	-
Partitions (Dividing - Pl.1S	119	L.F. @	-
One Story (Dividing - Pl.2S	125	L.F. @	-
High (Bath - Pl.1S	--	L.F. @	-
(Bath - Pl.2S	72	L.F. @	-
Corner Beads	30	BEAD.@	-
Closets	18	CLOS.@	-
Cased Openings	6	OPG.@	-
Doors - Interior	30	DOOR.@	-
Heating	29,700	C.F. @	-
Stairs - Complete	1	STR. @	-
Apartment Entrance Doors	6	DOOR.@	-
Main Entrance Etc.	1	ENT. @	-
Extra for Bath	6	D.U. @	-
Ranges & Refrigerators	6	D.U. @	-
Kitchen Shelving & Table	6	D.U. @	-
Incinerators	1	INC. @	-
Plumbing	6	D.U. @	-
Electrical - 3 Rooms	6	D.U. @	-
TOTAL			
End Walls & Fire Walls	10.8	L.F. @	-
Heating & Fuel Space	54	S.F. @	-
Tenant Storage Space	120	S.F. @	-

3 - 3 Room Apartments, Ribbon, Three Story
6 Dwelling Units @ 3 = 18 Rooms.

Designed to utilize fire resistive construction, with columns set off center (15'-6" - 11'-6").

Plumbing arranged with two groups of fixtures, one in each dwelling unit, served by one stack and one group of fixtures in each dwelling unit served by a separate stack. These stacks can, however, serve fixtures in adjoining units.

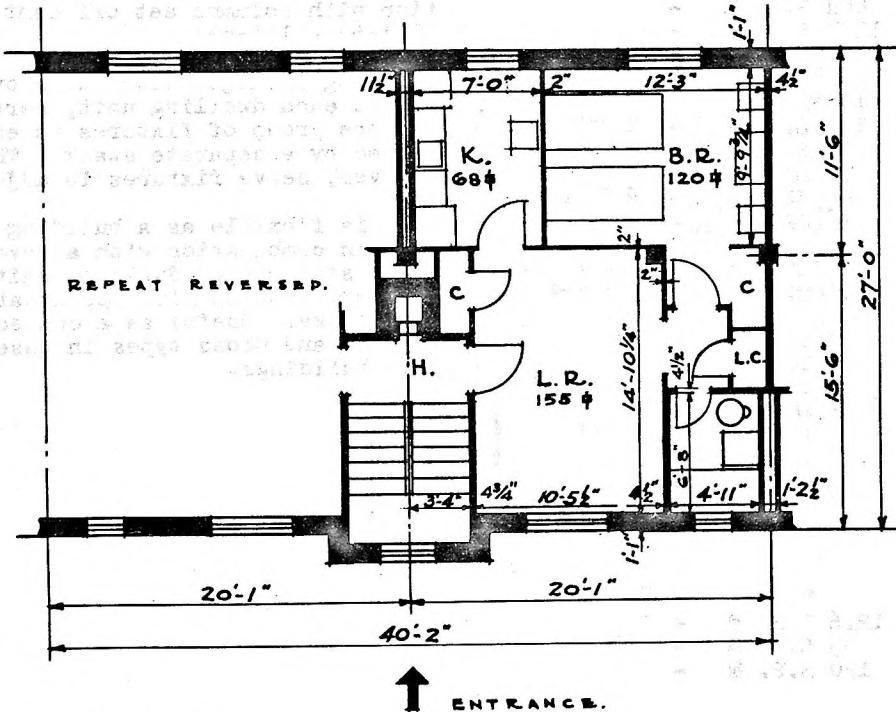
Plan is flexible as a building unit. May be used in combination with a reverse plan or any other size ribbon dwelling unit; consideration, however, must be given to locations of plumbing stacks. Useful as a connection and spreader for Tee and Cross types in assembling units into buildings.

UNITED STATES HOUSING AUTHORITY
TECHNICAL DIVISION
WASHINGTON, D. C.

PLAN NO. Ta-14

STATISTICS

GROSS AREA (SQ. FT. PER RM.)	181
NET AREA (SQ. FT. PER RM.)	114
RATIO (NET ÷ GROSS) %	63
EXT. WALL (LIN. FT. PER RM.)	14



DEPARTMENT OF THE INTERIOR
 UNITED STATES HOUSING AUTHORITY
 WASHINGTON, D.C.

3-3 APT.
 RIBBON

PLAN NO.

TA-14



DATE: 8 15-38

QUANTITIES		Cost
General Excavation	151 C.Y. @	-
Foundation Wall & Footing	90 L.F. @	-
3 Story Exterior Wall	90 L.F. @	-
Parapet Wall	90 L.F. @	-
Windows - 20% of Exterior Wall	484 S.F. @	-
1st. 2nd. 3rd. Floor & Roof (Gross)	1177 S.F. @	-
Floor Covering (Net)	3252 S.F. @	-
(Interior - Pl.2S	291 L.F. @	-
Partitions (Dividing - Pl.1S	108 L.F. @	-
One Story (Dividing - Pl.2S	114 L.F. @	-
High (Bath - Pl.1S	-- L.F. @	-
(Bath - Pl.2S	72 L.F. @	-
Corner Beads	42 BEAD.@	-
Closets	18 CLOS.@	-
Cased Openings	6 OPG.@	-
Doors - Interior	30 DOOR.@	-
Heating	31,800 C.F. @	-
Stairs - Complete	1 STR. @	-
Apartment Entrance Doors	6 DOOR.@	-
Main Entrance Etc.	1 ENT. @	-
Extra for Bath	6 D.U. @	-
Ranges & Refrigerators	6 D.U. @	-
Kitchen Shelving & Table	6 D.U. @	-
Incinerators	1 INC. @	-
Plumbing	6 D.U. @	-
Electrical - 3½ Rooms	6 D.U. @	-
TOTAL		
End Walls & Fire Walls	12.6 L.F. @	-
Heating & Fuel Space	63 S.F. @	-
Tenant Storage Space	120 S.F. @	-

TYPE OF UNIT

3½ - 3½ Room Apartments, Ribbon, Three Story
6 Dwelling Units @ 3½ = 21 Rooms.

Designed to utilize fire resistive construction with columns set off center (15'-6" - 11'-6").

Plumbing arranged with two groups of fixtures, one in each dwelling unit, served by one stack and one group of fixtures in each dwelling unit served by a separate stack. These stacks can, however, serve fixtures in adjoining units,

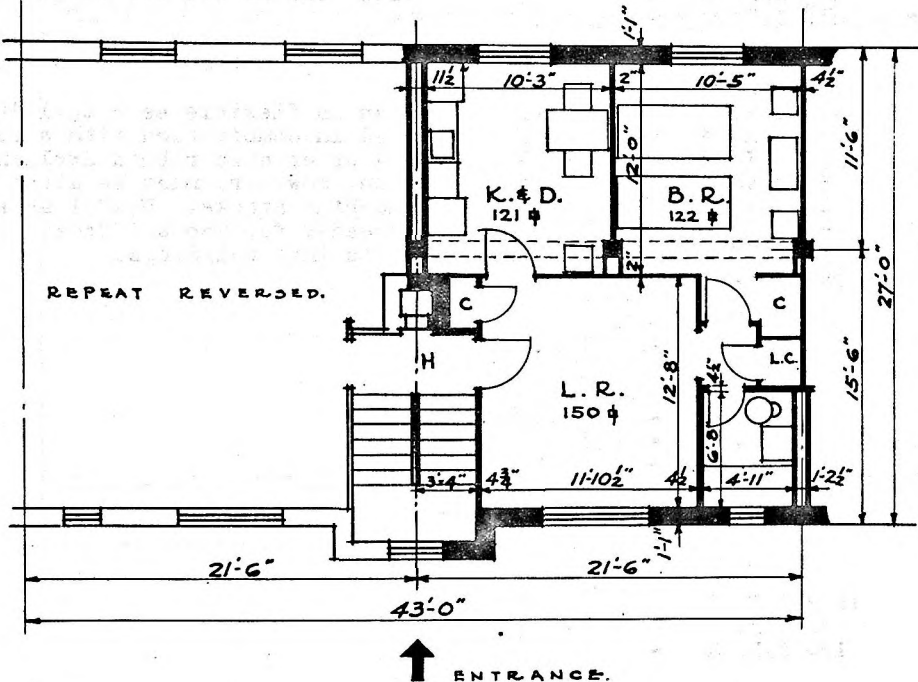
Plan is flexible as a building unit. May be used in combination with a reverse plan or any other size ribbon dwelling unit; consideration, however, must be given to locations of plumbing stacks. Useful as a connection and spreader for Tee and Cross types in assembling units into buildings.

UNITED STATES HOUSING AUTHORITY
TECHNICAL DIVISION
WASHINGTON, D. C.

PLAN NO. Ta-15

STATISTICS

GROSS AREA (SQ. FT. PER RM.)	168
NET AREA (SQ. FT. PER RM.)	112
RATIO (NET ÷ GROSS) %	66.7
EXT. WALL (LIN. FT. PER RM.)	12.8



DEPARTMENT OF THE INTERIOR
 UNITED STATES HOUSING AUTHORITY
 WASHINGTON, D.C.

