

New housing in a cleared area : a study of St Mary's, Oldham / Department of the Environment.

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New housing in cleared area

a study of St. Mary's, Oldham

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Abstract

New housing in a cleared area is an account of tenants' views of their new homes and estate recorded about a year after occupation. Information about the design is included to help assess the views expressed. This bulletin is the last in a series of four relating to a project of slum clearance and redevelopment undertaken by the former Ministry of Housing and Local Government's Research and Development Group at St Mary's, Oldham for Oldham Borough Council. Previous studies reported the housing needs of those living in the clearance area (Design Bulletin 19 *Living in a slum*), social and other problems arising from the process of relocation (Design Bulletin 20 *Moving out of a slum*), and an account of families with children under 16 living on three estates at densities of 109, 130, and 140 persons per acre (Design Bulletin 21 *Families living at high density*).

The introductory section briefly explains the aims of the project and is followed by a summary of the main points of interest drawn from the appraisal findings.

After *general background* which gives overall details of the site, the tenants and the system of construction, the *main body* of the bulletin presents a factual analysis of the survey data given under three main heads: *the dwellings*, including overall planning and allocation, detailed technical studies, and tenants' reaction; *the layout* examining children's play, traffic on the estate, and tenant appreciation of the estate as a whole; and *social aspects of moving*, general feelings, social dislocation, removal expenditure and housing costs and attitudes to staying or moving from the locality.

There are six appendices providing statistical and other supplementary information.

Note

This project was completed before the changeover to SI units and decimal currency, but rounded equivalents in these terms are given against the original values.

Authors Jenny Griffin and Jim Dickinson

Acknowledgements

Special thanks are due to

The officers of Oldham County Borough for all their assistance. The tenants for their willing co-operation in the appraisal survey.

The Housing Development Group

The Department's Housing Development Group is a team of architects, sociologists, quantity surveyors and administrators who work with other specialists as necessary.

It is concerned with all aspects of housing development, and seeks to promote higher standards and better value for money. In particular, by studying the activities and aspirations of people in relation to dwellings and by studying also the process of building, it contributes to policy and its execution, and seeks to improve the standard of design, components, services and equipment, and to pass on information to others. One of the ways of doing this is by publishing design bulletins.

One way the Group operates is by carrying out building projects for local authorities. It is commissioned as the authority's architects and paid fees at the normal RIBA scale.

The Department also provides funds to enable the Group to investigate user needs, technical problems and alternative solutions in greater depth than is practicable in the normal contract. This knowledge is passed on in the form of project bulletins, of which this is one.

The object of project bulletins is to help local authorities or private developers embarking on similar schemes, by describing the problems they are likely to meet, how the Group met these problems, and the lessons that have since been learnt.

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New housing in a cleared area

a study of St Mary's, Oldham

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1 Introduction

1. Phase I of the redevelopment of St Mary's Ward, previously one of Oldham's central slum areas, consists of 520 dwellings at a planned density of 272 bedspaces to the hectare, constructed in the concrete 12M Jespersen system of industrialised building. The dwellings are heated by a high-pressure hot water system, part of a larger coal-fired district heating scheme. Work commenced on the superstructure of the dwellings in January 1966, and was completed by January 1967.

2. The architects for the scheme were the Research and Development Group of the former Ministry of Housing and Local Government working in conjunction with Max Lock and Partners; the latter being appointed by the Borough Council to produce proposals for the comprehensive renewal of 120 hectares of sub-standard dwellings. The scheme under discussion was intended to be the first of ten phases of redevelopment within this 120 hectares after a survey showed that the existing houses on this site were the worst in the whole area.

3. The Development Group had two major objectives in doing this work. The first was to study the problems and effects of slum clearance and the reconstruction of a central urban area. The second was to find or develop an industrialised building system suitable for low and medium-rise dwellings for use particularly in areas with a shortage of skilled construction workers.

4. In September 1968, 18 months after the last dwelling had been occupied, an appraisal was made of tenants' reactions to their new homes. The appraisal consisted of sociologists' interviews with tenants who had been occupying their homes for at least nine months i.e. those who had occupied their homes during both a summer and a winter period. This resulted in 393 interview questionnaires being completed out of a total of 520 dwellings. The dwellings of 242 of those interviewed were also visited by an architect who made an assessment of the structure and recorded the way in which tenants had positioned their furniture.

5. The results of this survey and appraisal form the basis of this bulletin and therefore details of the design and construction have only been given where this is necessary for the text to be fully understood.

6. At the time this appraisal was carried out a similar exercise was undertaken by the Ministry to appraise tenants' reactions on six other high-density estates. Comparisons have been drawn with the preliminary findings of this other survey, which is referred to throughout this bulletin as *The Layout Study*.* The full results of this appraisal of estates is to be published shortly by HMSO. Details of the six estates are given in Appendix A.

7. A subsidiary objective of the appraisal was to study the performance and efficiency of the district heating installation. As it has been affected by a number of troubles and was still not working satisfactorily at the time of going to press it has not been possible to appraise it here. Mention should also be made here of problems which have arisen on rain-penetration through windows: these have not, however, been such as to interfere with the main objectives or to affect the appraisal. It is clear that the tenants' overall satisfaction with their dwellings and the estate was higher than in most other housing schemes studied in a similar way in spite of these troubles.

* To be published (in the first quarter of 1972) by the DEPARTMENT OF THE ENVIRONMENT as Design Bulletin 25 *The estate outside the dwelling: reactions of residents to aspects of housing layout* HMSO.







2 Summary of the more important findings

The social aspects of moving and living on the estate

8. Many tenants, especially previous owner-occupiers, had an initial reluctance to being moved from a familiar home and neighbourhood. Although moving to a new estate immediately adjacent to their previous homes did not entirely overcome all the tenants' problems associated with the pulling up of old roots, these were less than in a similar study made of the problems experienced by people who had moved out of the area altogether.

9. A change of dwelling to one within the same overall familiar area proved to be the first choice of most households; though it is difficult in this case to say whether knowing the area or its central position was the most important factor influencing this choice. There was certainly no lack of demand for a centrally-located dwelling in spite of all the design implications of development at this density—such as having flats or houses with very small gardens.

10. Although some tenants were affected by changes in social and other activities (some children changed schools; different churches and pubs were used; and the market was more frequently used than the corner shop), the numbers affected were far fewer and the changes less drastic than those occasioned by a move from the area altogether.

11. The amount spent by tenants on housing, e.g. rent, naturally increased, and meant that a small minority of housewives returned to work. Other costs such as transport (which caused a further burden to those moved to peripheral estates) remained constant for those who moved to this new estate. Many of the tenants were moved near each other with the consequence that a far greater proportion were 'on chatting terms' with neighbours than were those who had been dispersed to several estates away from the area altogether.

The dwellings

12. Most of the tenants on the new estate at St Mary's had come from slum clearance areas only a few minutes walk away and their previous housing was considerably lacking in material comfort. Most had chosen to come to the new estate and been given the type of dwelling they preferred—which for half the households without children was a flat. Nearly all the houses were lived in by families with children and with few exceptions the flats were occupied by adult or elderly households, without children. Space was allocated generously—a quarter having a spare bedroom and a half having at least one spare bedspace.

13. Although there were very few adult and elderly households in houses, and very few families in flats, in the sample taken, the consistency of reaction between dwelling type and household type made them worth recording. While families were less happy than either adult or elderly households, their satisfaction with the houses was only marginally higher than their satisfaction with flats. This suggests that either the flats or the houses of the type provided on St Mary's did not suit family needs entirely or else that housewives with children are often under stress and that their satisfaction rates will always be low. (The Layout Study also showed a lower rate of satisfaction amongst family households on all six estates surveyed.) Elderly households in flats were much

more appreciative of their dwelling than those few who lived in houses. This seemed to be because of the setting of the houses rather than their design, for they were sited on less attractive parts of the estate and were amongst family households with all the noise this entailed. Although on some aspects adult households gave similar responses whether in flats or houses, generally adults in flats were satisfied on a much wider range of things than those in houses.

14. A tenth of those living in flats above the ground were not at all happy living at these levels. A third of all those living in flats found there were a number of things they couldn't do in a flat; a third wanted a garden and a fifth wanted to move to the ground floor. However, these worries did not seem intense—the impossibility of hanging out washing was rarely regarded as a great problem and only a tenth of the sample were prepared to move away from the town centre in order to have a garden. The wish to move to the ground floor was a hypothetical choice, for those above the ground were unaware of the disadvantages.

15. Of the areas of the dwelling considered, the kitchen was most strongly linked to overall dwelling satisfaction, with secondary emphasis on bedrooms and storage. Bathroom design was relatively unimportant. However it is not known how important the living room was in this respect.

Room design

16. Meals were taken in the dining area where there was space for the family to sit together round the table and room for several other items of furniture. The living room was left free mainly for relaxation. Tenants found the sizes of these rooms satisfactory for these purposes although where kitchen/dining rooms were 16.3m² or over a quarter would have preferred some space transferred to the living room. A fifth, mainly the larger families, would have ideally preferred the dining area separated from the kitchen area.

17. Half the tenants with internal kitchens considered them too small because there was inadequate space for eating. Four-fifths of those without any source of direct daylight complained of bad lighting and difficulty getting rid of smells and steam.

18. Tenants were equally satisfied with daylighting in kitchen/dining areas whether the dining area or the working area was nearest the window.

19. A third of the tenants (mainly the elderly) did not have refrigerators and found it difficult to store food conveniently.

20. Tenants considered that they had sufficient sunlight in living rooms whether they faced south, east or west. The positioning of television sockets in a corner of the living room close to the window appeared to be satisfactory.

21. Local authority house-plans now have to show, besides certain mandatory items, 'a reasonable quantity of other possessions'; the other items most often found in living rooms in this survey were a dining chair, a sideboard, a standard lamp and a radiogram.

22. The largest conveniently located double bedroom was mainly used for a double bed—most probably for parents. Other double bedrooms were used equally for double or twin beds.

23. Four-fifths of those housewives with a double bedroom of approximately 10m² were satisfied with its size whereas nine-tenths were satisfied with those that were approximately 13.4m². A fifth considered bedrooms of 2.56m as too narrow. 6.5m² proved to be the minimum acceptable area for single bedrooms.

24. The middle-aged and elderly people living alone in bedsitter flats showed high levels of general satisfaction, but sleeping arrangements did not seem to be satisfactory. Living areas were not divided into living and sleeping zones and care was taken by tenants not to let the living room look like a bedroom. Where the kitchen/dining room was large enough the bed was put there, and where it was not, a folding bed or convertible settee was used. Although there was a fairly strong demand for a separate bedroom only half those who wanted one said they could afford to pay an extra 50p a week rent for it. It would be useful if layouts of bedsitting rooms included the furniture required for the living space and for a single bedroom.

25. The small size of bathrooms was spontaneously mentioned by a third of those with bathrooms of 2.8m². Just over a quarter of those with internal bathrooms complained about lack of daylight. On both these points complaints were more frequent the larger the household. Floor-to-ceiling soil and rainwater pipes were visible in the 2B4P bathroom which drew complaints from two-fifths of the housewives. Attitudes to the bathroom were not strongly linked to satisfaction with the dwelling.

The estate

26. Apart from other general satisfaction variables, the factors which related most closely to estate satisfaction were noise, estate attractiveness, play and privacy.

27. The white cladding, the grass and the openness of the layout seemed to be things tenants appreciated about the appearance of the estate. Apart from particular areas on the estate (e.g. back alleyways and public staircases) which drew complaints from a minority of tenants, the general appearance was greatly appreciated and probably shows the benefit of not only paying careful attention to the design of the landscaping and the surroundings generally, but also of keeping up a high level of maintenance.

28. The problem of lack of privacy was most marked in the houses, where a third complained. These were particularly vulnerable to being overlooked in the living room from the houses opposite and, to a lesser extent, in the bedrooms, where the problem was aggravated by a change in level so that some living rooms looked directly into bedrooms. In flats, lack of privacy and being overlooked were problems to those on the ground floor and those with living rooms overlooking the main children's play area.

29. Complaints of lack of privacy were linked with those about being overlooked and being disturbed by noise, especially that created by children's play.

30. Open views of green areas were much appreciated but not where privacy was invaded. Views on to play areas suffered this drawback and were not popular.

Children's play

31. The number of children observed playing outside was comparatively high and most mothers felt their children went outside enough to play.

32. Compared with other estates, the play areas at Oldham were well used. Factors which influenced this may well have been the total area given over to these and the amount, type and position, of the equipment provided.

33. The small gardens at Oldham were not extensively used for play. This was also found to be the case on estates studied by the Building Research Station where play facilities outside the garden were as attractive as upon this estate.¹ However, gardens fulfilled other needs and contributed to the variety of opportunity for play.

34. The paved areas, which were relatively safe and near the houses, probably contributed to the fairly high proportion of under-five's playing out on the estate. The fact that kitchens overlooked footpaths may also have helped although mothers did not mention this as one of the advantages of kitchen location and it is doubtful whether many children were always in sight of mother while playing. On the other hand young children may have felt happier playing where they knew they were near to mother.

35. Traffic was not a major worry to mothers as a whole but it was a particular problem to those with children under five. It would appear from this appraisal that the highest incidence of play on roads (and therefore the point of greatest danger) existed on the road between the new dwellings and some existing terrace houses, for here children from the new estate met and played with children from the older property.

36. Traditional play equipment was far more popular than the 'architectural' pieces specially designed. Of the equipment on this site swings were the most universally popular for although the sandpit and pool were well liked by children they were not liked by adults. Indeed as a consequence of complaints from adults the sandpit was filled in and the pool filled with water only on hot days in summer. The main play area was a source of considerable disturbance to the adult and elderly households overlooking it.

37. Small, closely-spaced areas of traditional play equipment appeared to be equally if not more popular with children than large widely-spaced areas. They also appeared to cause less annoyance to adults, especially where positioned away from front entrances to dwellings at the ends of or behind blocks. Sinking one of the play areas below the level of the houses seemed to minimise the annoyance felt by adults.

38. The ball-games area was not very well used. Comparison with ball-games areas on other estates suggests that its size was not the most significant reason for it not being used. It is possible that had a softer surface than tarmac been employed (like grass or ashes), and had it been located in a position where adults did not discourage its use, it might have proved more popular.

Access decks

39. As the decks led out in one direction to ground level at a point very near the town centre, in general they were used very well. However, half those with front doors opening on to the decks said they often walked in the opposite direction against the fall of the ground and therefore had to negotiate public staircases.

40. It is well known that elderly people very much enjoy looking out on to a busy scene and the decks at St Mary's provided admirable opportunity for this especially as the balustrade was a

¹ BUILDING RESEARCH STATION National Building Studies Research Paper 39 *Children's play on housing estates* (V Hole) HMSO 1966 pp 12-17

convenient height for leaning on. As they were of a generous width they were also used for chatting to neighbours and the two that faced west were used for sitting in the sun. They were greatly appreciated for affording protection from the rain but there were a few complaints of dirt and smell caused by dogs.

41. For adult and elderly households, being in a dwelling on a deck was as good as being in a dwelling at ground level. The window link between the deck and the kitchen/dining area of flats at deck level did not interfere with tenants' privacy.

42. While a quarter of the tenants with one flight of stairs between their flat and their front door at deck level liked the arrangement because it gave them extra privacy, a third disliked it. Generally these were the elderly who found it inconvenient or difficult to negotiate stairs every time the front door bell rang. The timber internal staircase used, also caused a minor noise problem in the flats below.