3 1/2-3 1/2 APT.
 - RIBBON -

PLAN NO
TA-15

0 1 2 3 4 5 10
 SCALE IN FEET

DATE: 8-15-38

QUANTITIES		Cost
General Excavation	181 C.Y. @	-
Foundation Wall & Footing	107 L.F. @	-
3 Story Exterior Wall	107 L.F. @	-
Parapet Wall	107 L.F. @	-
Windows - 20% of Exterior Wall	575 S.F. @	-
1st. 2nd. 3rd. Floor & Roof (Gross)	1418 S.F. @	-
Floor Covering (Net)	3908 S.F. @	-
(Interior - Pl.2S	341 L.F. @	-
Partitions (Dividing - Pl.1S	-- L.F. @	-
One Story (Dividing - Pl.2S	182 L.F. @	-
High (Bath - Pl.1S	84 L.F. @	-
(Bath - Pl.2S	72 L.F. @	-
Corner Beads	54 BEAD.@	-
Closets	24 CLOS.@	-
Cased Openings	-- OPG. @	-
Doors - Interior	36 DOOR.@	-
Heating	38,300 C.F. @	-
Stairs - Complete	1 STR. @	-
Apartment Entrance Doors	6 DOOR.@	-
Main Entrance Etc.	1 ENT. @	-
Extra for Bath	6 D.U. @	-
Ranges & Refrigerators	6 D.U. @	-
Kitchen Shelving & Table	6 D.U. @	-
Incinerators	1 INC. @	-
Plumbing	6 D.U. @	-
Electrical - $4\frac{1}{2}$ Rooms	6 D.U. @	-
TOTAL		
End Walls & Fire Walls	16.2 L.F. @	-
Heating & Fuel Space	81 S.F. @	-
Tenant Storage Space	120 S.F. @	-

TYPE OF UNIT

$4\frac{1}{2}$ - $4\frac{1}{2}$ Room Apartments, Ribbon, Three Story
6 Dwelling Units @ $4\frac{1}{2}$ = 27 Rooms.

Designed to utilize fire resistive construction
with columns set off center (15'-6" - 11'-6").

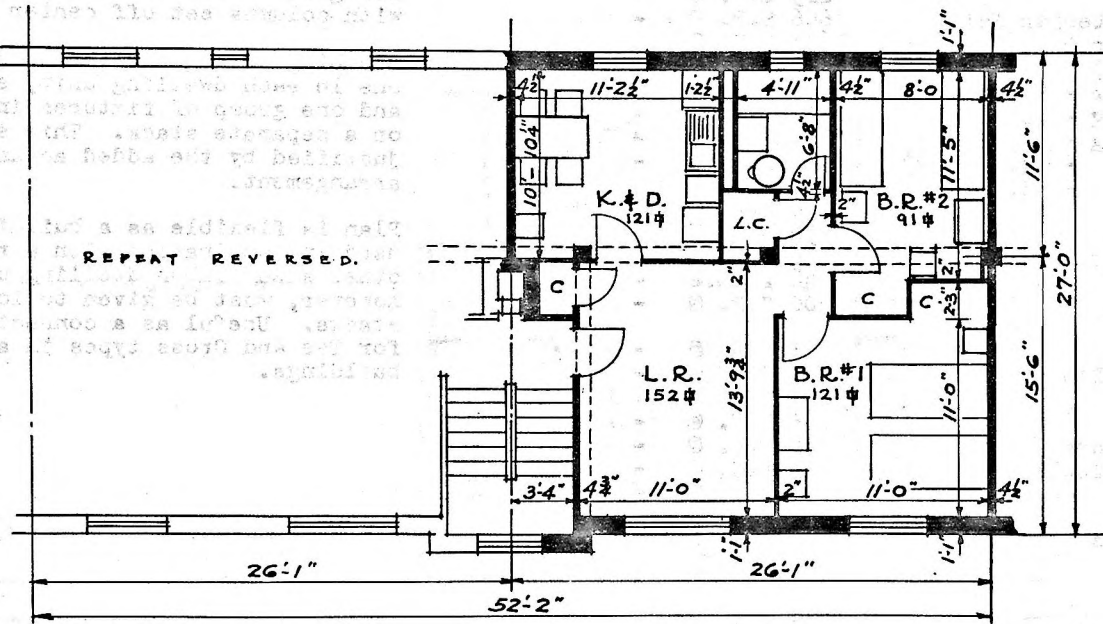
Plumbing arranged with all fixtures of each
dwelling unit served by one stack.

Plan is flexible as a building unit. May be
used in combination with a reverse plan or
any other size ribbon dwelling unit; considera-
tion, however, must be given to locations of
plumbing stacks. Useful as a connection and
spreader for Tee and Cross types in assembling
units into buildings.

UNITED STATES HOUSING AUTHORITY
TECHNICAL DIVISION
WASHINGTON, D. C.

PLAN NO. Ta-16

STATISTICS	
GROSS AREA (SQ. FT. PER RM.)	157
NET AREA (SQ. FT. PER RM.)	107
RATIO (NET ÷ GROSS) %	68
EXT. WALL (LIN. FT. PER RM.)	12



↑
ENTRANCE.

DEPARTMENT OF THE INTERIOR
UNITED STATES HOUSING AUTHORITY
WASHINGTON, D.C.

4 1/2 - 4 1/2 APT.
- RIBBON -
0 1 2 3 4 5 10
SCALE IN FEET

PLAN NO.
TA-16
DATE: 8-15-38

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REPEAT REVERSE D.

UNITED STATES HOUSING AUTHORITY
WASHINGTON, D.C.
PLAN NO. TA-16

QUANTITIES

			Cost
General Excavation	209	C.Y. @	-
Foundation Wall & Footing	123	L.F. @	-
3 Story Exterior Wall	123	L.F. @	-
Parapet Wall	123	L.F. @	-
Windows - 20% of Exterior Wall	666	S.F. @	-
1st. 2nd. 3rd. Floor & Roof (Gross)	1638	S.F. @	-
Floor Covering (Net)	4512	S.F. @	-
(Interior - Pl.2S	498	L.F. @	-
Partitions (Dividing - Pl.1S	77	L.F. @	-
One Story (Dividing - Pl.2S	144	L.F. @	-
High (Bath - Pl.1S	84	L.F. @	-
(Bath - Pl.2S	72	L.F. @	-
Corner Beads	48	BEAD.@	-
Closets	36	CLOS.@	-
Cased Openings	6	OPG. @	-
Doors - Interior	48	DOOR.@	-
Heating	44,200	C.F. @	-
Stairs - Complete	1	STR. @	-
Apartment Entrance Doors	6	DOOR.@	-
Main Entrance Etc.	1	ENT. @	-
Extra for Bath	6	D.U. @	-
Ranges & Refrigerators	6	D.U. @	-
Kitchen Shelving & Table	6	D.U. @	-
Incinerators	1	INC. @	-
Plumbing	6	D.U. @	-
Electrical - 5 Rooms	6	D.U. @	-
TOTAL			
End Walls & Fire Walls	18	L.F. @	-
Heating & Fuel Space	90	S.F. @	-
Tenant Storage Space	120	S.F. @	-

TYPE OF UNIT

5 - 5 Room Apartments, Ribbon, Three Story
6 Dwelling Units @ 5 - 30 Rooms.

Designed to utilize fire resistive construction with columns set off center (15'-6" - 11'-6").

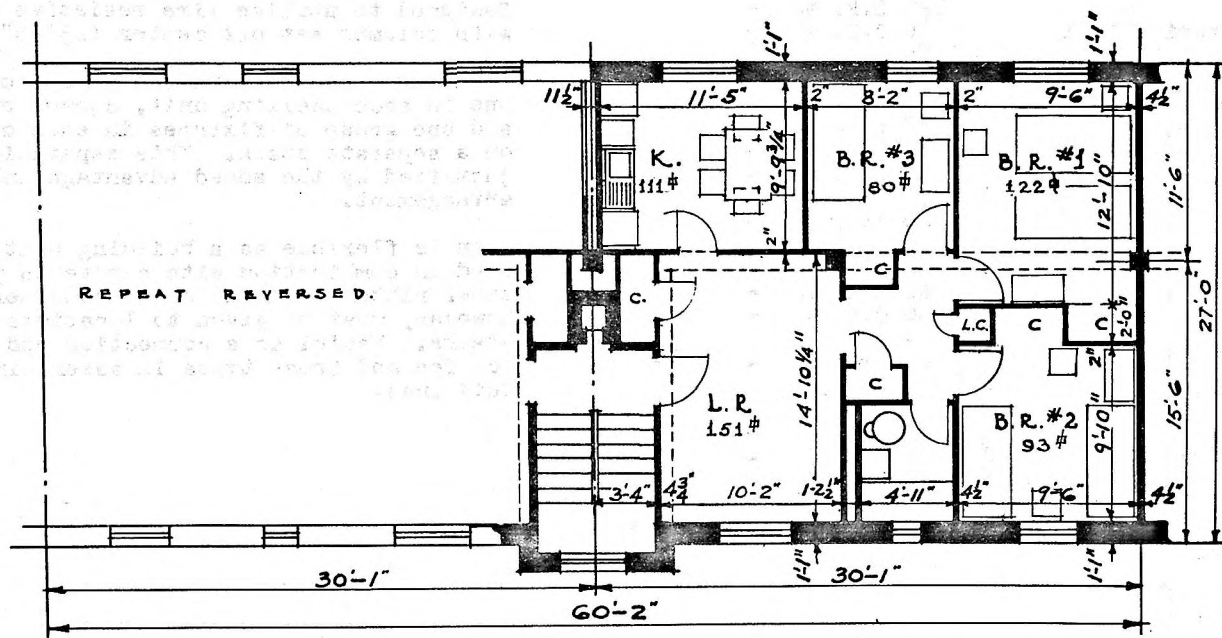
Plumbing arranged with two groups of fixtures, one in each dwelling unit, served by one stack, and one group of fixtures in each dwelling unit on a separate stack. This separation is justified by the added advantage in room arrangement.