43. Sixty per cent of those living in flats said they heard noises from the decks—half of which bothered them. The main complaint was of people walking along the decks especially at night. This was far worse for those dwellings between two decks.

Gardens and back alleys

44. In their previous homes only about a fifth of the households had a garden. On the new estate gardens of 37m² contented all tenants and those of about 28m² contented three-quarters. Any gardens much smaller than 28m² were unsatisfactory for the majority of tenants. However, two-fifths complained of lack of privacy in the garden and nearly three-quarters were dissatisfied with the open fencing.

45. The back alleyways were not considered by most mothers to be suitable for toddlers' play and two-fifths said they were dirty.

Noise

46. Noise from outside the dwelling disturbed more tenants than noise from one dwelling to another, with noise from traffic and children playing proving to be the most troublesome. The traffic noise was generated within the estate and complaints mainly concerned car doors slamming etc. on the large surface car park, often late at night.

Traffic

47. Car ownership was low and generally restricted to adult and family households. At the time of the survey there was enough parking provision close to houses. The large surface car park, which was close to elderly persons' dwellings was not widely used but the noise nuisance it generated was out of all proportion to its use.

Refuse disposal

48. Half those who had individual disposal facilities complained that either the bin store was too small or that it allowed smells to enter the dwelling. In comparison only 5% considered the refuse chutes to be unsatisfactory.

49. Although there were only about 60 women under 45 in the flats, half of them used the incinerators for disposing of sanitary towels. In houses most of the 100 younger women disposed of internal protection or soluble towels down the w.c. or put non-soluble towels in the refuse sack. However, 21 preferred to burn them—11 used an incinerator in the flats and 10 resorted to taking them off the estate usually to a relative's house with an open fire.

Clothes drying

50. In dry weather house gardens were extensively used for drying washing. In all other cases tenants dried washing in areas of the dwelling which were already heated. The drying cabinets installed in flats were not used for drying because they were said to be expensive and not necessary. Communal drying areas were not used either, mainly because of difficulties with access.

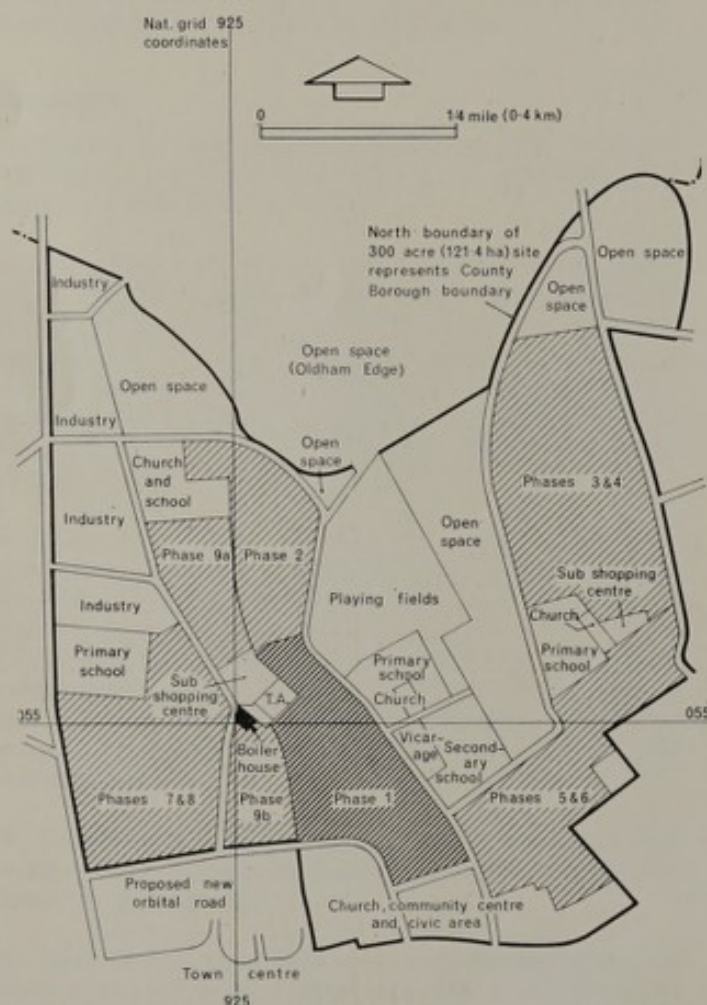
3 General background

3a The site

The area redevelopment plan

51. A broad outline of Max Lock and Partners' proposals for the comprehensive renewal of the total 120 hectare site to the north of Oldham's town centre, is shown in Figure 1.

52. In conjunction with Max Lock and Partners the Research and Development Group submitted a report proposing that the entire 120 hectare site should be heated by means of a district heating scheme (the location of the coal-fired boiler house has, for convenience, been shown in Figure 1). This proposal was accepted by the Council as were two other amendments which affected the Phase I brief. The first of these adjusted the boundaries of the site (shown in Figure 2) whilst the second, made as a result of the Group's social survey which showed that many people wished to continue living in the area,² increased the planned density from 209 bedspaces per hectare to over 247.



1 Max Lock and Partners' comprehensive plan housing areas shown hatched.

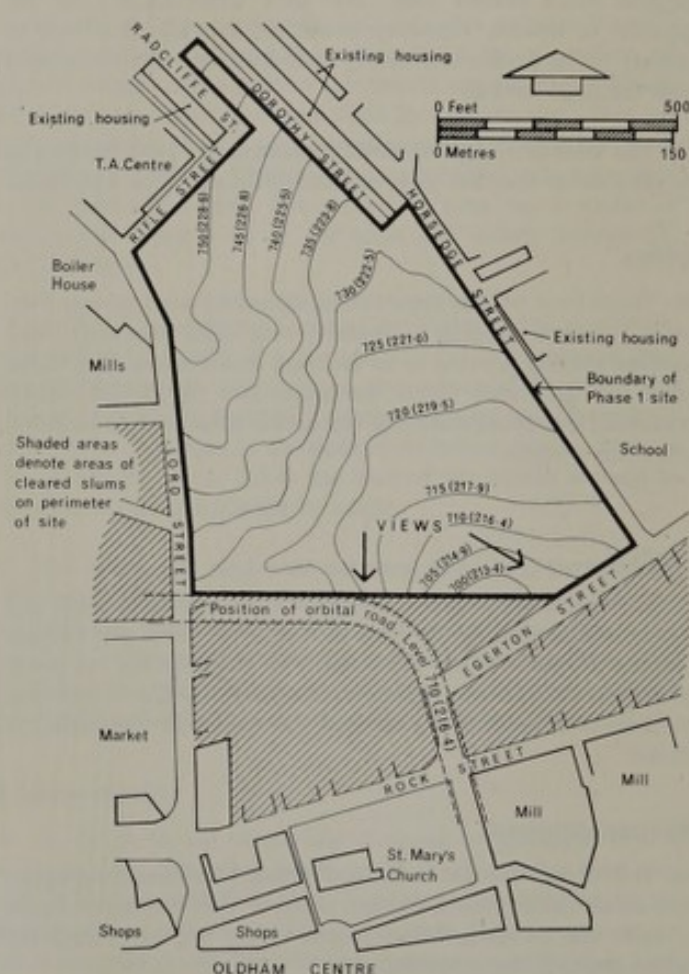
² MINISTRY OF HOUSING AND LOCAL GOVERNMENT Design Bulletin 19 *Living in a slum: a study of St Mary's Oldham* HMSO 1970

The existing site

53. The 6.96 hectares (net) which comprise the area of the Phase I site are close to the town centre and are over 215 metres above sea level. With a 12 metre fall in ground level from north-west to south-east, the site is very exposed and although the prevailing wind is south-west there are frequent cold north-east winds off the moors. These winds help to account for the fact that the average number of degree days for Oldham is 4 250 a year.* In addition to this the average annual rainfall is also high at 1 016 metres over an average of 225 rain days.†

54. Figure 2 shows other relevant features of the site once it had been cleared of the existing slum dwellings.

55. Because the site was part of a much larger area of redevelopment provision had to be made for a major pedestrian route from the later phases of development to the north. This route was to run through the site from Radcliffe Street in the north to the town centre. At its southern end the route was to take advantage of the



proposed level for the orbital road and cross it at high level when the total redevelopment was completed. It was also intended that the western boundary road (Lord Street) would eventually be closed once phase 9B (Figure 1) was completed so therefore any roads into the site from this side were to be kept as short as possible.

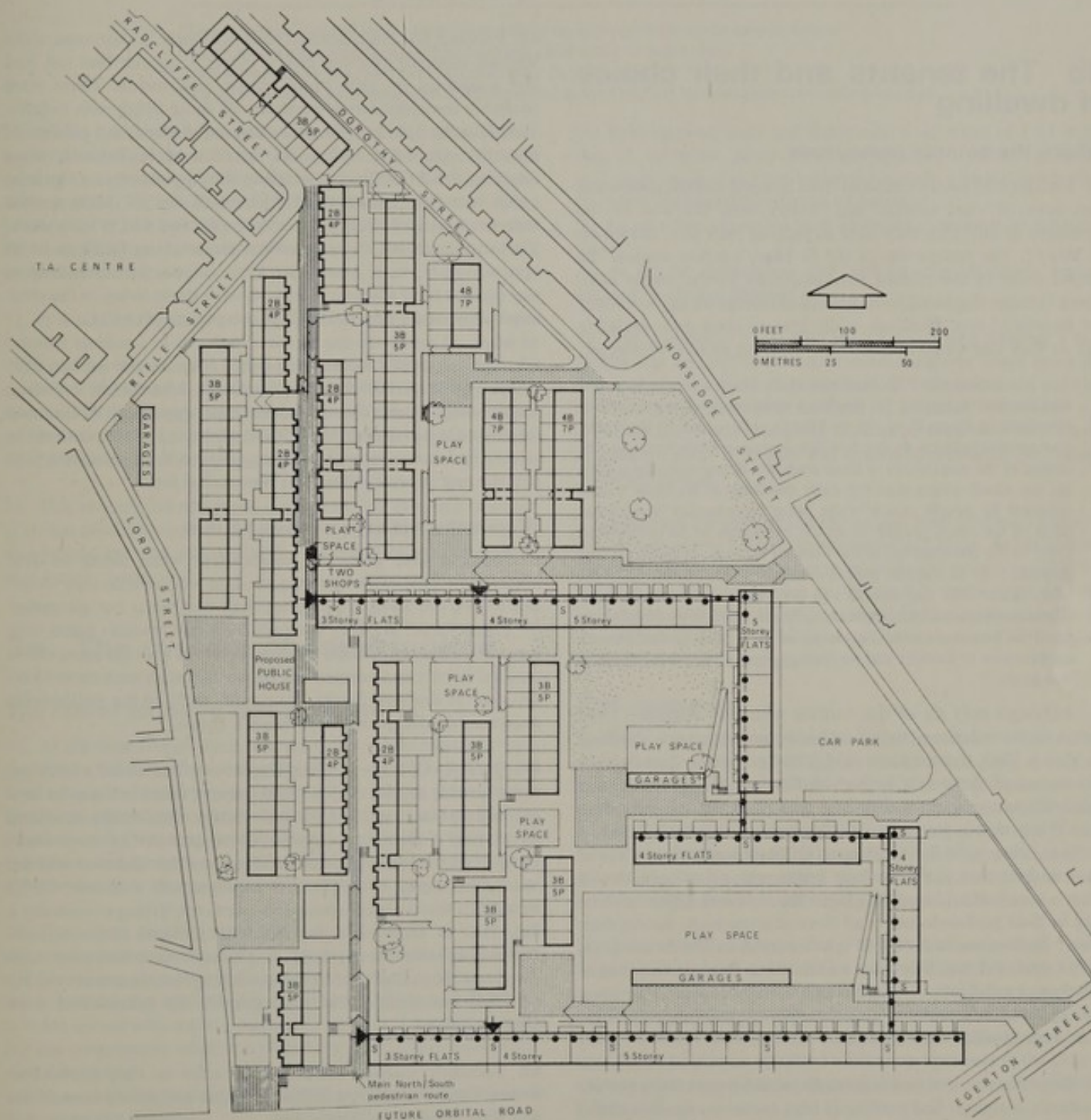
The completed scheme

56. The 338 flats and 182 two-storey houses which made up the completed scheme gave an overall density of 272 bedspaces per hectare, at a design average of 3.42 persons per dwelling. The

flats were in five blocks which varied in height from three to five-storey. Generally these were positioned to the south-east of the site (see Figure 3).

57. Following the sociological requirements of the brief the largest dwellings, for families with children, were in two-storey houses with private gardens. These houses were arranged in terraces following the contours of the site in order to give economic crane runs during construction.

58. By placing some blocks across the contours the natural slope of the ground was used to provide access to dwellings by covered



3 Site plan of finished scheme.

Throughout this bulletin the normal method of abbreviating the titles of plan types has been used whereby B=bedroom and P=people. Thus a two-bedroomed dwelling suitable for four people is shown as 2B4P.

On this particular plan only the houses are denoted by this method.

The dotted line indicates pedestrian circulation within the flat complex at deck level. Arrows show point of horizontal access onto decks from ground level. While the letters show the position of public staircases giving vertical access from ground to deck.

As is the case with many new estates the public house has not yet been built.

decks running out to ground level in the direction of the main pedestrian route. All front doors were thus accessible from ground level without the need to use stairs.

59. As all house terraces ran north-south the living rooms, which all faced onto back gardens, received sunlight from either east or west. The minimum distance between the fronts of houses was about 9 metres but this only applied to the two-bedroom four-person type lining the main pedestrian route which had no bedroom at the front. The minimum distance between backs of houses was about 14 metres.

3b The tenants and their choice of dwelling

Where the tenants came from

60. Background details collected from housing records gave some idea both of what tenants' last homes were like and of the standards of reference they used in judging their new homes on St Mary's. The occupation of the St Mary's estate marked the second stage of the phased redevelopment of the whole area. Those families displaced from the old dwellings on the site could not be offered new dwellings in the area as none were available and so they had to be rehoused on outlying estates.³ However,

'... in letting the 520 dwellings at St Mary's it was intended that families occupying the dwellings which were to be demolished elsewhere in Phase II of the St Mary's area would, in the main, find accommodation in the new development. Unfortunately, the timing of the acquisition of these areas for demolition was a little bit out which meant that the early dwellings at St Mary's were tenanted by people concurrently being dispossessed from other parts of the town, notably from the properties to be demolished prior to the construction of the Internal By-pass. However, it was possible later to transfer people from the Fisher Street CPO (St Mary's) and offer opportunities to these tenants, who had originally been displaced from St Mary's, to return if they wished to do so. This was negotiated by means of the ordinary facilities of applications to transfer and no encouragement by way of circulars was given.'⁴

61. Although only six of the families who had originally lived within the boundaries of the estate had returned to a new dwelling by March 1969, most tenants (61%) had previously lived within 800 metres of the site, a further quarter had lived between 800 and 1 600 metres away and the rest had lived further away than this. When asked, just over half the tenants regarded their last home as being in the St Mary's area. Of those housewives who did not consider that their previous home was actually in the St Mary's area half said that they knew the area well either because they or their husbands had lived there at some stage during their life or because some friend or relative used to live in the area. A few also said that they went to school or work in the area at one time or habitually passed through it on their way to the town centre. Thus only about a quarter of the tenants did not seem to be very familiar with the area.

62. Sixty-five per cent had previously rented homes from private landlords, a quarter had previously been owner-occupiers and the remaining few had either been council tenants, had lived with in-laws, or had been lodgers.

63. Just over half (52%) had lived in houses which had been demolished under clearance orders. A quarter of the tenants (26%) came from the waiting list, and somewhat under a quarter (17%) required rehousing from the private sector for reasons other than slum clearance such as voluntary closure, house purchase, road improvement demolition, and emergency cases (e.g. evicted families) given committee priority. 3% were transfer cases from other local authority dwellings.

64. Only 13% of the tenants had previously enjoyed a fairly high material standard of housing. The majority (72%) had previously lived in dwellings which lacked several basic amenities and the remainder had lived in dwellings which afforded a very low standard of housing.

65. Previous housing costs had been extremely low for most of the tenants, especially for the elderly. Over a quarter had not had any outgoings on rent or mortgage repayments. These were probably the older owner-occupiers or those living with in-laws. Two-fifths had paid under £1 a week and the rest had paid more than this. Only 5% had paid over £2 a week. Tenants, when applying for a dwelling, were given the opportunity to say how much rent they could afford and a half did so. Most quoted between £2 and £3 (32%) or between £3 and £4 (38%) a week. Rents and rates on the new scheme ranged from £1.50 to £4.50 approximately, so it seems that most tenants were prepared to pay current local authority rents, as were those living in the slum areas of St Mary's in 1963.⁵ (See also paragraph 117.)

66. Half the elderly households had a total income of less than £10 per week and half the adult and family households, including a wife's wages where she was working, (see paragraph 471) earned less than £25 per week gross. Almost all were, or in the case of the elderly had been, manual workers—over a third in skilled jobs and the rest in semi-skilled and non-skilled jobs.

Where the tenants wanted to live

67. Tenants were given the opportunity when filling in their application form before moving, to state which estate they would like to live on. Some chose more than one estate but altogether 68% mentioned St Mary's mainly as a first choice. Some time later the Housing Visitor made a personal visit to prospective tenants' homes and pointed out where vacancies were most likely to occur in the near future. Eventually 83% of the respondents requested dwellings on the St Mary's Estate.

68. Recently Oldham Housing Department has added a question to its housing application form asking applicants to state the type of dwelling they would prefer and whether they would be willing to consider a flat or maisonette. Three-quarters of those interviewed had had the opportunity to answer this question and the results are shown in Table 1. Somewhat over a quarter (29%) stated that they wanted a house and were not willing to consider a flat. Half of these were families with children under sixteen. Three-quarters of those asking for a house were in fact given such dwellings. The remainder of those wanting houses, mainly elderly or adult households, had little priority for houses and were allocated flats.

69. Two-fifths stated a preference for a flat on their application forms. These were almost exclusively adult and elderly households and their choice was largely met.

70. Those who expressed a willingness to consider either a flat or a house amounted to almost a third (32%) and were drawn from all types of households. The majority of these had no strong preferences, but a quarter (8% of the total), although willing to consider a flat, thought they would still prefer a house.

³ MINISTRY OF HOUSING AND LOCAL GOVERNMENT Design Bulletin 20 *Moving out of a slum: a study of people moving from St Mary's, Oldham* HMSO 1970 p 1

⁴ From a note by Oldham's Housing Manager.

⁵ MHLG Design Bulletin 20 *Moving out of a slum* 1970 pp 22-24

Table 1

Preference	Family* households		Adult* households		Elderly* households		Total	
	No.	%	No.	%	No.	%	No.	%
Prefer a house, not willing to consider a flat	40	47.5	26	24.0	14	16.9	80	29.0
Prefer a house, but willing to consider a flat	13	15.4	3	3.2	7	8.5	23	8.3
No preference, willing to consider a flat	22	26.1	27	24.8	15	18.1	64	23.2
Prefer a flat	9	11.0	53	48.0	47	56.5	109	39.5
Total	84	100.0	109	100.0	83	100.0	276	100.0

* Unless otherwise stated the definition of household types living on the estate were as follows:

Family households were those with at least one child under 16 years old

Adult households were those with no child under 16 years old

Elderly households were those with no children and at least half the members were over retirement age

71. It was the family households who expressed greatest preference for a house. Almost half said they would only consider moving to a house compared with a quarter of the adults and under a fifth (17%) of the elderly. 40% of the families were willing to consider a flat but only 11% would positively prefer a flat. However, among the adults and elderly, half actually stated a preference for a flat.

72. It is possible to compare these choices with the wishes of the original residents of St Mary's whose answers were recorded in 1963 and are documented in *Living in a slum*.² Then the majority expressed a desire for a house. The difference in choice made then and by those now living in the new St Mary's may reflect an increase in the knowledge about and the acceptance of flats, due to a greater number being built in the area.

73. This enquiry did not probe deeply into the meaning or range of choice offered to tenants or into the extent to which their choice was limited by what was available, nor can it assess the *strength* of a stated choice.

3c The system of construction

The reason for using 12M Jespersen

74. At the time design work was started the slum clearance programme in this and other areas was increasing and there appeared to be a need for building methods that offered higher productivity. One such method was system building so the Ministry, in conjunction with Ove Arup and Partners, established a number of aims that were thought to be desirable if a system was to be suitable for the slum clearance and urban renewal programme.

75. These aims suggested that a system should:

- (a) use factory-made precast concrete walls and floors to reduce site labour requirements and speed up construction time;
- (b) be suitable for relatively small and sloping sites and therefore suitable for use with mobile, medium-weight (2.51 tonnes) cranes;
- (c) use components which combined standardisation with planning flexibility;
- (d) be suitable for one or two-storey houses as well as low-rise flats up to five storeys;
- (e) be able to provide for vertical access to dwellings a floor above deck level;
- (f) include a reasonable range of external gables, infill cladding panels, internal partitions and floor finishes;
- (g) have a high degree of accuracy on walls and floors obviating wet trades such as plastering and screeds;

- (h) have exposed walls and floors with a 'U' value of 1.14 W/m² deg. C. or better, party floors giving grade 1 sound insulation and party walls that gave better than grade 1 sound insulation;
- (i) allow for alternative forms of heating;
- (j) be no more expensive than alternative methods of construction;
- (k) be to the dimensions and performance standards recommended in Design Bulletin 8.⁴

76. The possibility of starting from scratch and creating a new system was rejected in favour of developing one based upon the considerable experience already gained by sponsors of existing systems. Consequently a number of selected firms were approached and it was eventually decided to work with John Laing and Son Limited. This firm was already interested in the Danish Jespersen system.

77. Although the aims of the Danes had been similar to those of the Ministry some further development by Laings, Arups and the Ministry was necessary in order to make the system suitable for building two-storey houses (including link bedrooms) and for building multi-storey blocks having wide recessed access decks and two-level dwellings with a private staircase. The resultant system was 12M Jespersen.*

12M Jespersen

78. The structure was based on factory-made load-bearing unreinforced walls 7 in (178 mm) thick which gave a finished floor-to-ceiling height of 7 ft 6 in (2.286m).† Lengths of wall units were 4 ft (1.219m) or 8 ft (2.438m). Openings which varied in size from pipe holes to an effective opening of 6 ft by 6 ft 8 ins (1.829m by 2.032m) (used to form decks, see Figure 25) could be cast into the wall components. Gable walls had a standard inner load-bearing leaf with a factory-applied insulation and finish.

79. Reinforced floors were 7 in (178mm) thick and 4 ft (1.219m) wide with a length which varied in multiples of 1 ft (0.305m) from 4 ft (1.219m) to 18 ft (5.486m). These could also have holes cast in them to form duct openings etc. by the use of inserts placed in the standard moulds. Such components, whether floor or wall units, were known as standard variant components if the inserts did not affect standard casting procedure, or special components if they did.

⁴ MINISTRY OF HOUSING AND LOCAL GOVERNMENT Design Bulletin 8 *Dimensions and components for housing with special reference to industrialised building* HMSO 1963 Out of print

* John Laing and Son Limited say that since this contract has been completed they have continued to develop the 12M Jespersen system to meet changing needs.

† A brief description of the method of erecting these structural components is given in Appendix B.

Major disciplines of the system

80. The following were the major structural design disciplines of 12M Jespersen. They have been given in broad outline to enable the reader to grasp the implications of some design decisions referred to in the text:

- (a) all dwellings had to be designed on a 4 ft by 1 ft (1·219m by 0·305m) grid;
- (b) each floor unit had to be supported at each end by a wall unit;
- (c) all structural walls once started had to be carried down through the complete height of the building;
- (d) the same size wall components had to be used over each other for the whole height of the wall;
- (e) large openings such as doorways etc. could only be cast into 8 ft (2·438m) wide wall components;
- (f) each block of dwellings had to be braced with short additional structural walls positioned at right angles to the main structural walls;
- (g) the maximum wall unit cantilever was 5 ft (1·524m).

81. In addition it was found that there were financial disciplines as follows:

- (a) houses with concrete floors and roofs tended to be more costly than those constructed in a traditional manner. Therefore schemes consisting wholly of houses were uneconomic in this system;
- (b) the precast gable walls were much more expensive than traditional construction. It was therefore necessary to design blocks of dwellings as long as possible in order to keep the number of gable walls to a minimum;
- (c) the most economical spans of roof and floor units were 16 ft (4·877m), 17 ft (5·181m) and the maximum 18 ft (5·486m). Shorter span units cost more per square foot and necessitated the use of additional supporting walls thus adding to the cost of the structure;
- (d) the most economical block was a straight terrace, but a stagger in plan of 4 ft (1·219m), 8 ft (2·438m) and possibly 12 ft (3·658m) was found to be cheaper than two separate blocks. However, such staggers presented special structural and cladding problems at the re-entrant corners;
- (e) vertical steps in a block were expensive. However, while on gently sloping sites it was found cheaper to provide a level base-slab than to step the block, on steeply sloping sites such as at Oldham it was found cheaper to make dwellings follow the contours of the site;
- (f) standard variant structural components were more expensive than standards, and specials were more expensive still. Therefore plans of the dwellings were standardised as much as possible especially in relation to spans and areas in which there were services i.e. pipe holes through slabs etc. for it was more economical to have one component with a number of holes in it than several with one in each.

4 The dwellings

4a General studies

4a(i) A comparison between brief and completed scheme

82. Figure 4 shows the division of dwellings into flat and house types and compares this to the requirements suggested by the social surveys.

83. On the whole the brief was adhered to although fewer one-person dwellings and more two-person dwellings than required were provided. This departure from the brief was unfortunate only in those cases where this created the small enclosed kitchen without a rooflight.

84. The main failure to meet the brief was in regard to the arrangement of rooms within dwellings—the result of using

4

		REQUIREMENTS OF BRIEF FROM SOCIOLOGICAL SURVEY								DWELLINGS ACTUALLY BUILT				DWELLINGS APPRAISED					
Bedspaces	Dwelling type	% of each type in scheme	Maximum percentage of dwelling types to be built in these forms							% of each type in scheme	Number of dwelling types built in these forms				Total of each type appraised	Number of dwellings appraised			
			A	B	C	D	E	F	G		A	C	D	G		A	C	D	G
1		8	100	100	100	50	50	—	—	10	15	38	—	—	39		28	—	—
		17	100	100	100	50	50	—	—	0									
2		13	100	100	100	50	50	—	—	17	15	76	—	—	71	15	56	—	—
		0								7	24	—	11	—	28	18	—	10	—
3		19	100	100	100	75	25	—	—	19	—	97	—	—	67	—	67	—	—
4		9	100	—	100	75	—	100	100	19	24	—	14	60	76	17	—	10	49
		0								1	—	—	4	—	3	—	—	3	—
		9	100	—	100	75	—	100	100	0									
5		17	—	—	—	—	—	25	100	0									
		0								21	—	—	19	90	82	—	—	14	68
6		0								1	—	—	1	5	6	—	—	1	5
7		8	—	—	—	—	—	25	100	0									
		0								5	—	—	—	25	20	—	—	—	20
9		0								<1	—	—	—	2	1	—	—	—	1



Kitchen



Double Bed



Dining



Twin Beds



Kitchen/Dining



Single Bed



Living



Bedsitting room



Dining/Living



Sub-divisible bedroom

A Ground floor flat

B Flat with direct lift access
or walk to ground

C Flat with direct access to a
deck which has either a
lift or walk to ground

D As C but with one flight of
stairs to deck or ground

E Flat with two flights of
stairs to ground

F Ground floor maisonette

G House



5 Link-bedroom in a 2B4P house.

narrow-fronted houses. Generally this meant that no separate dining area was provided, a failure which, in the event, was not regretted as the kitchen/dining areas provided proved very popular.

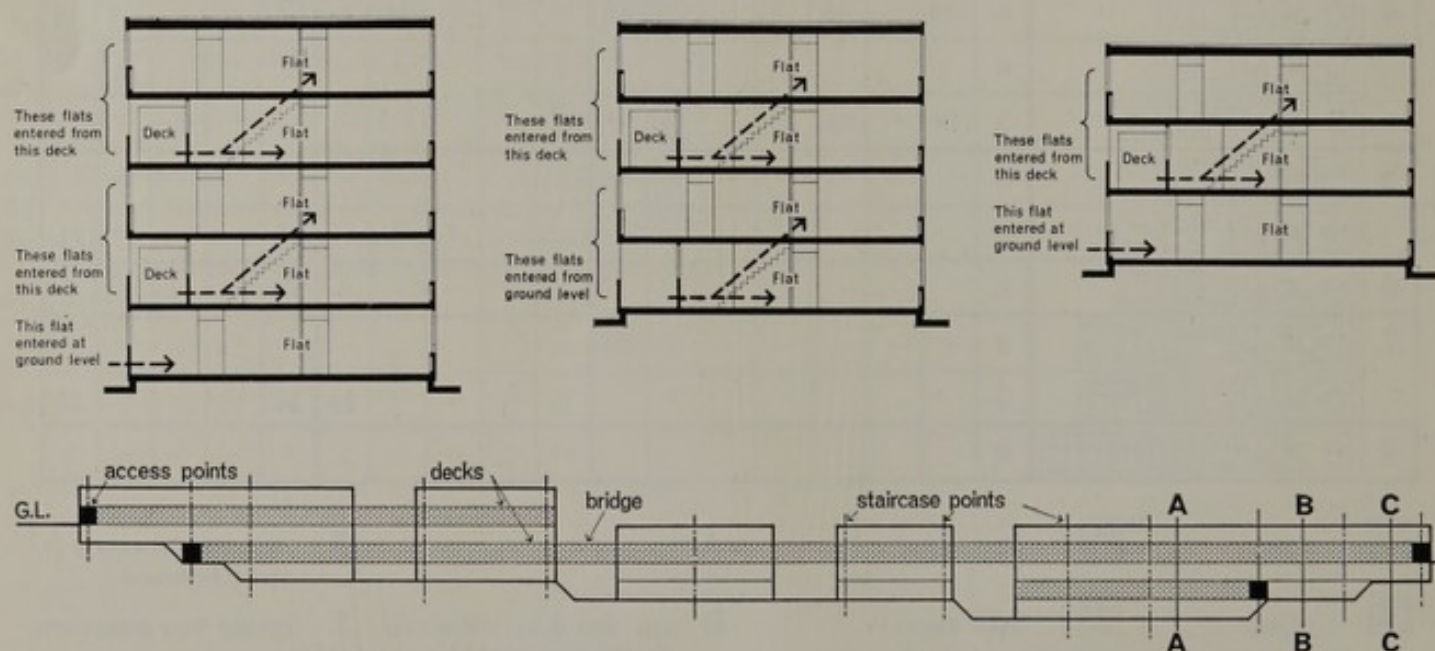
85. It will also be seen from Appendix C that some dwellings are below the Parker Morris space standards which, at the time, were not mandatory. This failure to meet one of the requirements of the brief, although partly the result of a later decision to move the concrete cladding six inches (152mm) in from the face of the structure, was, in the case of the flats, mainly brought about by the difficulty of reconciling the modular planning discipline with the need to mix various dwelling types within one block of simple external shape.