Plan is flexible as a building unit, and may be used in combination with a reverse plan or any other size ribbon dwelling unit; consideration, however, must be given to locations of plumbing stacks. Useful as a connection and spreader for Tee and Cross types in assembling units into buildings.

UNITED STATES HOUSING AUTHORITY
TECHNICAL DIVISION
WASHINGTON, D. C.

PLAN NO. Ta-17

STATISTICS	
GROSS AREA (SQ. FT. PER RM.)	162
NET AREA (SQ. FT. PER RM.)	111
RATIO (NET ÷ GROSS) %	68.5
EXT. WALL (LIN. FT. PER RM.)	12



REPEAT REVERSED.

↑ ENTRANCE

DEPARTMENT OF THE INTERIOR
 UNITED STATES HOUSING AUTHORITY
 WASHINGTON, D.C.

5-5 APT.
 -RIBBON-
 0 1 2 3 4 5 10
 SCALE IN FEET

PLAN NO.
TA-17
 DATE: 8 15 38

QUANTITIES

Cost

General Excavation	215	C.Y. @	-
Foundation Wall & Footing	127	L.F. @	-
3 Story Exterior Wall	127	L.F. @	-
Parapet Wall	127	L.F. @	-
Windows - 20% of Exterior Wall	686	S.F. @	-
1st. 2nd. 3rd. Floor & Roof (Gross)	1684	S.F. @	-
Floor Covering (Net)	4638	S.F. @	-
(Interior - Pl.2S)	505	L.F. @	-
Partitions (Dividing - Pl.1S)	78	L.F. @	-
One Story (Dividing - Pl.2S)	114	L.F. @	-
High (Bath - Pl.1S)	84	L.F. @	-
(Bath - Pl.2S)	72	L.F. @	-
Corner Beads	48	BEAD.@	-
Closets	36	CLOS.@	-
Cased Openings	6	OPG. @	-
Doors - Interior	48	DOOR.@	-
Heating	45,500	C.F. @	-
Stairs - Complete	1	STR. @	-
Apartment Entrance Doors	6	DOOR.@	-
Main Entrance Etc.	1	ENT. @	-
Extra for Bath	6	D.U. @	-
Ranges & Refrigerators	6	D.U. @	-
Kitchen Shelving & Table	6	D.U. @	-
Incinerators	1	INC. @	-
Plumbing	6	D.U. @	-
Electrical - 5½ Rooms	6	D.U. @	-
TOTAL			
End Walls & Fire Walls	19.8	L.F. @	-
Heating & Fuel Space	99	S.F. @	-
Tenant Storage Space	120	S.F. @	-

TYPE OF UNIT

5½ - 5½ Room Apartments, Ribbon, Three Story
6 Dwelling Units @ 5½ = 33 Rooms.

Designed to utilize fire resistive construction with columns set off center (15'-6" - 11'-6").

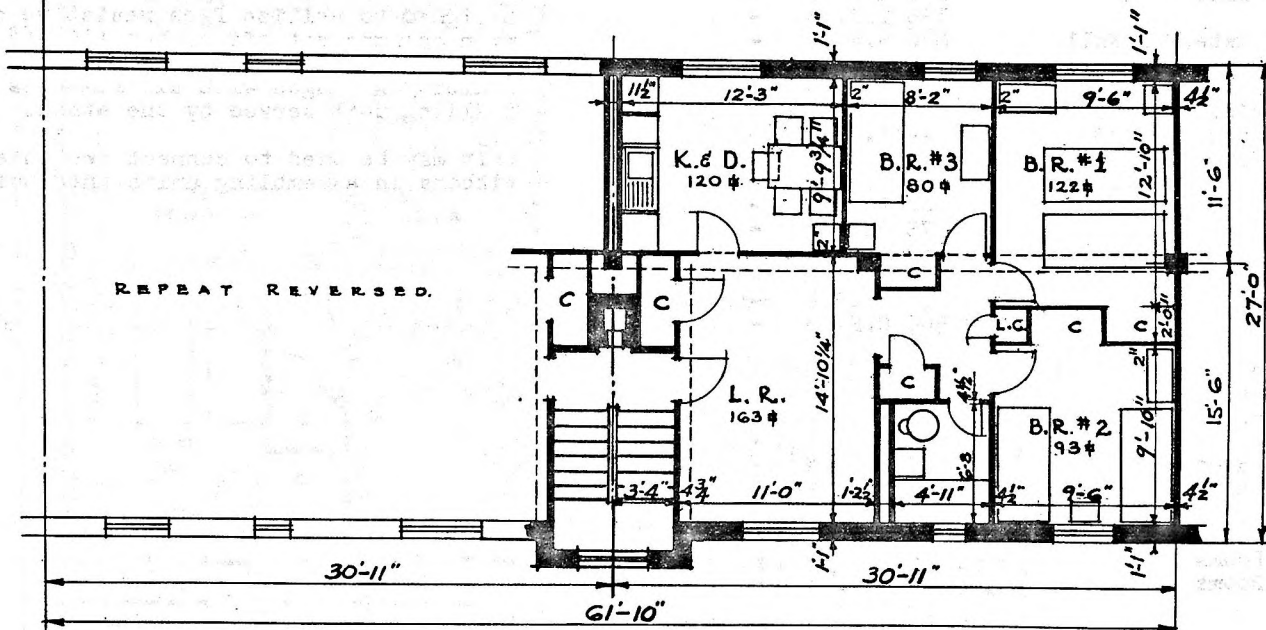
Plumbing arranged with two groups of fixtures, one in each dwelling unit, served by one stack and one group of fixtures in each dwelling unit on a separate stack. This separation is justified by the added advantage in room arrangement.

Plan is flexible as a building unit, and may be used in combination with a reverse plan or any other ribbon dwelling unit; consideration, however, must be given to locations of plumbing stacks. Useful as a connection and spreader for Tee and Cross types in assembling units into buildings.

UNITED STATES HOUSING AUTHORITY
TECHNICAL DIVISION
WASHINGTON, D. C.

PLAN NO. Ta-18

STATISTICS	
GROSS AREA (SQ. FT. PER RM.)	152
NET AREA (SQ. FT. PER RM.)	105
RATIO (NET ÷ GROSS) %	69
EXT. WALL (LIN. FT. PER RM.)	11.3



REPEAT REVERSED.

↑ ENTRANCE.

DEPARTMENT OF THE INTERIOR
 UNITED STATES HOUSING AUTHORITY
 WASHINGTON, D.C.

5½-5½ APT.
 - RIBBON -

PLAN NO.

TA-18



DATE: 8-15-38

QUANTITIES

		Cost
General Excavation	276 C.Y. @	-
Foundation Wall & Footing	156 L.F. @	-
3 Story Exterior Wall	156 L.F. @	-
Parapet Wall	156 L.F. @	-
Windows - 20% of Exterior Wall	846 S.F. @	-
1st. 2nd. 3rd. Floor & Roof (Gross)	2165 S.F. @	-
Floor Covering (Net)	5986 S.F. @	-
(Interior - Pl.2S	507 L.F. @	-
Partitions (Dividing - Pl.1S	-- L.F. @	-
One Story (Dividing - Pl.2S	303 L.F. @	-
High (Bath - Pl.1S	126 L.F. @	-
(Bath - Pl.2S	108 L.F. @	-
Corner Beads	75 BEAD.@	-
Closets	39 CLOS.@	-
Cased Openings	12 OPG. @	-
Doors - Interior	48 DOOR.@	-
Heating	58,500 C.F. @	-
Stairs - Complete	1 STR. @	-
Apartment Entrance Doors	9 DOOR.@	-
Main Entrance Etc.	1 ENT. @	-
Extra for Bath	9 D.U. @	-
Ranges & Refrigerators	9 D.U. @	-
Kitchen Shelving & Table	9 D.U. @	-
Incinerators	1 INC. @	-
Plumbing	9 D.U. @	-
Electrical - 3 Rooms	3 D.U. @	-
4 1/2 Rooms	6 D.U. @	-
TOTAL		
End Walls & Fire Walls	36 L.F. @	-
Heating & Fuel Space	108 S.F. @	-
Tenant Storage Space	180 S.F. @	-

TYPE OF UNIT

4 1/2 - 3 - 4 1/2 Room Apartments, Ell, Three Story
6 Dwelling Units @ 4 1/2 and 3 @ 3 = 36 Rooms.

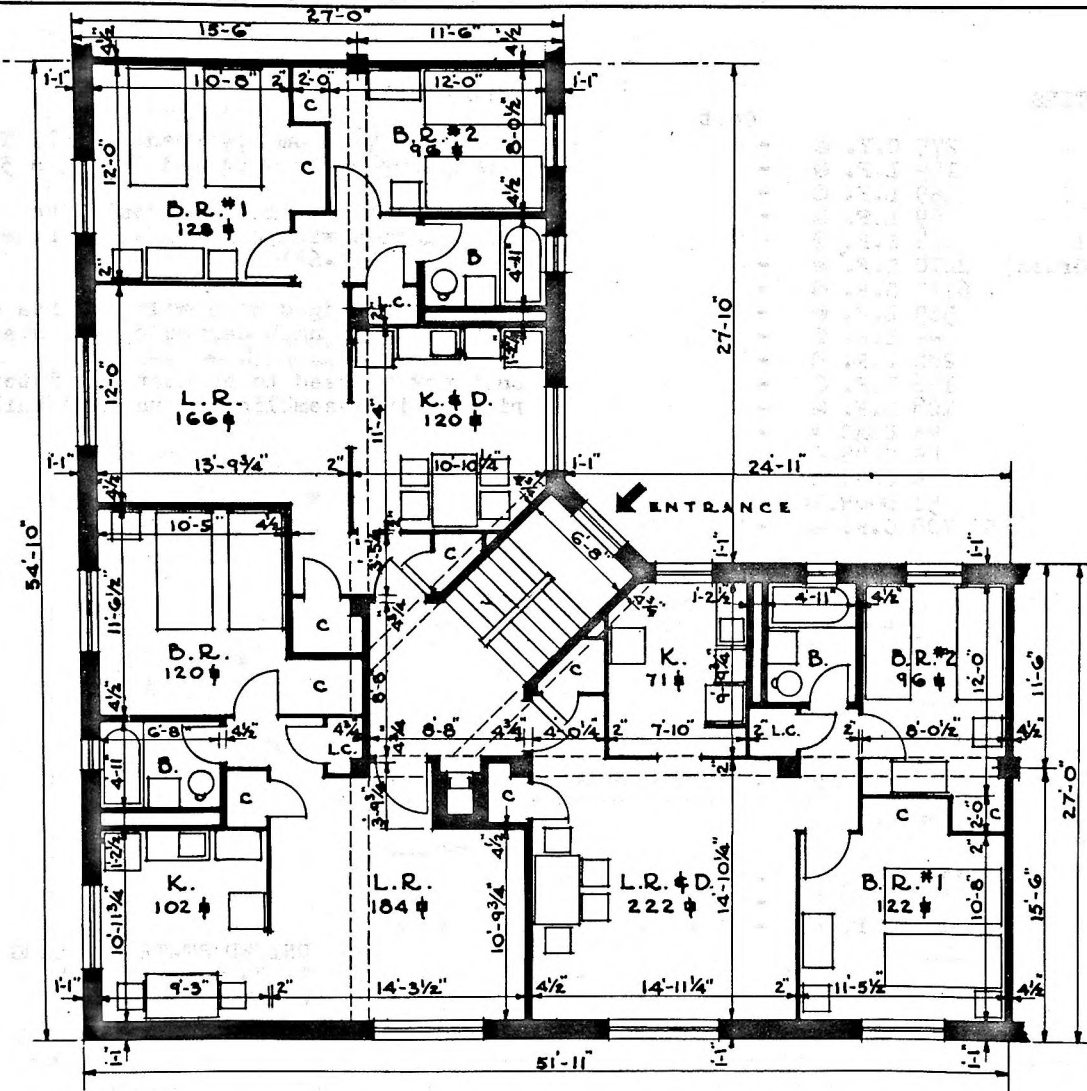
Designed to utilize fire resistive construction
with columns set off center (15'-6" - 11'-6").

Plumbing arranged with all fixtures of each
dwelling unit served by one stack.

Unit may be used to connect two intersecting
ribbons in assembling units into buildings.

UNITED STATES HOUSING AUTHORITY
TECHNICAL DIVISION
WASHINGTON, D. C.

PLAN NO. Ta-19



STATISTICS	
GROSS AREA (SQ. FT. PER RM.)	180
NET AREA (SQ. FT. PER RM.)	119
RATIO (NET ÷ GROSS) %	66.1
EXT. WALL (LIN. FT. PER RM.)	13.1

DEPARTMENT OF THE INTERIOR
 UNITED STATES HOUSING AUTHORITY
 WASHINGTON, D. C.

4 1/2-3-4 1/2 APT.
 - ELL -

0 1 2 3 4 5 10
 SCALE IN FEET

PLAN NO.
TA-19

DATE: 8 15-38

QUANTITIES

		Cost
General Excavation	275 C.Y. @	-
Foundation Wall & Footing	159 L.F. @	-
3 Story Exterior Wall	159 L.F. @	-
Parapet Wall	159 L.F. @	-
Windows - 20% of Exterior Wall	864 S.F. @	-
1st. 2nd. 3rd. Floor & Roof (Gross)	2210 S.F. @	-
Floor Covering (Net)	6110 S.F. @	-
(Interior - Pl.2S)	519 L.F. @	-
Partitions (Dividing - Pl.1S)	-- L.F. @	-
One Story (Dividing - Pl.2S)	288 L.F. @	-
High (Bath - Pl.1S)	126 L.F. @	-
(Bath - Pl.2S)	108 L.F. @	-
Corner Beads	93 BEAD.@	-
Closets	45 CLOS.@	-
Cased Openings	6 OPG.@	-
Doors - Interior	51 DOOR.@	-
Heating	59,700 C.F. @	-
Stairs - Complete	1 STR. @	-
Apartment Entrance Doors	9 DOOR.@	-
Main Entrance Etc.	1 ENT. @	-
Extra for Bath	9 D.U. @	-
Ranges & Refrigerators	9 D.U. @	-
Kitchen Shelving & Table	9 D.U. @	-
Incinerators	1 INC. @	-
Plumbing	9 D.U. @	-
Electrical - 3 1/2 Rooms	3 D.U. @	-
4 1/2 Rooms	6 D.U. @	-
TOTAL		
End Walls & Fire Walls	37.5 L.F. @	-
Heating & Fuel Space	113 S.F. @	-
Tenant Storage Space	180 S.F. @	-

TYPE OF UNIT

4 1/2 - 3 1/2 - 4 1/2 Room Apartments, Ell, Three Story
6 Dwelling Units @ 4 1/2 and 3 @ 3 1/2 = 37 1/2 Rooms.

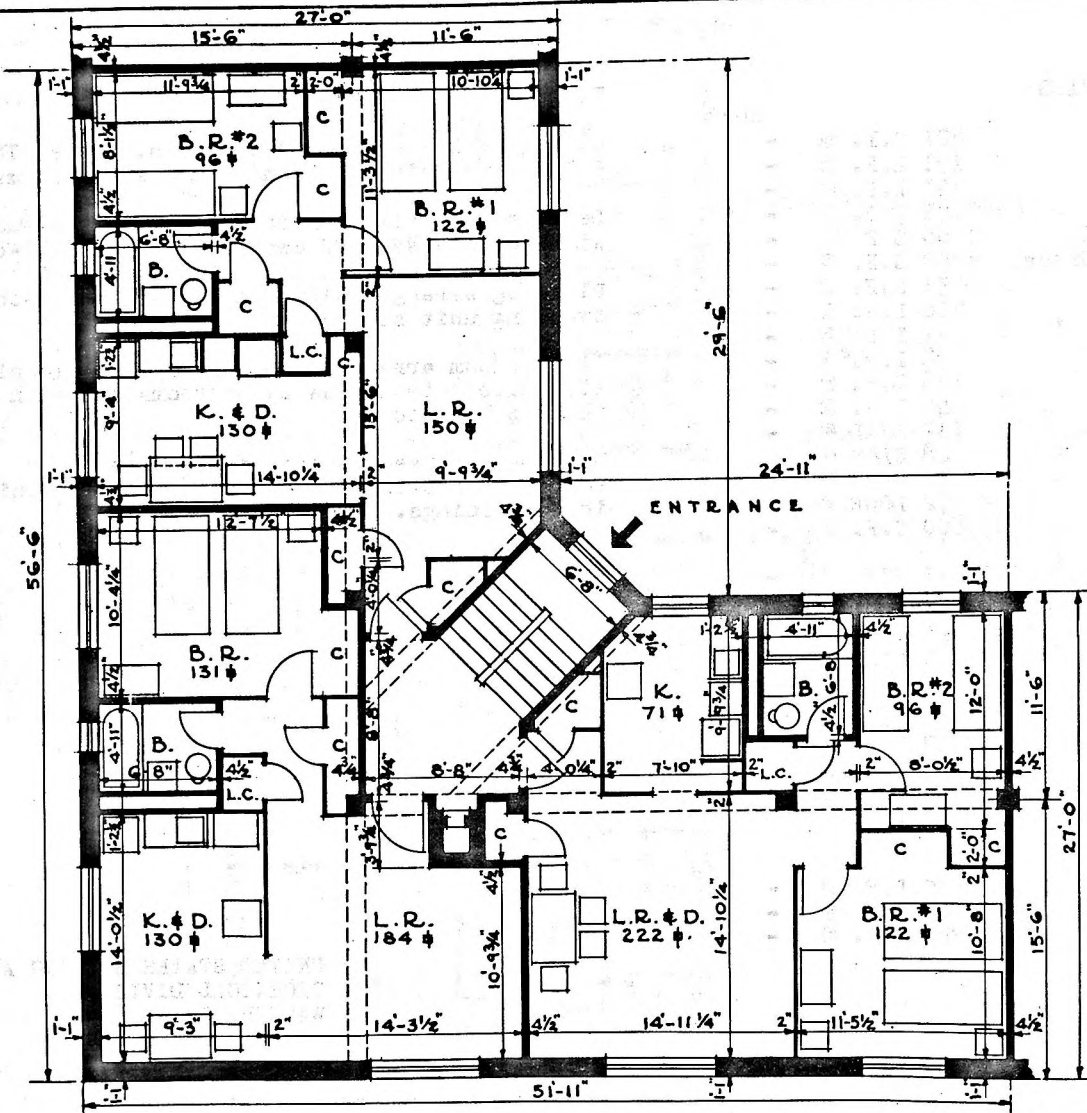
Designed to utilize fire resistive
construction with columns set off center
(15'-6" - 11'-6").