4a(ii) The arrangement of dwellings

86. The two-storey houses, of which there are three standard types (2B4P, 3B5P and 4B7P), are, for reasons of economy, designed to be contained within one structural bay.* These bays are either 18 ft (5.486m) (2B4P and 4B7P) or 16 ft wide (4.877m) (3B5P). Depth of house plans is 24 ft (7.315m) for the 2B4P and 32 ft (9.754m) for the remaining two types.

87. It was realised that it would not be possible to design flats the same way (i.e. each within one structural bay) if the desired social mix was to be achieved and the smaller old-persons' dwellings were to be interspersed within each block with other, larger, dwellings.† A standard bay width of 13 ft (3.962m) was finally selected as it was found (when used with a block depth of 32 ft (9.754m)) that this gave the most suitable compromise between the social requirements and the economic requirement for a simple block shape.

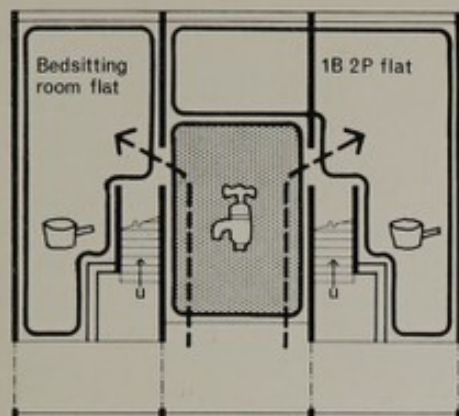
88. The blocks of flats are of three, four or five storeys. Decks are used which give access to flats on the same level and (via private staircases) to those on the floor above (Figure 6). In the four-storey block, where there is a deck at second floor only, the



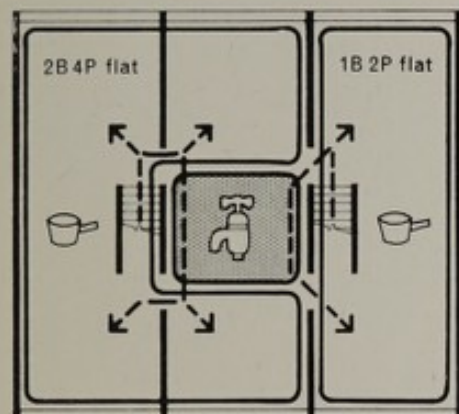
6 Diagrammatic elevation of composite blocks and sections at three, four and five storeys.

* Each of the standard types of house has a 'link' version in which an additional double bedroom is provided over an adjacent public footway (Figure 5). There are 11 of these houses.

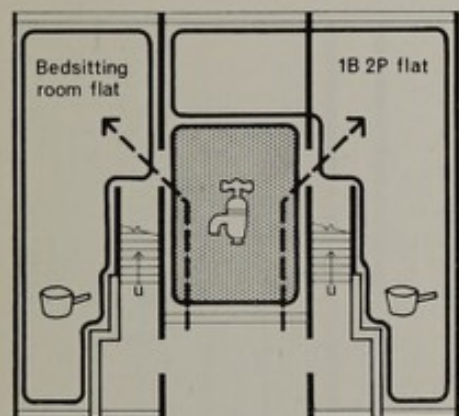
† Other studies and the experience of the elderly living in houses at Oldham (see paragraph 13) suggest that old people are happier not living in close proximity to children.



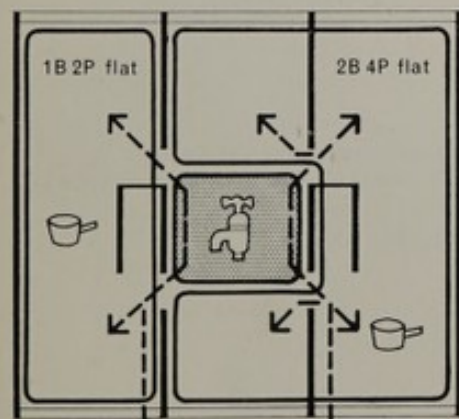
7 Plan at deck level.



8 Plan at intermediate level (staircase flats).



9 Plan at ground level on four-storey blocks.



10 Plan at ground level in three and five-storey blocks.

first-floor flats have access via private staircases from ground level. All ground-floor flats have direct access from ground level. The 'up and down from deck' solution was rejected because of the planning drawback for first-floor dwellings and problems of structural stability introduced by having two staircases.

89. The basic plan arrangement at every floor level uses three of the 13 ft x 32 ft (3.962m x 9.754m) structural bays to form two flats; the centre bay containing an internal bathroom for each flat. At deck level—due to the fact that the deck is contained within the framework of the block—less usable floor area was available and the two flats thus formed are small dwellings—generally a bedsitting room and a 1B2P flat. Each of these flats is entered at the centre bay and each is wrapped round an entrance lobby and staircase leading to the flat above (Figure 7). It would have probably made planning easier if both staircases had been placed in the centre bay, but the architects were uncertain at the time whether or not this was structurally advisable. It was later apparent that this would have been feasible.




90. At levels immediately above decks or above the ground in four-storey blocks (i.e. those with access by private staircase from below) the whole width of the block is used and the three-bay unit contains either two 2B3P or one 2B4P and one 1B2P flats (Figure 8). Such flats are often referred to in the text as 'staircase flats'.

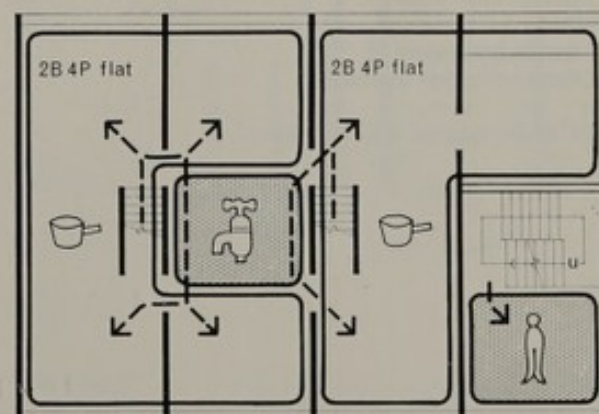
91. The ground-floor plan in four-storey blocks is identical with the access-deck plan except that the structural bays on either side of the entrance are extended out to the face of the building (Figure 9).

92. In three and five-storey blocks, the ground floor contains no access to flats above, so that all three structural bays are extended to give larger dwellings—a 1B2P and 2B4P flat (Figure 10).

93. With the exception of those at ground-floor level, all the basic three-bay flat arrangements are augmented when they are next to public staircases by additional bedrooms behind the staircase. Tenants' clothes-drying areas are also provided within this bay at all but deck and ground levels (Figure 11).

KEY

-  Denotes area in which bathrooms are located
-  Denotes area in which kitchens are located
-  Denotes drying area



11 Plan at intermediate level showing use of extra space created by staircase bay. Compare with Figure 8.

General notes

94. The furniture layouts shown on the following plans are not those proposed by the designer but are composite layouts evolved from studying the tenants' own furniture arrangements.

95. Some flats at intermediate levels and/or those with an additional bedroom in the structural 'public staircase' bay (see Figure 11) have either an emergency smoke lobby between the additional bedroom and public staircase or else have a different entrance arrangement on the floor below (depending on whether the flat is entered from ground or deck). Because of this areas have been approximated to avoid redrawing plans which are in all other respects equal. Accurate areas of these dwellings and the numbers involved are given in Appendix C.

96. Attention is drawn to the fact that the scheme was built before Parker Morris areas and standards were made mandatory.^{5,6 and 7}

⁵ MINISTRY OF HOUSING AND LOCAL GOVERNMENT *Homes for today and tomorrow* (Parker Morris Report) HMSO 1961

⁶ MINISTRY OF HOUSING AND LOCAL GOVERNMENT Circular 1/68 (Welsh Office 1/68) *Metricalisation of housebuilding* HMSO 1968 pp 9-10

⁷ MINISTRY OF HOUSING AND LOCAL GOVERNMENT Circular 82/69 (Welsh Office 84/69) *Housing standards and costs: accommodation specially designed for old people* HMSO 1969 p 4

0 5 10ft
0 1 2 3m Scale for all type plans

2B4P house

Area: 79.8m²* including storage

Mandatory area: 79.0m² including storage

Storage area: 5.6m²*

Mandatory storage area: 4.5m²

Number built: 60

Number of tenants interviewed: 49

Number of furniture layouts recorded: 29

In addition to the above, five further dwellings of this basic type were built with a link-bedroom between two blocks. This bedroom, which was entered by a door in the flank wall at the head of the stairs, changed the house type into a 3B6P dwelling.

Area: 93.3m²* including storage

Mandatory area: 97.0m² including storage

Storage area: 5.6m²*

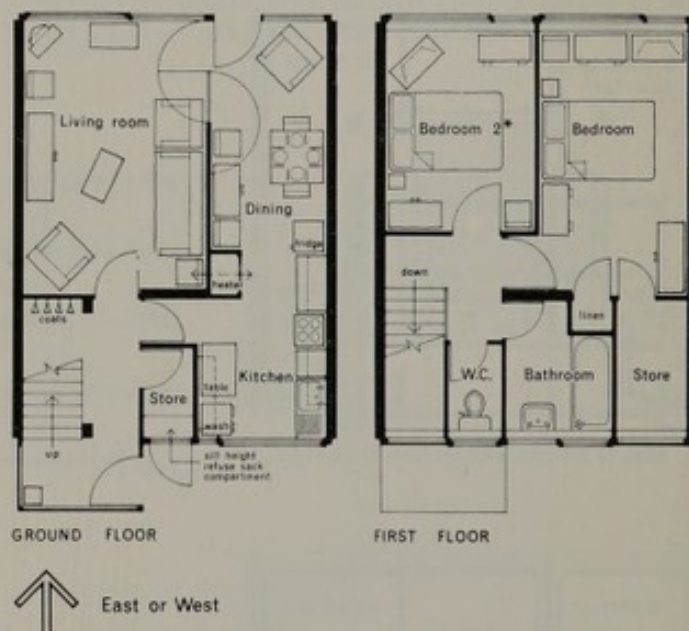
Mandatory storage area: 4.5m²

Number built: 5

Number of tenants interviewed: 5

Number of furniture layouts recorded: 4

*Includes 1.67m² for external shed (not shown).



*Bedroom 2

In over half (15) of the layouts surveyed this was used as a single bedroom—but no common pattern of furniture arrangement was discernible.

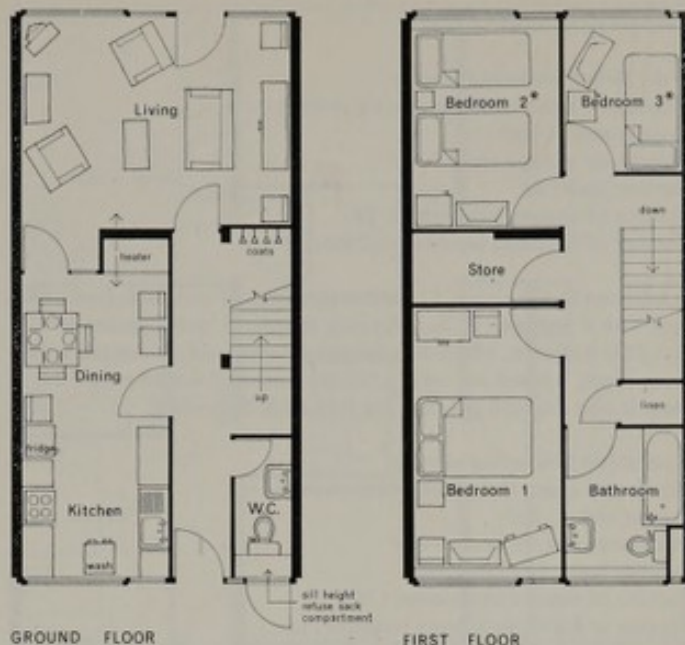
3B5P house

Area: 91.5m²* including storage
Mandatory area: 89.5m² including storage
Storage area: 4.8m²
Mandatory storage area: 4.5m²
Number built: 90
Number of tenants interviewed: 68
Number of furniture layouts recorded: 30

In addition to the above, four further dwellings of this basic type were built with a link-bedroom between two blocks. This bedroom, which was entered by a door in the flank wall at the head of the stairs, changed the house type into a 4B7P dwelling.

Area: 104.8m²* including storage
Mandatory area: 114.5m² including storage
Storage area: 4.8m²
Mandatory storage area: 6.5m²
Number built: 4
Number of tenants interviewed: 3
Number of furniture layouts recorded: 2

*Includes 1.67m² for external shed (not shown).



GROUND FLOOR

FIRST FLOOR



East or West

*Bedroom 2

In a third (nine) of the layouts surveyed this was used as a single bedroom.

*Bedroom 3

In almost a third (eight) of the layouts surveyed a better arrangement of furniture was achieved by placing the bed alongside the window.

4B7P house

Area: 103.2m²* including storage
Mandatory area**: 114.5m² including storage
Storage area: 4.7m²
Mandatory storage area: 6.5m²
Number built: 21
Number of tenants interviewed: 17
Number of furniture layouts recorded: 12

In addition to the above, two further dwellings of this basic type were built with a link-bedroom between two blocks. This bedroom, which was entered by a door in the flank wall at the head of the stairs, changed the house type into a 5B9P dwelling.

Area: 116.6m²* including storage
Storage area: 4.7m²
Number built: 2
Number of tenants interviewed: 1
Number of furniture layouts recorded: 2
(No mandatory standards exist for this size of dwelling.)

*Includes 1.67m² for external shed (not shown).

**Homes for today and tomorrow did not recommend areas for this size of dwelling.



GROUND FLOOR

FIRST FLOOR



East or West

*Bedroom 2

In almost half (six) of the layouts surveyed (including the three mentioned below) this was used as a single bedroom.

*Bedroom 3

In three of the 14 layouts surveyed this was used as a single bedroom.

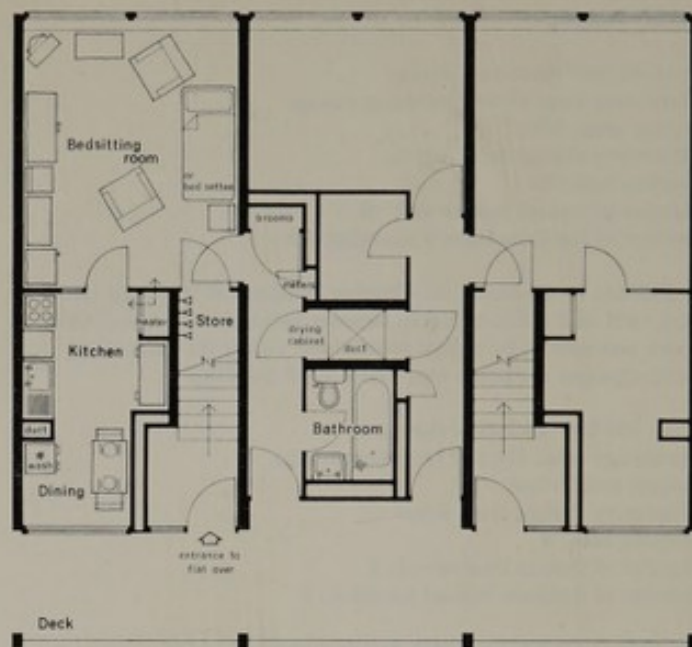
Bedsitting room flat

Area: 36.8m² including storage
Mandatory area: 32.5m² including storage
Storage area: 1.2m²
Mandatory storage area: 2.5m²
Number built: 38
Number of tenants interviewed: 28
Number of furniture layouts recorded: 20

In addition to the above, 12 further dwellings of this basic type were built with a bedroom in the adjoining structural 'public staircase' bay. This bedroom, which was entered by means of a door from the living room, opened out onto a private balcony 3.8m long by 1.0m deep. It also changed the flat type into a 1B2P dwelling.