Plumbing arranged with all fixtures of
each dwelling unit served by one stack.

Unit may be used to connect two intersecting
ribbons in assembling units into buildings.

UNITED STATES HOUSING AUTHORITY
TECHNICAL DIVISION
WASHINGTON, D. C.

PLAN NO. Ta-20

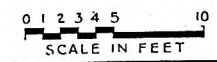


STATISTICS	
GROSS AREA (SQ. FT. PER RM.)	177
NET AREA (SQ. FT. PER RM.)	116
RATIO (NET ÷ GROSS) %	65.7
EXT. WALL (LIN. FT. PER RM.)	12.8

DEPARTMENT OF THE INTERIOR
 UNITED STATES HOUSING AUTHORITY
 WASHINGTON, D.C.

4 1/2-3 1/2-4 1/2 APT.
 - ELL -

PLAN NO.
TA-20
 DATE: 8 15-38



QUANTITIES

TYPE OF UNIT

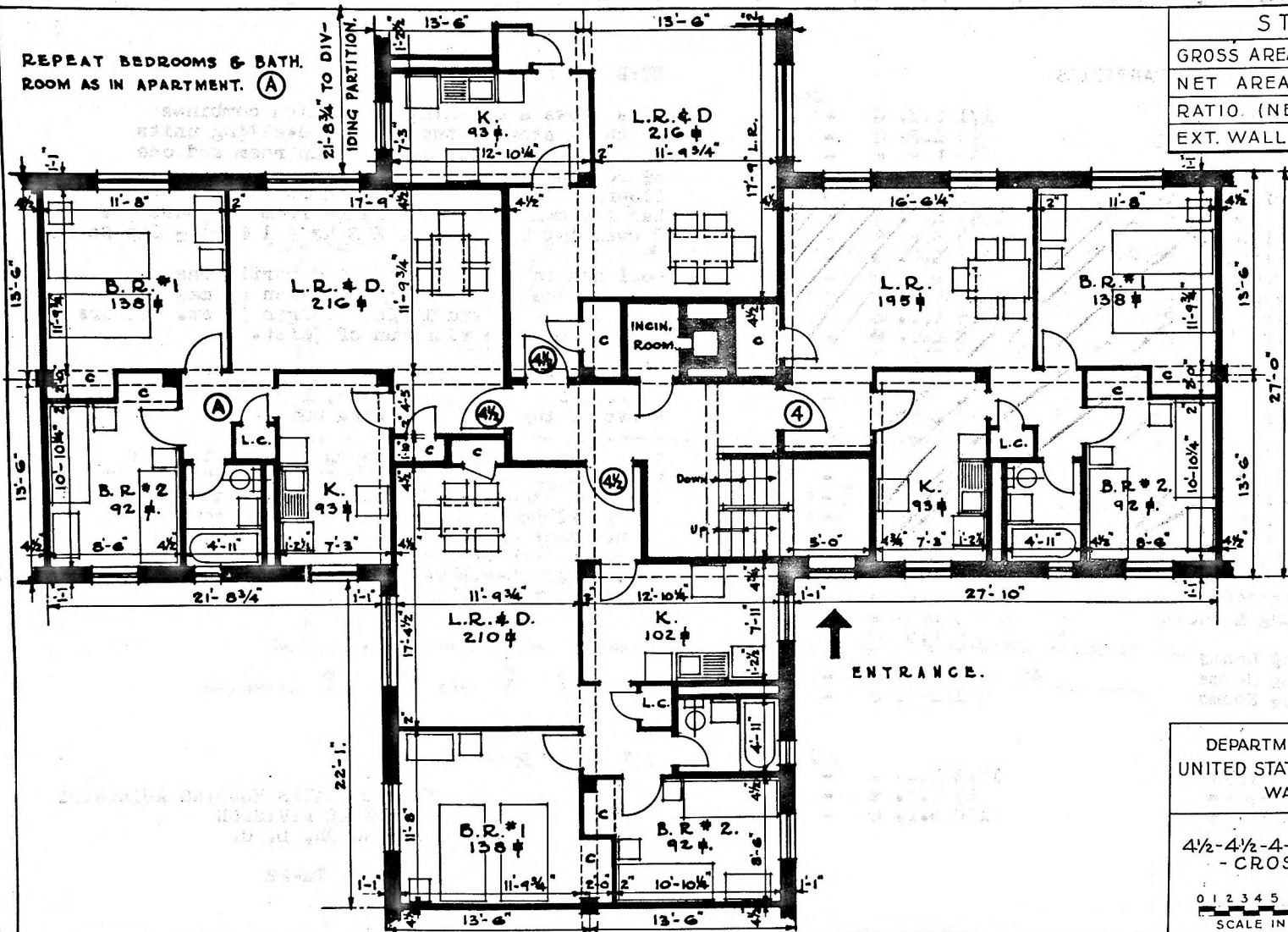
		Cost	
General Excavation	401 C.Y. @	-	4 $\frac{1}{2}$ - 4 $\frac{1}{2}$ - 4 - 4 $\frac{1}{2}$ Room Apartments, Cross, Three Story
Foundation Wall & Footing	191 L.F. @	-	9 Dwelling Units @ 4 $\frac{1}{2}$ and 3 @ 4 = 52 $\frac{1}{2}$ Rooms.
3 Story Exterior Wall	191 L.F. @	-	
Parapet Wall	191 L.F. @	-	Designed to utilize fire resistive construction
Windows - 20% of Exterior Wall	1008 S.F. @	-	with columns set off center (15'-6" - 11'-6").
1st. 2nd. 3rd. Floor & Roof (Gross)	3250 S.F. @	-	
Floor Covering (Net)	9131 S.F. @	-	Plumbing arranged with all fixtures of each
(Interior - Pl.2S	710 L.F. @	-	dwelling unit served by one stack.
Partitions (Dividing - Pl.1S	-- L.F. @	-	
One Story (Dividing - Pl.2S	498 L.F. @	-	Living Room arranged for privacy for sleeping
High (Bath - Pl.1S	168 L.F. @	-	with alternate access to bedrooms and bath
(Bath - Pl.2S	144 L.F. @	-	through kitchen.
Corner Beads	132 BEAD. @	-	
Closets	48 CLOS. @	-	Unit may be used to connect two, three or
Cased Openings	12 OPG. @	-	four intersecting ribbons in assembling units
Doors - Interior	72 DOOR. @	-	into buildings.
Heating	87,800 C.F. @	-	
Stairs - Complete	1 STR. @	-	
Apartment Entrance Doors	12 DOOR. @	-	
Main Entrance Etc.	1 ENT. @	-	
Extra for Bath	12 D.U. @	-	
Ranges & Refrigerators	12 D.U. @	-	
Kitchen Shelving & Table	12 D.U. @	-	
Incinerators	1 INC. @	-	
Plumbing	12 D.U. @	-	
Electrical - 4 Rooms	3 D.U. @	-	
4 $\frac{1}{2}$ Rooms	9 D.U. @	-	
TOTAL			
End Walls & Fire Walls	78.75 L.F. @	-	
Heating & Fuel Space	158 S.F. @	-	
Tenant Storage Space	240 S.F. @	-	

UNITED STATES HOUSING AUTHORITY
 TECHNICAL DIVISION
 WASHINGTON, D. C.

PLAN NO. Ta-21

REPEAT BEDROOMS & BATH.
ROOM AS IN APARTMENT. (A)

21'-6 3/4" TO DIV-
IDING PARTITION.

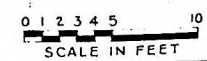


STATISTICS

GROSS AREA (SQ. FT. PER RM.)	186
NET AREA (SQ. FT. PER RM.)	122
RATIO (NET ÷ GROSS) %	65.7
EXT. WALL (LIN. FT. PER RM.)	10.9

DEPARTMENT OF THE INTERIOR
UNITED STATES HOUSING AUTHORITY
WASHINGTON, D.C.