Area: 49.8m² including storage
Mandatory area: 47.5m² including storage
Storage area: 1.2m²
Mandatory storage area: 3.0m²
Number built: 19 (7 handed)
Number of tenants interviewed: 16
Number of furniture layouts recorded: 15

Location: Deck levels.

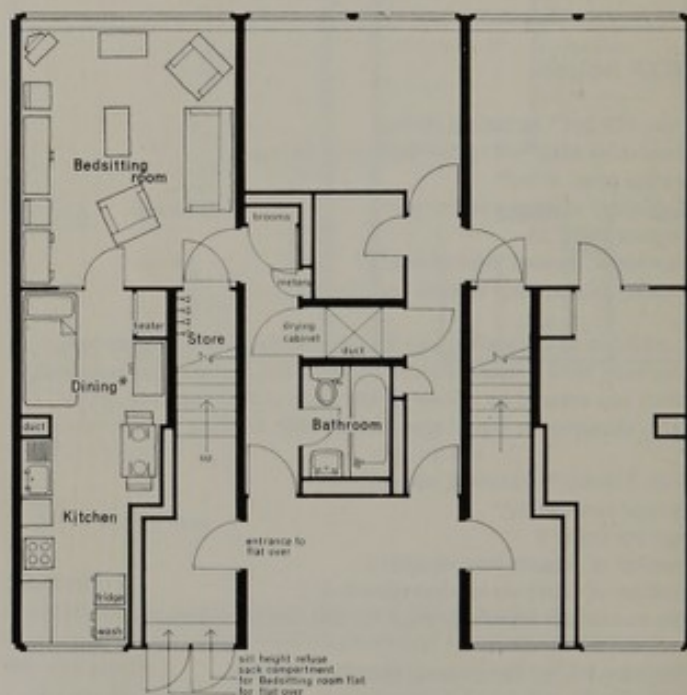


South or East

*Washing machine etc. The amount of extra equipment in these dwellings was generally low. (See paragraph 176.)

Bedsitting room flat

Area: 41.8m² including storage
Mandatory area: 32.5m² including storage
Storage area: 1.2m²
Mandatory storage area: 2.5m²
Number built: 15
Number of tenants interviewed: 11
Number of furniture layouts recorded: 10
Location: Ground floor in four storey.



South or East

*Dining area

Most surveys of these dwellings showed that tenants preferred to place their bed in this area rather than the bedsitting room proper; consequently the kitchen becomes somewhat crowded when the tenant has extra equipment. (But see paragraph 170.)

1B2P flat

Area: 49.5m² including storage
 Mandatory area: 47.5m² including storage
 Storage area: 2.8m²
 Mandatory storage area: 3.0m²
 Number built: 24
 Number of tenants interviewed: 18
 Number of furniture layouts recorded: 9

Location: Ground floor in three or five storey.



South or East

*Kitchen

In two-thirds of the layouts surveyed this was also used as the dining area.

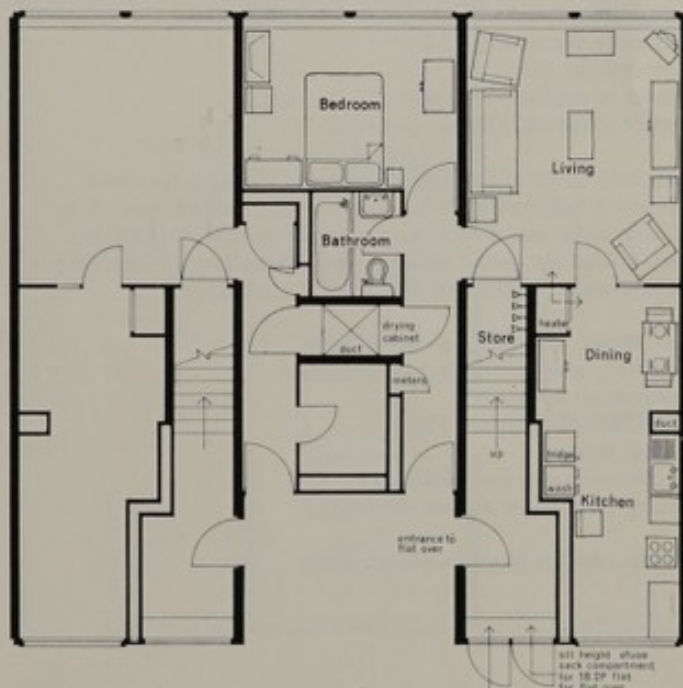
*Bedroom

In a third (three) of the layouts surveyed this was used as a single bedroom.

1B2P flat

Area: 52.8m² including storage
 Mandatory area: 47.5m² including storage
 Storage area: 0.8m²
 Mandatory storage area: 3.0m²
 Number built: 15
 Number of tenants interviewed: 15
 Number of furniture layouts recorded: 10

Location: Ground floor in four storey.

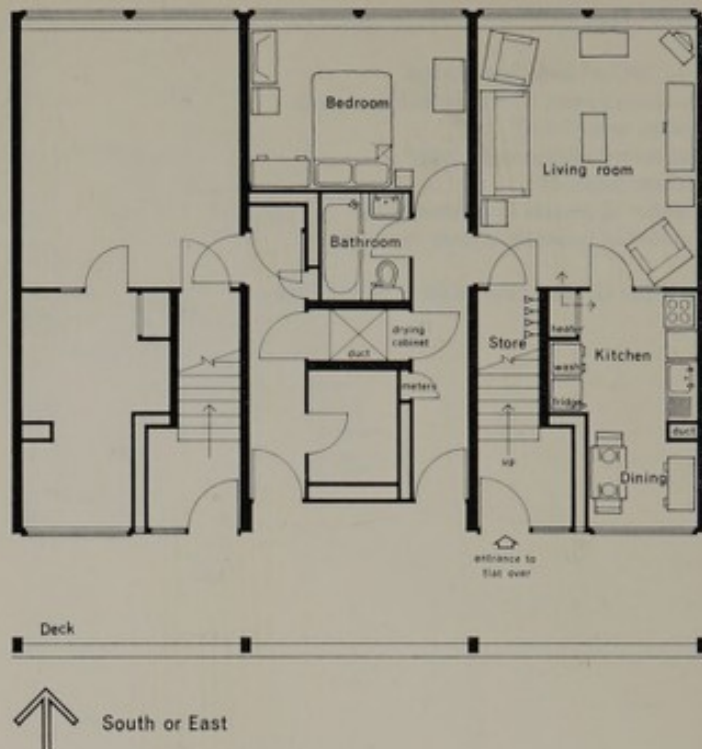


South or East

1B2P flat

Area: 47.8m² including storage
Mandatory area: 47.5m² including storage
Storage area: 0.8m²
Mandatory storage area: 3.0m²
Number built: 57 (7 handed)
Number of tenants interviewed: 40
Number of furniture layouts recorded: 15

Location: Deck levels.



1B2P flat

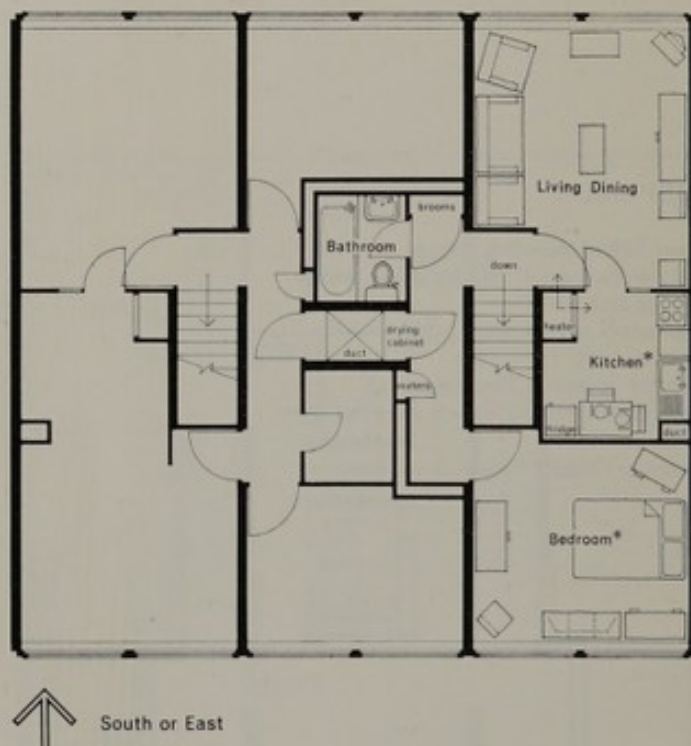
Entrance lobby on floor below not shown.

Area: 53.7m² including storage
Mandatory area: 47.5m² including storage
Storage area: 0.4m²
Mandatory storage area: 3.0m²
Number built: 11
Number of tenants interviewed: 10
Number of furniture layouts recorded: 7

In addition to the above, four dwellings of this basic type were built with a bedroom in the adjoining 'public staircase' bay. This bedroom which was entered by means of a door from the living room, opened out onto a private balcony 3.8m long by 1.0m deep. It also changed the flat type into a 2B4P dwelling.

Area: 66.3m² including storage
Mandatory area: 73.5m² including storage
Storage area: 0.4m²
Mandatory storage area: 3.5m²
Number built: 4
Number of tenants interviewed: 3
Number of furniture layouts recorded: 3

Location: All but ground and deck levels.



*Kitchen

In two-thirds of the layouts surveyed this was used as a dining area consequently the dining table is shown here.

*Bedroom

In two out of the seven layouts surveyed this was used as a single bedroom.

2B3P flat

Entrance lobby on floor below not shown.

All three structural bays on this type of plan were used to form two very similar 2B3P flats. In the following lists details of the left-hand variants (those shown with furniture layout etc.) are given first.

Area: 64.2m² and 65.1m² including storage

Mandatory area: 60.0m² including storage

Storage area: 0.4m² and NIL m²

Mandatory storage area: 3.0m²

Numbers built: 50 and 47

Number of tenants interviewed: 36 and 31

Number of furniture layouts recorded: 16 and 15

In addition to the above, 19 further dwellings of these basic types were built with a bedroom in the adjoining structural 'public staircase' bay. These bedrooms, which were entered by means of a door from the living room, opened out onto a private balcony 3.8m long by 1.0m deep. They also changed the flat types into 3B5P dwellings.

Area: 67.9m² and 68.8m² including storage

Mandatory area: 82.5m² including storage

Storage area: 0.4m² and NIL m²

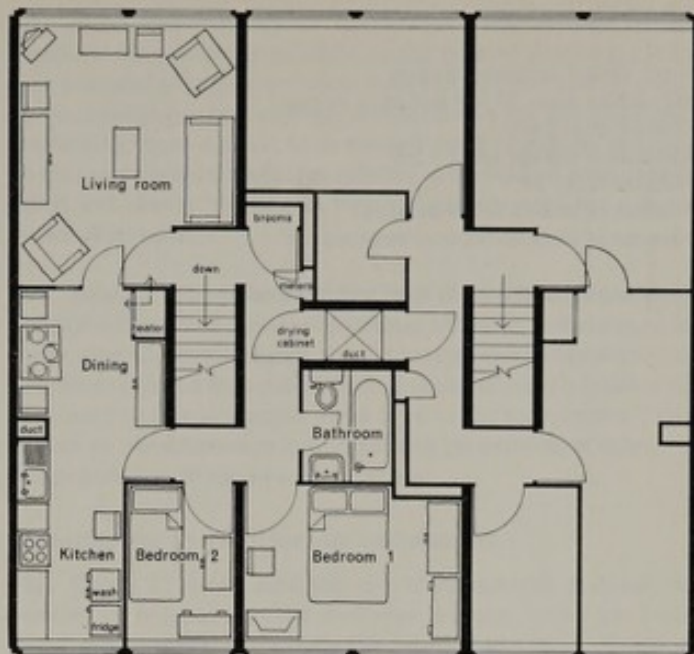
Mandatory storage area: 3.5m²

Numbers built: 8 and 11

Number of tenants interviewed: 7 and 7

Number of furniture layouts recorded: 6 and 7

Location: All but ground and deck levels.



South or East

2B4P flat

Entrance lobby on floor below not shown.

Area: 75.1m² including storage

Mandatory area: 73.5m² including storage

Storage area: NIL

Mandatory storage area: 3.5m²

Number built: 14

Number of tenants interviewed: 10

Number of furniture layouts recorded: 10

In addition to the above, one further dwelling of this basic type was built with an additional bedroom in the adjoining structural 'public staircase' bay. This bedroom, which was entered by means of a door from the living room, opened out onto a private balcony 3.8m long by 1.0m deep. This changed the flat type to a 3B6P dwelling.

Area: 87.8m² including storage

Mandatory area: 90.0m² including storage

Storage area: NIL

Mandatory storage area: 3.5m²

The tenant of this flat was interviewed but the furniture layout was not recorded.

Location: All levels except ground and deck.



South or East

*Bedroom 2

In four out of the ten layouts surveyed this was used as a single bedroom.

2B4P flat

Area: 72.0m² including storage

Mandatory area: 73.5m² including storage

Storage area: 2.4m²

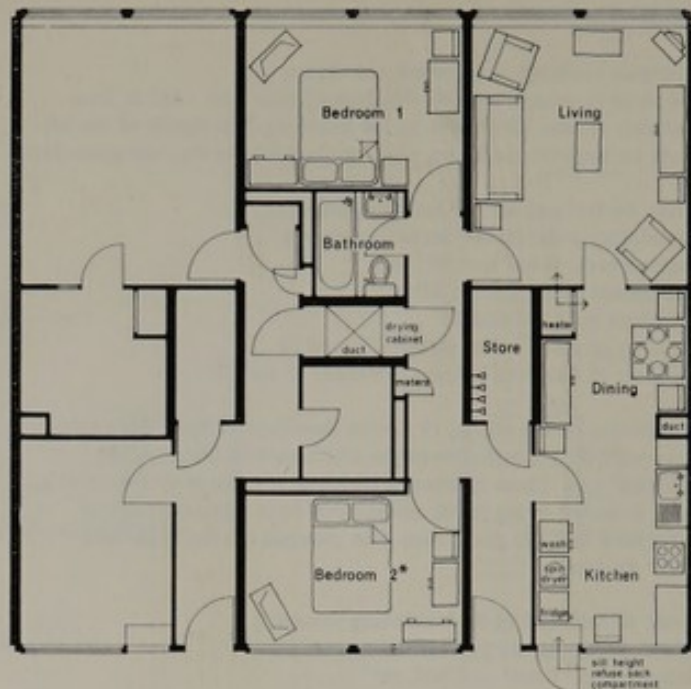
Mandatory storage area: 3.5m²

Number built: 24

Number of tenants interviewed: 17

Number of furniture layouts recorded: 16

Location: Ground floor in three and five storey.



South or East

*Bedroom 2

In over half (nine) of the 17 layouts surveyed this was used as a single bedroom—but no common pattern of furniture arrangement was discernible.

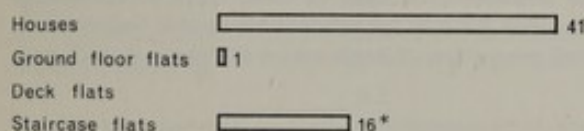
General notes

97. It was the general intention of both the Development Group and Oldham's Housing Manager that families should be allocated houses and elderly people should be given dwellings without stairs—either ground or deck-level flats. Adults on the other hand could be allocated flats with an internal staircase to the front door (referred to throughout this section as staircase flats) as it could be assumed that they would be more mobile than the elderly.

98. Naturally ideal fit of households to dwellings can rarely be obtained because it is impossible to predict how many of each household type will be eligible for a dwelling at the particular point in time when a scheme or block is ready to be let. The mix of dwellings on St Mary's was indeed not determined with this purpose in mind but built to meet the needs of a balanced population taking into consideration the proportion of household types found in the country as a whole, in Oldham, and in Oldham's slum clearance areas. When interviewing on site took place it was found that the proportion of adult and elderly households was much larger than expected.

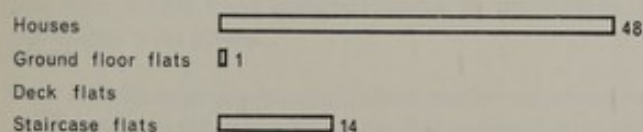
99. The composition of the 393 interviewed households and the dwellings they had been allocated was as follows:

(a) 58 were families with at least one child under five years of age and had been allocated the following dwellings.

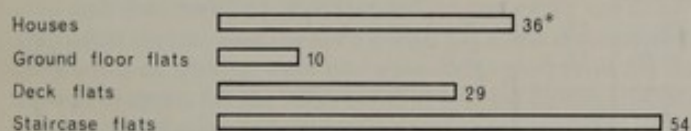


* In half these households the children had been born after the dwelling had been allocated.

(b) 63 were families where all children were over five years of age but at least one was under sixteen. These families had been allocated the following dwellings.

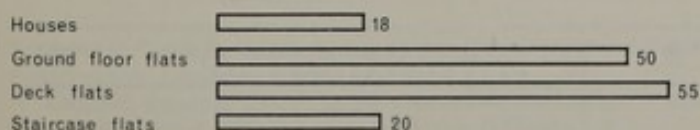


(c) 129 were adult households and had been allocated the following dwellings.



* Twelve of these households had children in their late teens or early twenties.

(d) 143 were elderly households and had been allocated the following dwellings.



100. While the majority of household types covered by the appraisal were suitably matched to the type of dwelling, allocation procedures had nevertheless been dictated to a certain extent by the availability of dwellings. At the time of the first handovers the development did not have enough small dwellings available so that some houses meant for families with children were used by adult and elderly households with no priority need for a house rather than a flat.

101. While it cannot be predicted how the mix will serve future needs it is likely that the small dwellings will be in high demand for some time to come because the slum clearance programme will continue to yield a high proportion of the small elderly households who want to stay in familiar areas close to the town centre. There is also an above-average and increasing proportion of elderly in the population of the town as a whole.

Occupancy in relation to bedspaces

102. Figure 12 shows how the size of households matched the number of bedspaces in the dwellings. Figures within the boxes show the number of households which fitted their dwellings exactly. Under-occupation falls to the left of this line of boxes and over-occupation to the right.

103. Altogether over half the dwellings (56.7%) were under-occupied but mainly by only one bedspace. However, there were pockets of greater under-occupation—for example almost half the 2B4P dwellings (houses as well as flats) were occupied by two people only, almost all of whom were elderly or middle-aged married couples. Just over a third (36.2%) of the households fitted their dwellings exactly and over-occupation was confined to 28 cases (7.1%).

104. The proportion of small dwellings (2B4P and less) under-occupied (58%—166) was similar to that of the larger dwellings (52%—57). The larger dwellings on the other hand had most over-occupation—23% (25 dwellings) compared to under 1% for smaller dwellings. Although under-occupation was roughly the same in houses and flats, more houses than flats were over-occupied simply because more larger dwellings were houses.

105. Almost two-thirds of all households of four persons and under were living in dwellings with more bedspaces than persons. Few were over-occupying. Most of the five-person households fitted their dwellings exactly (with the remainder under-occupying). When households larger than this are considered, the all too familiar picture of lack of space emerges. Although two of the 33 households of six or more people fitted their dwellings exactly and six had spare bedspaces, most (25) were over-occupied. For some of these very large households, large enough accommodation was probably not available and if it were, rents may have been prohibitive.

Occupancy in relation to bedrooms

106. The 'Bedroom Standard'® is a measurement of occupancy devised to take into consideration household composition and the number of bedrooms rather than the number of bedspaces. With this standard all married couples are allotted one bedroom as are all single people over 21. Persons aged between ten and 20 of the same sex are paired and allotted one bedroom, and any single person left over in this age range is paired with a child under ten of the same sex and allotted one bedroom. Those under ten years old are paired and allotted one bedroom irrespective of sex. The bedroom standard therefore provides a much more generous scale of accommodation than the numerical occupancy considered above.

® SOCIAL SURVEY *The housing situation in 1960* (P Gray and R Russell) Central Office of Information 1962 p 75 Out of print

107. Figure 13 shows that although the rate of over-occupancy remains about the same with the bedroom standard as with the numerical occupancy scale (8.2%), the bedroom standard reduces the rate of under-occupancy to almost a quarter (24%) and increases the numbers of dwellings with households of the correct size to two-thirds (66%).

108. While this criterion for density of occupation shows the same variation as the other scale in that smaller dwellings are more frequently under-occupied and less frequently over-occupied than the larger ones, the difference between houses and flats is largely obscured by the fact that one-bedroom dwellings cannot be under-occupied according to the bedroom standard. Bedsitter and 1B2P flats constitute over half the total number of flats and account for the high concentration of flats equal to the standard.

109. If these flats are considered separately the remaining flats are 7.1% (8) below standard; 48.2% (54) equal to the standard and 44.6% (50) above the standard which is a more generous allocation of space than in the houses and confirms what is shown by the numerical occupancy figures.

Occupancy rates in relationship to allocation policy

110. The figures quoted so far in this section must be set in the context of the allocations policy of Oldham's Housing Department.

111. While that Department's first intention is to allocate dwellings with the same number of bedspaces as people in the household, it is often modified to meet the wishes of tenants for a

particular number of bedrooms. As long as tenants can afford the rent and have reasonable claim to spare bedspaces Oldham comply with requests as far as possible. For example, a person living alone will be given a 1B2P flat if available, if he or she particularly dislikes bed-sitters. This policy results in a fairly generous allocation of space and must be an important factor contributing to the under-occupancy noted earlier. However, as no records were kept of tenants' wishes for spare space it has been impossible to assess how much under-occupancy is due to this cause.

112. A separate bedroom is automatically offered for each child of different sex over seven years of age and a spare bedroom given to newly-married couples. The records of household composition show that both these principles were carried out in practice with very few exceptions.

113. Growing families are only given spare bedspace if they request it, and the survey data showed that many such households fitted their dwellings exactly, so that potentially there may be a problem of over-occupation.

114. Adult households who did not follow the usual two-generation pattern of parents and older teenage children seemed to suffer from lack of separate bedrooms. Oldham's policy is to try to give them as much space as possible unless they say they are happy to share. It would obviously pose problems to provide separate bedrooms to the following household which is typical of a minority housed on St Mary's; three sisters, two of over 60 and one of 44, a middle-aged brother and a nephew of seventeen. A detailed study of the attitudes to sharing of these types of household might well support the case for subdivisible double bedrooms in at least a small proportion of dwellings on any particular scheme.

Dwelling size	Number of occupants per dwelling										Total
	1	2	3	4	5	6	7	8	9	10	
Bedsitter (Flat)	39										39
%	100.0										100.0
1B2P (Flats)	56	43									99
%	56.6	43.4									100.0
2B3P (Flats)	6	35	23	3							67
%	8.9	52.2	34.3	4.5							100.0
2B4P (Flats & houses)	6	36	27	10							79
%	7.6	45.6	34.2	12.6							100.0
3B5P (Flats & houses)		4	12	23	25	15	3				82
%		4.9	14.6	28.0	30.5	18.3	3.7				100.0
3B6P (Flats & houses)				2	4						6
%				33.3	66.7						100.0
4B7P (Houses)			1	2	3	6	2	3	2	1	20
%			5.0	10.0	15.0	30.0	10.0	15.0	10.0	5.0	100.0
5B9P (Houses)										1	1
%										100.0	100.0
Total interviewed	107	118	63	40	32	21	5	3	2	2	393

12 Number of bedspaces under or over-occupied by dwelling size.

Dwelling size	1 bedroom below standard	Number of bedrooms equal to standard	1 bedroom above standard	2 bedrooms above standard	Total
Bedsitter %	—	39 100.0	—	—	39 100.0
1B2P %	4 5.0	95 95.0	—	—	99 100.0
2B3P %	3 4.5	31 46.3	33 49.2	—	67 100.0
2B4P %	10 12.7	34 43.0	35 44.3	—	79 100.0
3B5P + 3B6P %	14 15.9	51 58.0	20 22.7	3 3.4	88 100.0
4B7P %	5 25.0	7 35.0	6 30.0	2 10.0	20 100.0
5B9P %	0	1 100.0	0	0	1 100.0
Total houses %	24 16.8	70 48.9	44 30.8	5 3.5	143 100.0
Total flats %	12 5.0	188 75.2	50 19.8	0	250 100.0
Total all dwellings %	36 8.2	258 65.6	94 23.9	5 1.3	393 100.0

13 Households in relation to the bedroom standard by dwelling size.

115. Comparisons with national figures⁹ and¹⁰ show that under-occupancy on this estate is less than in Oldham as a whole and less than in the local authority sector in the Region. Over-occupancy is no greater.

116. As with most new housing in both public and private sectors, the estate was not occupied to the full designed level with the result that there were 217 persons per hectare against the designed 272 bedspaces per hectare, with consequent relief to wear and tear on the scheme as a whole.

117. Half the tenants on the estate said the rents were 'too much'. The higher the rent paid the more people felt it was unreasonable, irrespective of whether their rent gave them good value for the amount of space. On the other hand, one of the factors affecting dwelling satisfaction was the amount of space available to the household. Satisfaction was higher where there was spare space. On balance, therefore, the policy of allocating space generously could be justified on this ground especially as few tenants admitted to having difficulty in paying the rent. However, social security payments covered the rent for many of the elderly (see also paragraph 65).

⁹ GENERAL REGISTER OFFICE *Sample Census 1966 England and Wales County report: Lancashire* HMSO 1967 Table 8 p 49

¹⁰ GENERAL REGISTER OFFICE *Sample Census 1966 England and Wales Housing Tables Part 1* HMSO 1968 Table 10 p 115 and p 119

4b Detailed studies

4b(i) Kitchen/dining areas

General note

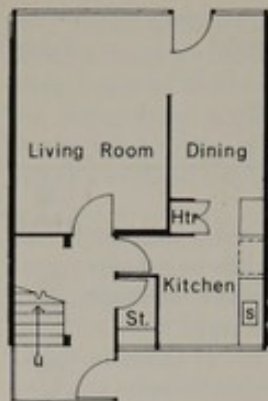
118. There are three main types of kitchen to be found in the houses and six in the flats as shown by Figure 14.

Overall design of the kitchen/dining area

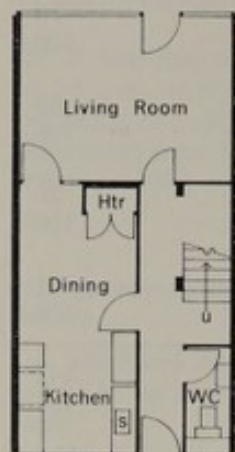
119. Following research into tenants' use of space² and¹¹ most kitchens (with the exceptions of types F and I) were designed to give a generous kitchen/dining area with an adequate living room rather than provide a generous living room with space for meals and a smaller working kitchen. No dwelling had a separate dining area or even an area visually separated (by means of work tops, shelving units or similar arrangements) from the kitchen proper.

² MHLG Design Bulletin 19 *Living in a slum* 1970 p 33

¹¹ MINISTRY OF HOUSING AND LOCAL GOVERNMENT Design Bulletin 21 *Families living at high density: a study of estates in Leeds, Liverpool and London* HMSO 1970 p 39



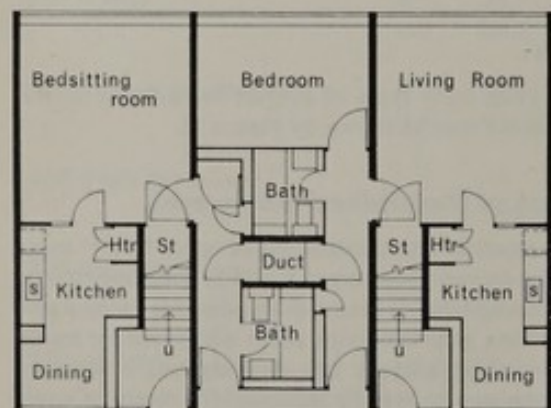
Kitchen type A used mainly in 2B4P dwellings. Kitchen/dining area of 15.5m² with 1.9m³ of storage.



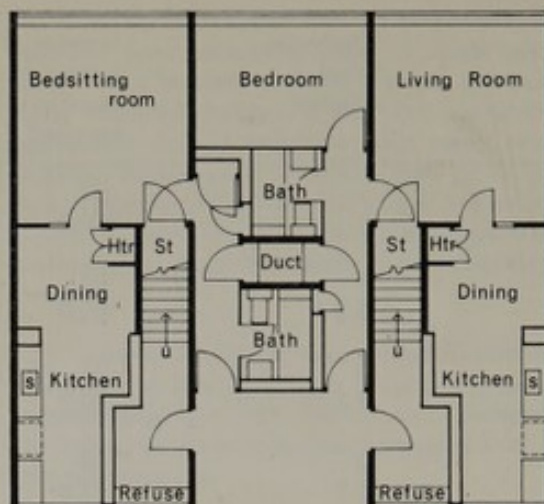
Kitchen type B used mainly in 3B5P dwellings. Kitchen/dining area of 14.0m² with 2.3m³ of storage.



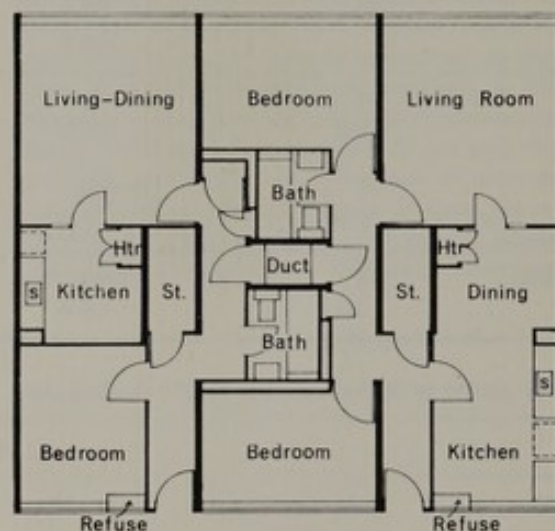
Kitchen type C used mainly in 4B7P dwellings. Kitchen/dining area of 16.3m² with 2.3m³ of storage.