4 1/2 - 4 1/2 - 4 - 4 1/2 APT.
- CROSS -



PLAN NO.
TA-21
DATE: 8-15-38

QUANTITIES		Cost
General Excavation	171 C.Y. @	-
Foundation Wall & Footing	99 L.F. @	-
3 Story Exterior Wall	99 L.F. @	-
Parapet Wall	99 L.F. @	-
Windows - 20% of Exterior Wall	536 S.F. @	-
1st. 2nd. 3rd. Floor & Roof (Gross)	1341 S.F. @	-
Floor Covering (Net)	3696 S.F. @	-
(Interior - Pl.2S	293 L.F. @	-
Partitions (Dividing - Pl.1S	146 L.F. @	-
One Story (Dividing - Pl.2S	188 L.F. @	-
High (Bath - Pl.1S	15 L.F. @	-
(Bath - Pl.2S	70 L.F. @	-
Corner Beads	49 BEAD.@	-
Closets	22 CLOS.@	-
Cased Openings	5 OPG. @	-
Doors - Interior	25 DOOR.@	-
Heating	36,200 C.F. @	-
Stairs - One Story Flights	6 FLGT.@	-
Entrance Doors Front	5 DOOR.@	-
Entrance Doors Rear	2 DOOR.@	-
Stoops - Front & Rear	7 STP. @	-
Covered Entry (Double)	- ENTY.@	-
Extra for Bath	5 D.U. @	-
Ranges & Refrigerators	5 D.U. @	-
Kitchen Shelving & Table	5 D.U. @	-
Plumbing	5 D.U. @	-
Electrical - 3½ Rooms	2 D.U. @	-
4½ Rooms	2 D.U. @	-
5½ Rooms	1 D.U. @	-
TOTAL		
End Walls & Firewalls	18.3 L.F. @	-
Heating & Fuel Space	65 S.F. @	-
Tenant Storage Space	100 S.F. @	-

TYPE OF UNIT

This shows a building unit which combines in three stories two 3½ room dwelling units on the first floor with two 4½ room and one 5½ room units on the second and third floors so arranged that each dwelling unit has its own private entrance from the outside. 2 Dwelling Units @ 3½, 2 @ 4½ & 1 @ 5½ = 21½ Rooms.

Designed to utilize wood stud partitions with off center bearing partition to make full use of 12 and 14 foot length joist. Stairs placed to frame with run of joist.

Plumbing arranged with ten groups of fixtures on four stacks. Two stacks, however, can serve fixtures in adjoining units.

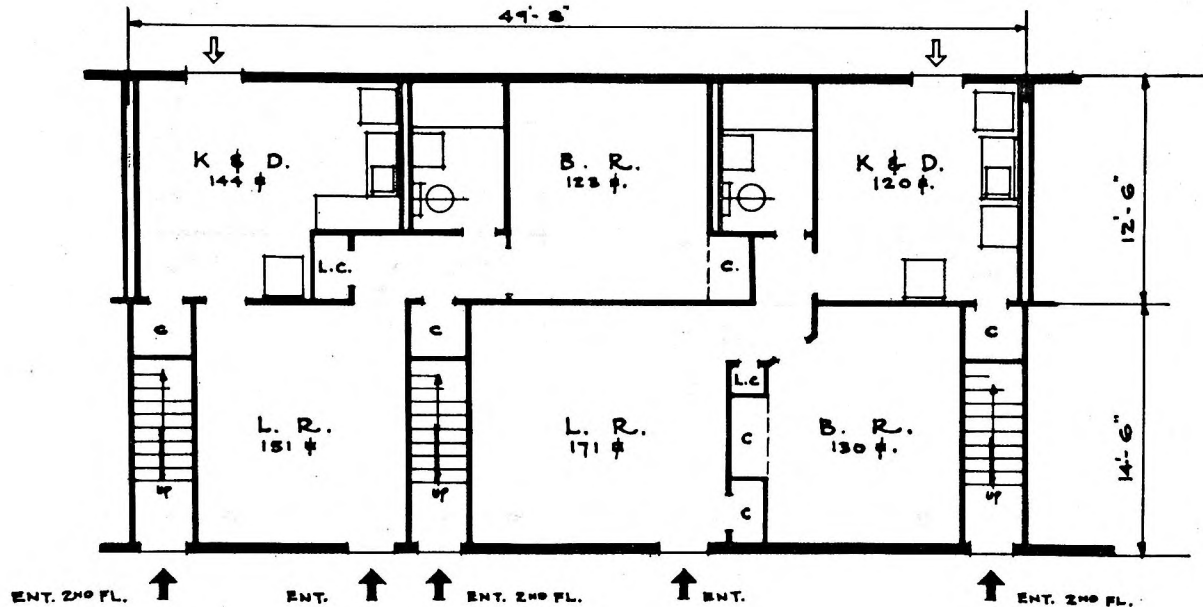
This combination of Flats on the first floor with Two Story Units above gives approximately the same density and coverage of land as three story, ribbon type, apartments but requires no maintenance of public hallways, and may be arranged with private gardens for each dwelling unit. See sheets Ta-23 and Ta-24 for second and third floor plans.

UNITED STATES HOUSING AUTHORITY
TECHNICAL DIVISION
WASHINGTON, D. C.

PLAN NO. Ta-22

STATISTICS

GROSS AREA (SQ. FT. PER RM.)	187
NET AREA (SQ. FT. PER RM.)	116
RATIO (NET ÷ GROSS) %	62
EXT. WALL (LIN. FT. PER RM.)	13.8



FIRST FLOOR. PLAN.

DEPARTMENT OF THE INTERIOR
 UNITED STATES HOUSING AUTHORITY
 WASHINGTON, D.C.

3 STORY COMBINATION
 2 - 3½ ROOM FLATS
 2 - 4½ ROOM HOUSES
 1 - 5½ ROOM HOUSE

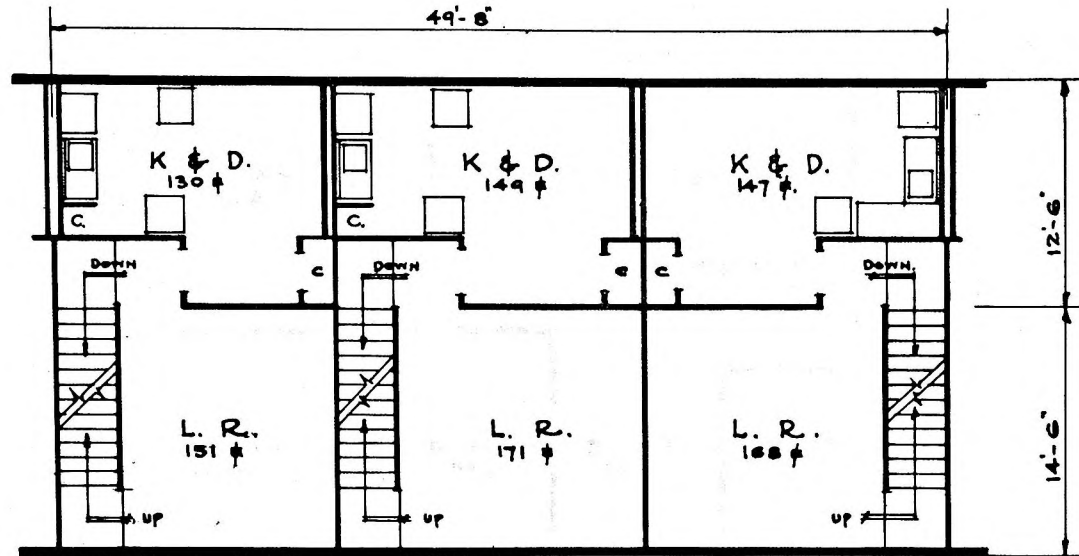
PLAN NO.
TA-22

0 1 2 3 4 5 10
 SCALE IN FEET

DATE: 8-15-38

STATISTICS

GROSS AREA (SQ. FT. PER RM.)	187
NET AREA (SQ. FT. PER RM.)	116
RATIO (NET ÷ GROSS) %	62
EXT. WALL (LIN. FT. PER RM.)	13.8



SECOND FLOOR PLAN

DEPARTMENT OF THE INTERIOR
 UNITED STATES HOUSING AUTHORITY
 WASHINGTON, D.C.

3 STORY COMBINATION
 2 - 3 1/2 ROOM FLATS
 2 - 4 1/2 ROOM HOUSES
 1 - 5 1/2 ROOM HOUSE

PLAN NO.

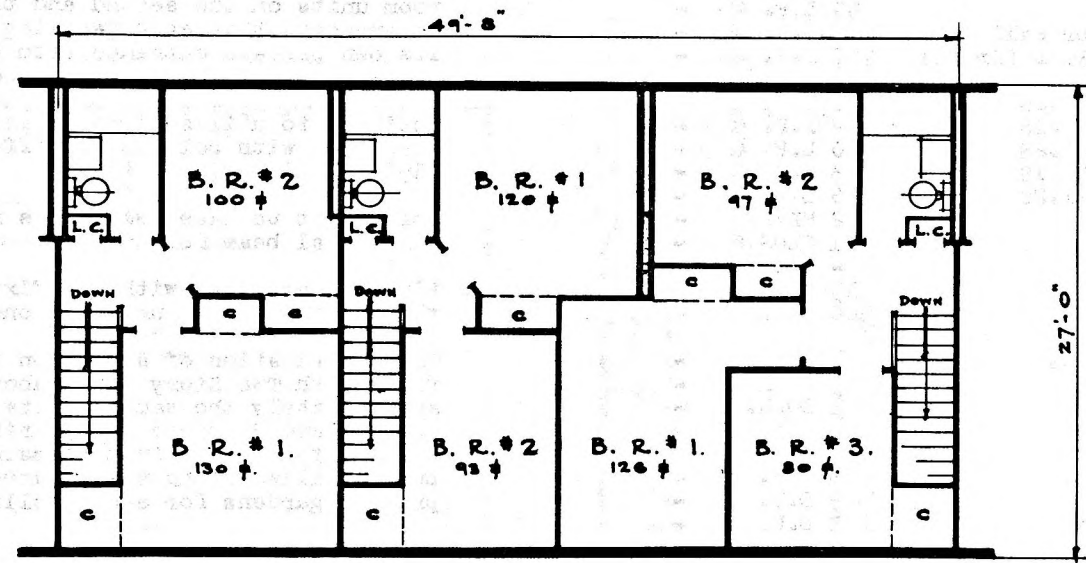
TA-23

0 1 2 3 4 5 10

SCALE IN FEET

DATE: 8-15-38

STATISTICS	
GROSS AREA (SQ. FT. PER RM.)	187
NET AREA (SQ. FT. PER RM.)	116
RATIO (NET ÷ GROSS) %	62
EXT. WALL (LIN. FT. PER RM.)	13.8



THIRD FLOOR PLAN

DEPARTMENT OF THE INTERIOR
UNITED STATES HOUSING AUTHORITY
WASHINGTON, D.C.

3STORY COMBINATION
2 - 3½ ROOM FLATS
2 - 4½ ROOM HOUSES
1 - 5½ ROOM HOUSE

PLAN NO.
TA-24

0 1 2 3 4 5 10
SCALE IN FEET

DATE: 8-15-38

QUANTITIES

		Cost	
General Excavation	102 C.Y. @	-	
Foundation Wall & Footing	59 L.F. @	-	
3 Story Exterior Wall	59 L.F. @	-	
Parapet Wall	59 L.F. @	-	
Windows - 20% of Exterior Wall	212 S.F. @	-	
1st. 2nd. 3rd. Floor & Roof (Gross)	797 S.F. @	-	
Floor Covering (Net)	2197 S.F. @	-	
(Interior - Pl.2S	156 L.F. @	-	
Partitions (Dividing - Pl.1S	- L.F. @	-	
One Story (Dividing - Pl.2S	150 L.F. @	-	
High (Bath - Pl.1S	43 L.F. @	-	
(Bath - Pl.2S	36 L.F. @	-	
Corner Beads	52 BEAD.@	-	
Closets	14 CLOS.@	-	
Cased Openings	- OPG. @	-	
Doors - Interior	15 DOOR.@	-	
Heating	21,500 C.F. @	-	
Stairs - One Story Flights	4 FLGT.@	-	
Entrance Doors Front	3 DOOR.@	-	
Entrance Doors Rear	1 DOOR.@	-	
Stoops - Front & Rear	4 STP. @	-	
Covered Entry (Double)	- ENTY.@	-	
Extra for Bath	3 D.U. @	-	
Ranges & Refrigerators	3 D.U. @	-	
Kitchen Shelving & Table	3 D.U. @	-	
Plumbing	3 D.U. @	-	
Electrical - 4½ Rooms	3 D.U. @	-	
TOTAL			
End Walls & Firewalls	11.5 L.F. @	-	
Heating & Fuel Space	41 S.F. @	-	
Tenant Storage Space	60 S.F. @	-	

TYPE OF UNIT

This shows a building unit which combines in three stories a 4½ room dwelling unit on the first floor with two 2-story 4½ room units on the second and third floors, so arranged that each dwelling unit has its own private entrance from the outside. 3 Dwelling Units @ 4½ = 13½ Rooms.

Designed to utilize fire resistive construction with columns set off center (15'-2" - 11'-10").

Stairs set to make use of the main structural beam for framing.

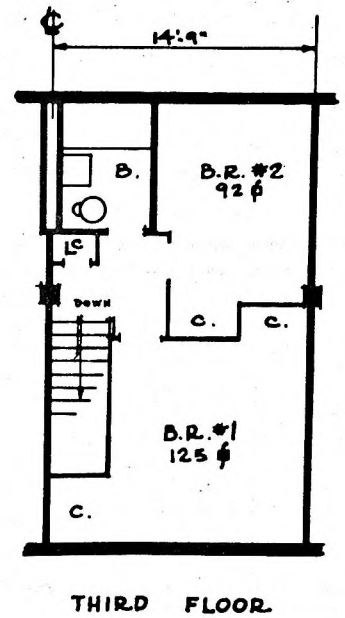
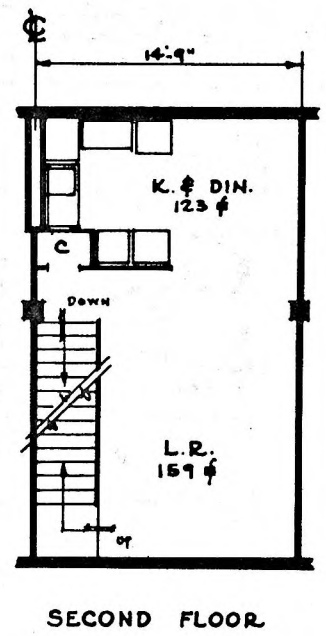
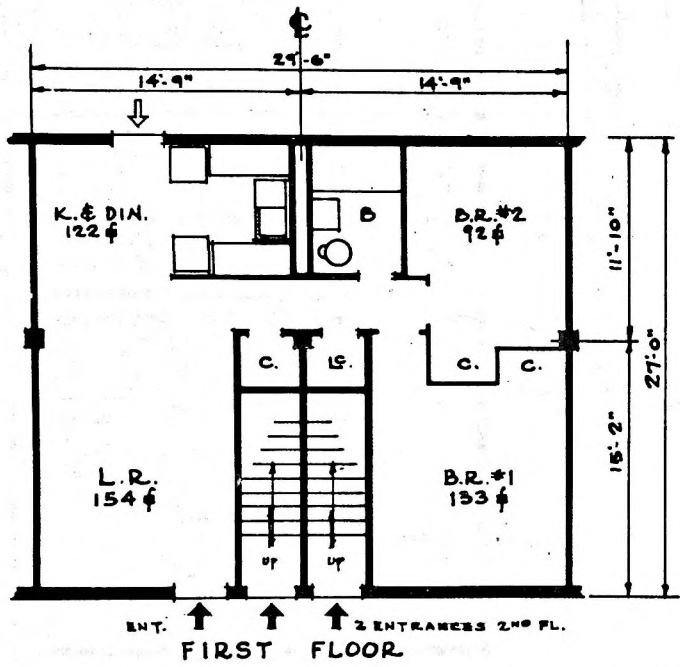
Plumbing arranged with all fixtures of the three dwelling units on one stack.

This combination of a Flat on the first floor with Two Story Units above gives approximately the same density and coverage of land as three story, ribbon type, apartments but requires no maintenance of public hallways and may be arranged with private gardens for each dwelling unit.

UNITED STATES HOUSING AUTHORITY
TECHNICAL DIVISION
WASHINGTON, D. C.

PLAN NO. Ta-25

STATISTICS	
GROSS AREA (SQ. FT. PER RM.)	177
NET AREA (SQ. FT. PER RM.)	111
RATIO (NET ÷ GROSS) %	62.7
EXT. WALL (LIN. FT. PER RM.)	13.1



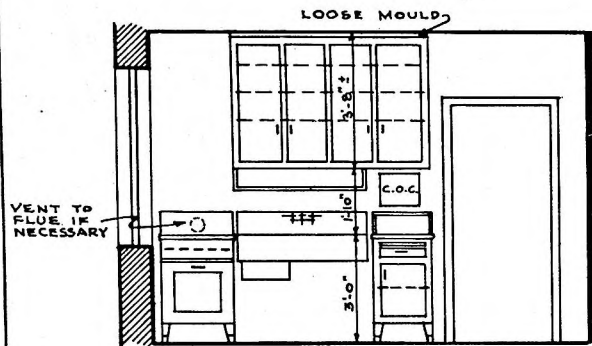
DEPARTMENT OF THE INTERIOR
 UNITED STATES HOUSING AUTHORITY
 WASHINGTON, D.C.