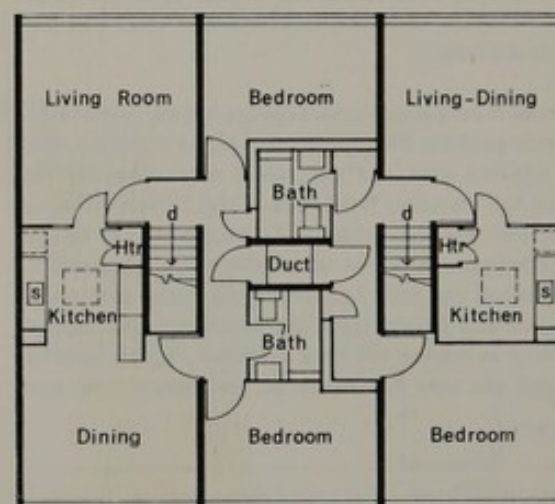
Kitchen type D. Kitchen/dining area of 8.5m² with 1.3m³ of storage.



Kitchen type E. Kitchen/dining area of 13.4m² with 1.6m³ of storage.



Kitchen types F (left) and G (right).
Kitchen area F of 5.9m² with 1.3m³ of storage.
Kitchen/dining area G of 15.6m² with 2.2m³ of storage.



Kitchen types H (left) and I (right).
Kitchen/dining area H of 19.7m² with 1.9m³ of storage.
Kitchen area I of 5.9m² with 1.3m³ of storage.

120. All tenants were asked whether or not they found their kitchen* too big or too small. The majority found them just right for their needs and the only types of kitchen which were not satisfactory were the internal kitchens (types F and I) almost half of which were considered to be too small. Few people said that their kitchens were too big. Size therefore was not a major problem in any of the kitchens with an attached dining area, and living space seems to have been well distributed between this area and the living room proper.

121. With the exceptions of those with type F and I kitchens, tenants were asked if they would prefer a larger living room and a smaller kitchen. Overall, 10% said they would, though there was some variation depending on the size of kitchen. Housewives in the larger kitchens A, C, G and H were more willing to give up space to enlarge the living room even though the average number of people occupying these dwellings was slightly greater than in those with smaller kitchens. At 16.3m² and 19.7m²—respectively the sizes of the two largest kitchens C and H—over a quarter would have chosen to have a larger living room at the expense of kitchen size. These replies did not appear to reflect tenants' dissatisfaction with the size of the living room.

122. The same people were also asked whether they would prefer the kitchen area to be separated from the dining area. Only a small minority (17%) said they would. Family and adult households most often said they would like two separate areas—21% compared with only 8% of the elderly. In all previous appraisals carried out by the Ministry, similar results emerged on this point. The demand for separate dining and kitchen areas has always been a minority demand among those lacking this amenity but possessing kitchen/dining areas of not less than 14m². BRS surveys summarized in *Houses and people*,¹² indicated a higher (40%) demand for two 'dayrooms' but this may have been due to the fact that the kitchens in the houses studied were all under 11m² and some only half that size, so that there was a real need not only for meals space but also space for other everyday family activities.

123. Housewives in houses appraised in earlier surveys had always been appreciative of any worktop or shelving unit which divided the kitchen proper from the dining area. The desire for such units was not enquired into at Oldham but no one mentioned it spontaneously, and the furniture layouts showed that only one or two people had built such a dividing unit.

124. After being asked detailed questions about their kitchens all housewives were asked to summarise how satisfied they were with them. 90% said they were satisfied. In most dwellings the satisfaction rate was even higher but for those with kitchens type F or I the rate dropped to below 60%.

Daylighting in work areas

125. With the exception of the type F kitchen (which relies entirely on borrowed light from the living area through a glazed door and screen—Figure 15) all dining/kitchen areas have some form of direct daylight. In the type I kitchen this direct daylighting is solely from a 2 ft 6 in (762 mm)-square rooflight (Figure 15). However, as can be seen from Figure 14, not all kitchens have the work area closest to the source of daylight.

126. When asked the general question whether or not they got enough daylight in their kitchen, 18% of all interviewed com-

* With the exceptions of types F and I the term 'kitchen' refers to the complete kitchen/dining area unless otherwise stated.

¹² BUILDING RESEARCH STATION *Houses and people: a review of user studies at the Building Research Station* (W V Hole and J J Attenborough) HMSO 1966 pp 13–16



15 Kitchen type H. Kitchen types F & I finish on the line shown. Whilst kitchen type I gets direct daylighting from a similar rooflight, kitchen type F relies entirely on borrowed lighting through the glazed door and panel.



16 Kitchen type B looking towards dining area.



17 Kitchen type C looking towards living room.



18 Kitchen type E looking towards bedsitting room.



19 Kitchen type G looking towards external wall.

plained that they didn't. There was, however, a marked difference between the houses, where only a very few were not happy with the daylighting levels, and the flats where dissatisfaction rose to almost a quarter.

127. Apart from one block of houses, the difference in complaint levels was not reliably significant when the three different house kitchen designs were compared. (No complaints were received from the 54 tenants with kitchen A which had two sources of direct daylight; three complained out of 64 with kitchen B; and three out of 18 with kitchen C.) As kitchens in flats are not comparable, these figures are too small to provide any firm conclusions about working areas positioned away from windows. However, as mentioned, one block of houses (the most northerly on a north-west south-east axis, see site plan Figure 3) stands out as contributing disproportionately to the number of dissatisfied. Four out of the seven interviewed living in this block (which has the type B kitchen) complained of inadequate daylighting. This is thought to be due, not so much to the orientation of the block (most flats for instance have north-facing kitchens) as to the light-absorbent properties and depressive effect of an old boundary wall opposite the kitchen window. This wall, now very dirty, is of Accrington red bricks and has a minimum height of about 2.5m. It is 7.5m from the kitchen windows (see also paragraph 437 and Figure 56).

128. In the flats, variation in satisfaction was caused by the different design of kitchens. By far the worst type was the internal kitchen F where 84% complained. The most satisfactory daylighting was in those kitchens with a rooflight. These were kitchen I which relied only on the rooflight and kitchen H which had windows at the dining end of the room as well as a rooflight. No complaints at all were made about lighting in these kitchens. The narrow kitchen E was found unsatisfactory by a quarter of the housewives. Complaints from the other two kitchens (D and G) were slightly lower than this.

129. There were small variations in satisfaction rates between blocks, storey level of flats and position in blocks, and although the first two were not significant the third was. It was found that the rate of dissatisfaction rose in dwellings adjacent to public staircases from 14% to 36% (figures include those with the type F kitchen). As there is no apparent reason for this increase it most probably reflects the relationship between general satisfaction and being next to such a staircase.

Ventilation of work areas

130. No kitchen had any form of artificial ventilation. All kitchens except types F and I relied for ventilation on opening lights and ventilators which were sometimes the other side of the dining area. Type I had an openable rooflight.

131. Getting rid of steam and smells was not a major problem except in type F kitchens where half said they had problems with steam and a third with smells. About a fifth of those with kitchens type B and C also complained, though this was possibly a reflection of the higher occupancy rate and larger meals being cooked.

Kitchen fittings and equipment

132. All kitchens were fitted with prefinished wall cupboards,* floor-level cupboards with fitted work-top, and a stainless steel sink. The amount of storage varied, as shown by Figure 14. Broom storage was not provided in the kitchen, (see also paragraphs 323 and 332).

133. The arrangement of the fitted units was found to be satisfactory for four-fifths of the housewives and there were no significant variations between types. Elderly people who found the units inconvenient were mainly worried about cupboards being too high so that it was impossible to reach things on the top shelves. Others frequently complained that cupboards over the sink were too low, giving inadequate head clearance (Figures 15-19). Tenants were asked about the sufficiency of drawers and cupboards for storing small durable items such as cleaning things, tins of food and saucepans. 90% were satisfied on each item.

134. All plans had space allocated for a cooker, refrigerator, and washing machine, though for the latter two pieces of equipment space was not necessarily allocated in the working area (Figure 15). Kitchen types D, F, H and I were not arranged in the mandatory work sequence, the cooker being positioned in the corner next to the living room door.

135. Altogether 63% of tenants had a refrigerator, a similar number a washing machine, and 10% had wash boilers or spin

* These cupboards were positioned 1 270 mm above the floor, which means the top shelf was at a height of about 1 770 mm.

dryers. Ownership of these items was most frequent among families and lowest among elderly tenants. This equipment was generally kept in the actual working area and although nearly a fifth of refrigerators and washing machines appeared in the dining area they were mainly placed next to the end worktop unit. With very few exceptions tenants said that they had enough room for this equipment.

136. With the exception of type F, kitchens were provided with a ventilated food cupboard at either high or low level. All such cupboards were ventilated naturally. Type F kitchens were all fitted with a refrigerator.

137. The 63% who had refrigerators used them for storing perishable foods, 13% used the ventilated food cupboard and 14% used a hall cupboard. Use of these last two places took place mainly in the small flats where refrigerator ownership was low. For example only 23% of those in bedsitters had a refrigerator but over a third used the drying cabinet in the hall for storing perishables and a similar number used the ventilated cupboard. Therefore nearly half those tenants without a refrigerator considered that the drying cabinet formed a more effective storage place for perishables than a cupboard ventilated in a similar manner but positioned close to the heater unit (see paragraph 337).

Use of the kitchen/dining area

138. With very few exceptions the dining area was used for most meals as intended. However, with the small F and I type kitchens as many as 65% of tenants used the kitchen for meals. Eating in these kitchens must have been cramped and was only feasible because most were in flats for two people. It was the designer's intention that meals should be taken in the living room even though this was no larger than in other flats. Consequently half the tenants in these flats said that they did not have a convenient space for a dining table.

139. Apart from those in bedsitting room flats and flats with type F or I kitchens, 88% (169) of households kept their dining table in the area provided. 7% kept it either in the actual working area of the kitchen or else in the living room. A few had no table for meals. A fifth of the tables in dining areas were folding tables. Almost everyone had at least one dining chair in this area and usually two or three. Chairs kept in the dining area were more numerous in the larger houses and flats but not strictly in proportion to the number of occupants. Probably the numbers were supplemented by dining chairs kept in the living room or the working area of the kitchen. For instance 3P dwellings tended to have two chairs in the dining area, 5P dwellings three or four chairs, and larger dwellings usually four chairs. In addition to tables and chairs there were always other items of furniture. Over half (57%) had some sort of storage unit like a sideboard, china cabinet, free-standing cupboard etc; a third had a small table, a fifth a washing machine or fridge; a fifth at least one easy chair or settee and a further fifth a stool. A multitude of other items occurred less frequently, the total number of items varying between types of dining area but not strictly according to size or occupancy, although the average number of items in the flats was 5.7 and in the houses 6.7. Thus tenants tended to have more furniture than that envisaged in the Parker Morris Report but there was rarely room to use everything properly, e.g. walk round a table when a meal was taking place. Despite this tenants felt the size of the area to be satisfactory and did not regard it as a drawback (see paragraphs 120 and 121).

140. In addition to the equipment listed in paragraphs 132 and 135 the most frequently observed items of furniture in the working area were a waste bin or bucket (found in over half the furniture plans analysed), one or more dining chairs (found in 25% of

plans) and a small table (25%). A fifth had some sort of extra storage such as a kitchen cabinet or wall shelves; 15% had a vegetable rack, 15% a stool and 12% a clothes horse. The average number of items for all working areas was 3.4 and did not vary with the size of dwelling.

141. Small kitchens type F and I were different from the working areas of other kitchens in that tables were much more frequent—74% had them—and chairs were also more frequent as one would expect where there was no specially designated dining area. Ownership of refrigerators was apparently higher than normal because some were provided, but washing machines, as was found in other 1B2P flats, were less frequent. However, having to combine space for eating and the preparation of food in this small area meant that these kitchens were crowded, the average number of furniture items being five, higher than in other kitchen types.

142. One of two types of kitchen/dining area was provided in bedsitting room flats, the large E or the smaller D kitchen. Proposed furniture arrangements in these areas were completely upset by the fact that beds were frequently kept here rather than in the bedsitting room. This occurred in 90% (9) of type E kitchens and in 15% (3) of the smaller (D) kitchens. The bed was often accompanied by other furniture usually associated with a bedroom such as a chest of drawers and a wardrobe. Ownership of equipment such as refrigerators and washing machines was particularly low in bedsitters and in four bedsitters there was no cooker, although three of these had gas rings.

4b(ii) Living areas

General note

143. There are three basic types of living room in the houses and one in the flats as shown by the type plans (pages 16–19).

Overall design and layout

144. In houses, the size of living rooms varied from 15.6m² in the 2B4P type to 19.5m² in the 4B7P. With the exception of the most northerly block of 11 houses living rooms faced either east or west. In the flats the basic size of living rooms was 17.2m² though this was reduced by some 1.1m² in those with an internal staircase. Living rooms in all flats faced either south or east.

145. With the exception of the 39 flats with the small kitchens (type F and I, Figure 14) it was not the designers' intention that tenants should have meals in these rooms.

146. The great majority of people said they used their living rooms to relax in at weekends and in the evenings and used the kitchen/dining areas for meals. Most tenants appeared to like the distribution of living space into two major areas (see paragraph 122).

147. Although there was a wide range in the amount and type of furniture within individual living rooms* there did not appear to be any clear relationship (e.g. with the size of living room, size of dwelling or even size of household) to account for this. However, overall, there was an average of 10.3 items of furniture found in each living room, some of which appeared frequently. For instance 94% of households had television sets, 70% had a

* This section does not include the living area in bedsitting room flats. These are considered separately in paragraphs 170–173.

small table and 59% two easy chairs and a settee or else three easy chairs. It is now mandatory to show these items on furniture plans, plus 'a reasonable quantity of other possessions such as a radiogram, bookcase'. At Oldham these 'other possessions' were as follows: 60% had a dining chair, 43% a sideboard, 24% a standard lamp and only 20% a radiogram. Other items of significance included tea trolleys, desks, china cabinets, pianos, sewing machines and toy boxes. Bookcases occurred very rarely.

148. Only a third of the living/dining rooms of flats with the small kitchen had a table; the majority of tenants preferring to cram this into the kitchen (see paragraphs 138 and 141).

149. Despite being asked a specific question, only seven tenants interviewed complained about having insufficient sunlight in their living room. These seven were scattered haphazardly throughout the site, so it seems than an east orientation for the living room did not give an impression of lack of sunlight.

Television

150. Each living room was provided with a television socket in the corner of the room next to the window. These were served by a communal television aerial located on the western end of the most northerly block of flats. All three television channels were available.

151. All tenants were asked questions designed to ascertain the efficiency of the television arrangements. Over three-quarters of the households were satisfied with the reception. No mention was made of difficulties with the location of the set within the room, and it was generally placed nearest the socket outlet. There was therefore no trouble with trailing flexes.

4b(iii) Bedrooms

Main bedrooms

152. The largest bedroom was designated the main bedroom (Bedroom 1 on plans) except where there was a 'link' bedroom in houses or an 'extension' bedroom off the living room in flats (see Figures 5 and 11). Although these were generally the largest bedroom in a dwelling they were considered by the designers to be less convenient in use.

153. The main bedroom was used for a double bed in the great majority of houses (85%) and in two-thirds of the flats. This difference between dwelling types is accounted for by the under-occupation of 1B2P flats where residents living on their own had a single bed in the bedroom. Some other dwellings also had single beds in the main bedroom, some had twin beds, a few of the main bedrooms in the larger flats were not used at all, and a few were used for a double bed plus a child's bed. Comments on the size of main bedrooms therefore have to be considered against this.