3 STORY COMBINATION
 4 1/2 ROOM FLAT &
 2-4 1/2 ROOM HOUSES

PLAN NO.
TA-25

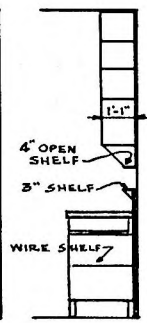
0 1 2 3 4 5 10
 SCALE IN FEET

DATE: 8-13-38

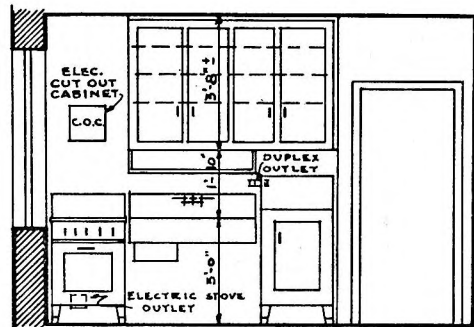


ELEVATION

NOTE POSITION OF CUT OUT CABINET WITH GAS STOVE

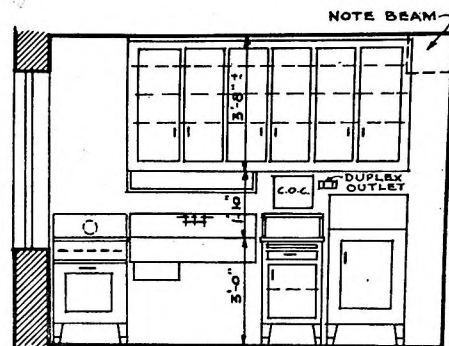


SECTION

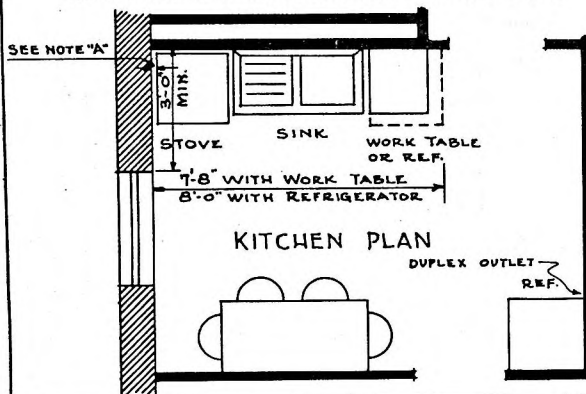


ELEVATION

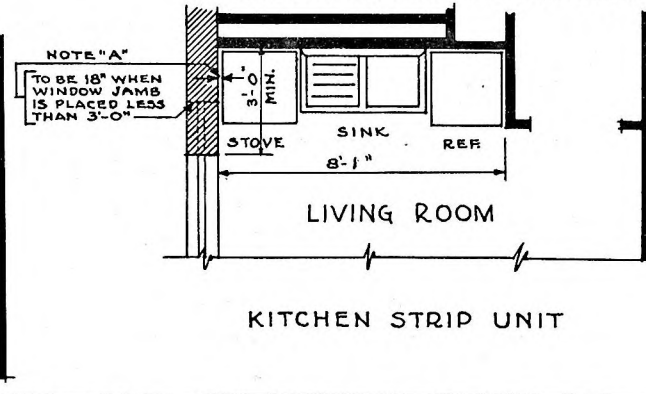
NOTE POSITION OF CUT OUT CABINET WITH ELECTRIC STOVE



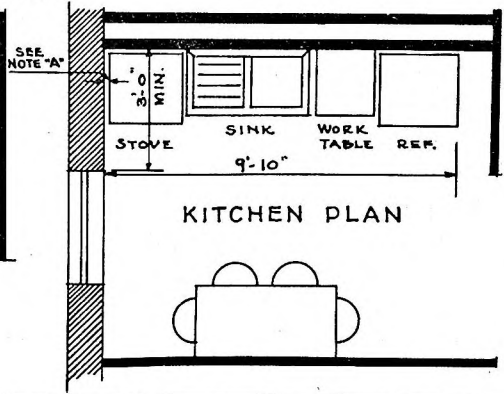
ELEVATION



KITCHEN PLAN

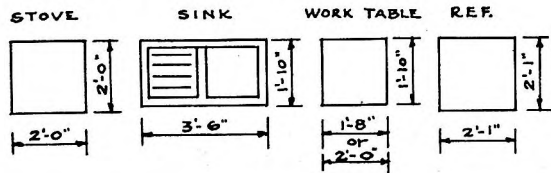


KITCHEN STRIP UNIT



KITCHEN PLAN

SIZES USED FOR EQUIPMENT

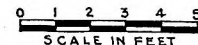


NOTE:

1. CABINETS MAY BE METAL OR WOOD, SAME DESIGN, RUN TO CEILING.
2. FOR 2 TO 3 1/2 R.M. DWELLING UNITS CABINET LENGTH TO BE APPROX. 5'-3", IN 4 TO 6 1/2 R.M. UNITS CABINET LENGTH TO BE APPROX. 7'-8".
3. WORK TABLE TO BE PORTABLE.
4. WHERE CEILING DROPS DUE TO CONCEALMENT OF BATH ROOM PLUMBING ABOVE OR BEAMS, TOP SHELF OF CABINET TO BE OMITTED.
5. A 1 1/2" CLEARANCE BETWEEN EQUIPMENT HAS BEEN ALLOWED TO PROVIDE FOR JOB ROUGHING-IN AND VARIATION OF MANUFACTURERS SIZES.
6. STOVE AND REFRIGERATOR MAY CHANGE PLACES DEPENDING ON POSITION OF WINDOW, BUT RELATIONSHIP OF SINK AND WORK TABLE TO REMAIN AS SHOWN.

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UNITED STATES HOUSING AUTHORITY
WASHINGTON, D.C.

TYPICAL
KITCHEN LAYOUTS



PLAN NO.

TA-26

DATE: 8 15-38

Henry Borriello

MAX. PERSONS PER D.U.	2		3			4 1/2				6 1/2				8 1/2				TOTALS														
	0 B.R.		1 B.R.			2 B.R.				3 B.R.				4 B.R.																		
BED ROOMS PER D.U.	2 2 1/2		2	2 1/2	3	3 1/2	3	3 1/2	4	4 1/2	4	4 1/2	5	5 1/2	5	5 1/2	6	6 1/2	D.U.	RMS	1/2 RMS	RMS + 1/2 RMS										
ROOMS PER D.U.	NUMBER OF DWELLING UNITS																															
	NO. OF STORIES	TYPE BLDG.	NO. OF BLDGS.																													
APARTMENTS	3	4	A	2															42					54	198	48	222					
	3	4	B	2															42					54	198	48	222					
	3		C	1																			3	15	18	69	18	78				
	3		D	1																			3	15	18	69	18	78				
	3		E	1																			9	6	36	51	180	51	205 1/2			
	3		F	1																			9	6	36	51	180	51	205 1/2			
	3		G	2																				12	60	72	276	72	312			
TOTAL APTS.																								30	12	30		246	318	1170	306	1323
HOUSES.	2	H	18																72				36				108	468	468			
	1	2	I	12															60				36				96	420	420			
	2	J	6																18				6				24	102	102			
	2	K	4																24				16				40	176	176			
	2	L	6																				36	36	72	396	72	432				
	1	M	5																30				10				40	130	130			
TOTAL HOUSES.																			30	174	10	94	36	36	380	1692	72	1728				
FLATS	2	J																24				24				48	144	24	156			
	2	K																16								16	32	16	40			
	2	N	9	36																		36				72	216	216				
	2	O	1	8																		8				16	48	48				
	2	P	1	2																		2				4	12	12				
TOTAL FLATS				46	16		24		24	46																156	452	40	472			
GRAND TOTAL				72	46	16	30	36	30	30	24	220	246	10	94		36	36	854	3314	418	3523										

EXAMPLE: THERE ARE TWO TYPE A APARTMENT BUILDINGS EACH THREE AND FOUR STORIES HIGH, **3-4**, AND EACH CONTAIN 3-2 1/2 ROOM D.U.; 3-3 ROOM D.U. AND 2-4 1/2 ROOM D.U. UNDER THE COLUMN HEADED "TOTALS" IS LISTED: "D.U." OR DWELLING UNITS = 54 (TOTAL FOR TYPE A BUILDINGS), "RMS" (ROOMS) = 198; "1/2 RMS" (ACTUAL NO. OF ONE HALF ROOMS) = 48; "RMS + 1/2 RMS" = 198 + 48 = 222 (WHICH IS THE TOTAL NUMBER OF ROOMS FOR TYPE A BLDGS.)

1/2 ROOMS = ALLOWABLE AREAS TO BE COUNTED AS ONE HALF ROOMS AS LISTED IN THE BULLETIN.

WHERE A BUILDING CONTAINS BOTH HOUSES AND FLATS, SUCH AS BUILDINGS "J" AND "K" THE BUILDING WILL BE LISTED TWICE, ONCE UNDER "HOUSES" FOR D.U. OF THIS TYPE AND ONCE UNDER "FLATS" FOR D.U. OF THIS TYPE. THE TOTAL NUMBER OF SUCH COMBINATION BUILDINGS IS ONLY LISTED ONCE.

DEPARTMENT OF THE INTERIOR
UNITED STATES HOUSING AUTHORITY
WASHINGTON, D.C.

SAMPLE ROOM SCHEDULE
FOR PRELIMINARY SUBMITTAL ONLY

TA-27
DATE: 8-15-38