154. Whilst the Housing Manual of 1949¹² specified 135 sq ft (12.5m²) as a minimum size for the main bedroom, later standards⁶ and ¹⁴ have only recommended overall dwelling areas, not those for individual rooms. Recent appraisals¹⁵ and ¹⁶ have shown that main bedrooms of about 110 sq ft (10.2m²) seem to be regarded as too small by a fifth to a quarter of all tenants. This proportion decreases as bedroom size increases. These findings are also confirmed by the Oldham results.

155. Two-thirds of all tenants had no criticism to make when asked about the size and shape of the main bedroom.* In houses (where the main bedroom was 2.56m by 4.27m or 4.57m i.e. 11.0 or 11.7m²) hardly anyone complained about the size but a fifth said that it was too narrow.†

156. On the other hand in all flats for three people and more the main bedroom was only 10.0m² and a fifth of these tenants considered it to be too small. In the remaining flats (the 1B2P types) the bedrooms varied in size being either 9.5, 11.1, 12.7 or 13.4m² in area. Complaints about size came from the tenants of half those dwellings with the 9.5m² bedroom, from a quarter of those with the 11.1m², but from only just over a tenth of those with either of the two larger bedrooms.

Other double bedrooms

157. These were of three different sizes being either 8.4m² (the third bedroom in 4B7P houses); 10.0m² (found in most dwellings with a second double bedroom) or 13.0m² ('extension' or 'link' bedrooms).

158. Just over a third of these rooms had double beds in them, a third had twin beds, a fifth had single beds and the remaining few had no beds at all. Some may have been spare beds. Altogether a tenth of the tenants interviewed thought that these rooms were too small. As there were so few of the larger and smaller rooms it is impossible to be certain about satisfaction rates for these sizes, although it does seem that most people were happy with a second bedroom of about 10.0m².

159. Because 'link' and 'extension' bedrooms were less conveniently positioned in plan, and because it was felt that special problems with noise and cold might arise, tenants of dwellings with these bedrooms were asked extra questions. Of the nine tenants with 'link' bedrooms four criticized them saying they were cold; mainly because they had windows at both ends. Of the 33 tenants with 'extension' bedrooms only nine had criticisms—two mentioning that they were cold in winter and two mentioning that because the bedroom door opened direct from the living room there was a lack of privacy.

Single bedrooms

160. The single bedrooms at Oldham in flats and 3B5P houses were only 57 sq ft (5.3m²) in area. In the 4B7P houses they were 72 sq ft (6.7m²). Other appraisals have shown that single bedrooms below 70 sq ft (6.5m²) are rarely considered satisfactory¹² and ¹⁵ and that 90 sq ft (8.4m²) is greatly appreciated.¹¹ and ¹⁶

⁶ MHLG Circular 1/68 *Metrication of housebuilding* 1968

¹² MINISTRY OF HEALTH *Housing manual* 1949 HMSO 1949 p 42 Out of print

¹⁴ MINISTRY OF HOUSING AND LOCAL GOVERNMENT Circular 27/70 (Welsh Office 30/70) *Metrication of housebuilding: progress* HMSO 1970

¹⁵ MINISTRY OF HOUSING AND LOCAL GOVERNMENT Design Bulletin 15 *Family houses at West Ham: an account of the project with an appraisal* HMSO 1969

¹⁶ MINISTRY OF HOUSING AND LOCAL GOVERNMENT User reaction study: housing at Coventry *Official Architecture and Planning* December 1967 p 1753

* Bedsitter tenants were originally asked about their main room but little comment resulted and, in view of the unorthodox use of the bedsitting room, replies have not been included here.

† Many other surveys have noted similar complaints with bedrooms of this 'shape ratio' notably¹² BUILDING RESEARCH STATION *Houses and people: a review of user studies at the Building Research Station* (W V Hole and J J Attenburrow) HMSO 1966

¹¹ MHLG Design Bulletin 21 *Families living at high density* 1970

¹² BUILDING RESEARCH STATION *Houses and people* 1966 pp 25-26

161. Even though these rooms were small, observation showed that a few tenants of 4B7P houses managed to use them for a double bed. However, these were very much a minority because overall two-thirds of small bedrooms were used for a single bed and a further quarter due, in the main, to under-occupation in 2B3P flats had no bed at all. Although nobody criticised the 6.7m² bedroom, 60% of tenants with the 5.3m² room complained of its small size.

Children sharing bedrooms

162. In three-quarters of the households where there were two or more children in the family, there were also children sharing bedrooms. Two-fifths of the mothers said they would prefer single rooms for their children and a half of these said they would be prepared to pay an extra 50p a week rent to achieve this. However, the number involved was so small (14) that it seems there was no great demand for more dwellings with single instead of double bedrooms. On the other hand this may also be a reflection of successful allocation policies (see paragraphs 110–114).

Furniture in bedrooms

163. On the whole furniture in bedrooms was similar to that envisaged by Circular 27/70 but bedside tables were not found very often—a chair and a table being more popular. There was a very wide range of furniture found but the average in double bedrooms was just over six items and in single bedrooms four.

164. As well as a bed or beds, over two-thirds of main bedrooms contained a dressing table and a wardrobe and in over half there was at least one chair and one chest of drawers. A quarter also had a bedside table, and, frequently, a table or some sort of storage chest.

165. The furniture content of other double bedrooms was very similar; a bed or beds, a wardrobe, a chest of drawers, and either a chair and table or a dressing table being the most popular items in descending order of frequency.

166. As well as a bed, over half the single bedrooms had either a wardrobe, a chest of drawers, a dressing table or some sort of storage box. Few had two of these items but a third also had a chair and a fifth a table.

4b(iv) Bedsitting room flats

General note

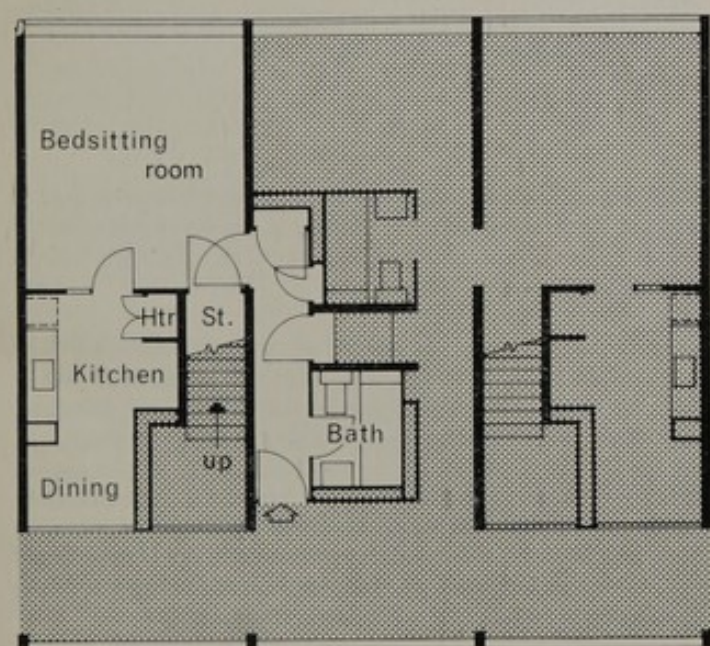
167. All bedsitter flats were occupied by people living alone, two-thirds being elderly people and the rest adults, mainly forty-five years and older. Two-fifths (17 tenants) were men and a third (12) were employed, including two who worked part-time.

168. Satisfaction rates were extremely high for bedsitting room flats, 82% of the tenants in flats on the deck (type A Figure 20) were very satisfied and the remainder fairly satisfied. 91% of the tenants in ground-floor flats (those which have larger kitchen/dining areas—type B) were very satisfied, the remaining one tenant being fairly satisfied. Only 16% of bedsitting room tenants expressed a desire to move compared with over 25% for the estate as a whole.

169. In reply to an open-ended question nearly a quarter (23%) said they liked everything. The particular aspect that the tenants liked most about their dwelling was that it was convenient, compact and easy to clean; over a third said this. Just over half had no complaints about their dwelling and there was no single complaint mentioned by more than one person.

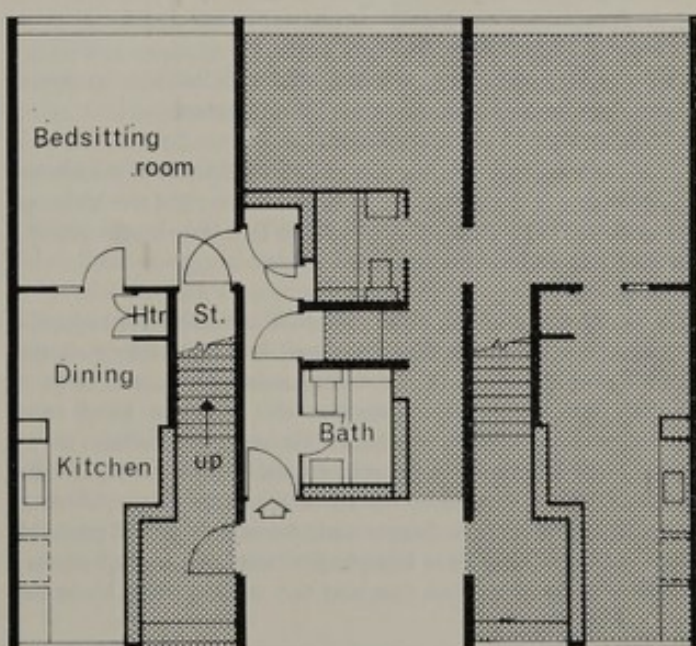
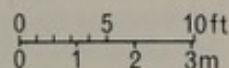
The living area

170. The major point of interest arising from the furniture layout survey was that no tenants attempted to split the living area into sitting and sleeping zones by the use of furniture (see plans p 18). Although 60% of the tenants did not keep a proper made-up bed in the bedsitting room none of them complained



Type A

20 Bedsitting room flat.



Type B

that this area was too small. It could be presumed therefore that they disliked seeing a bed in the living area and hid the fact that their dwelling was a bedsitter by:

(a) keeping the bed in the kitchen/dining area—the bed was recorded in this area in 90% (nine) of the type B flats for which furniture layouts were made and in 15% (three) of type A flats with the small kitchen/dining area;

(b) using a folding bed or convertible settee; these made up a third (ten) of all the sleeping arrangements and included five convertible settees in type A living rooms, a folding bed kept in the store and one in the kitchen. The two folding beds and one settee found in type B bedsitters were all in the kitchen.

This apparent dislike of using the bedsitting room for both sleeping and living is confirmed by the dislike of this kind of accommodation among single people below retiring age.¹⁷

171. Almost the same number of tenants said that they would prefer to have a separate living room and bedroom as said they would not. Perhaps because they could not hide the bed away in the kitchen very conveniently, more of the tenants with the smaller kitchen/dining area said that they would rather have had separate rooms (54% or 14 tenants) than did the others (36%—four). Just under half (44%) of all those who said that they would prefer separate rooms also said that they would be prepared to pay 50p per week extra rent if they could have them. However, when asked for criticisms about the size and shape of their bedsitting room, no useful comments were made.

172. Only one of the tenants usually sat in the kitchen/dining area in the evenings and at weekends instead of in the bedsitting room as intended. This tenant had a portable television and did little cooking.

173. It was found that the average number of furniture items, including small items such as pouffes, was 9.5 in the type A living rooms and 10.9 in the type B. As well as the bed, which where there was one, was generally placed along a wall, this total consisted of various combinations of the following items—a sideboard or china cabinet (owned by 80%), a television set (74%), two easy chairs and two dining chairs (60%), a settee (54%), a chest of drawers (43%), two side tables (40%) and a wardrobe (20%).

The kitchen/dining area

174. All the tenants in type B flats and 93% of those in type A expressed positive satisfaction with their kitchen.

175. When asked what they thought about the size of the kitchen most tenants considered them to be about the right size although four tenants (two from each type) said that they would prefer a larger living room and a smaller kitchen.

176. An average of 5.8 items of furniture was found in type A kitchens, for while few tenants owned a refrigerator or clothes washing machine, most put extra unexpected items such as folding beds, chests of drawers etc. into this area. Much more furniture was found in the larger kitchens—an average of 8.1 items—which is more than that envisaged by Circular 36/67¹⁸ and was not entirely accounted for by bedroom furniture. Although tenants said they were happy with the size it would probably have been considered too large had it been used exclusively as a kitchen/dining area. Two men and two women living alone had

no cooker but three of these did have gas rings. Two of these tenants had type A kitchens, and two type B.

177. Most of the tenants (90%) ate most of their meals in the kitchen/dining area and there was little demand for a separate dining room. There were no particular problems with daylighting, inconvenient arrangement of kitchen units or getting rid of smells and steam.

Storage

178. Although general storage in these dwellings fell far short of mandatory requirements (1.2m² as opposed to 2.5m²) with the exception of clothes storage it appears to have been adequate. This may be because:

(a) the understair store was fully used (mandatory standards of storage space exclude from calculations any space where the height to the ceiling is less than 1.5m);

(b) tenants of bedsitting room flats were generally badly off with regard to material possessions; furniture was limited to fairly basic essentials and interviewing revealed very low rates of ownership of kitchen equipment, ironing boards, vacuum cleaners, suit cases, tools.

179. When asked generally whether they were satisfied with the storage cupboards provided in their dwelling very few said they were not. In common with 1B2P flats this reply was favourable compared to that obtained from tenants of the other flats and houses (see paragraphs 332 and 333). However, dissatisfaction with the storage of perishables was higher than for any other dwelling type—a fifth being unhappy (see paragraph 137).

4b(v) Bathrooms

180. All bathrooms contained a bath, a handbasin and, in all but the 2B4P houses, a w.c. The 2B4P houses had a separate w.c. only, while the larger houses had a w.c. downstairs in addition to the one in the bathroom. All bathrooms in flats were internal as were those in the 4B7P type houses (see plans pp 17–21), although the latter, unlike those in flats, were not artificially ventilated.

181. The size of bathrooms varied: in flats these were of two sizes—1.52m by either 1.82m or 1.65m. In the houses the bathrooms' major dimensions were as follows:

2B4P: 1.82m by 2.28m (effective area 3.71m²)

3B5P: 2.05m by 2.43m (effective area 4.64m²)

4B7P: 1.75m by 2.13m (effective area 3.43m²)

182. The bath was of pressed steel and the handbasin and w.c. of vitreous china. The w.c., which was a low-level suite, had a plastic cistern and seat. It had no cover. The handbasin had no tiled splashback.

183. All pipework was, for reasons of cost, surface mounted. In most bathrooms this merely consisted of short horizontal runs at low level but in the 2B4P house the vertical soil and rainwater pipes from ceiling to floor were also very much in evidence.

184. For cheapness and to avoid wet trades no tiling was used; the concrete walls were covered direct with a washable paper. The bath, which had an upturned rim on three sides, was simply butted up to the concrete walls—the joint between it and the wall being covered by a 5 × 3/4 in (127 × 19 mm) softwood strip.

185. Tenants were only asked the simple question 'Is there anything you dislike about your bathroom and if so what?' Over half (56%) said that there was, though answers differed with size of flat occupied or, in the case of houses, with bathroom type.

¹⁷ DEPARTMENT OF THE ENVIRONMENT Design Bulletin 23 *Housing single people 1: how they live at present* HMSO 1971

¹⁸ MINISTRY OF HOUSING AND LOCAL GOVERNMENT Circular 36/67 *Housing standards costs and subsidies* HMSO 1967 pp 13–14

186. Only a quarter of those in bedsitters had criticisms to make of their bathrooms compared with two-thirds of those in 1B2P flats and nearly three-quarters in flats larger than this. The main problems were the small size* mentioned by a third of all housewives in flats and lack of daylight noted by 27%. The complaints about size are consistent with the findings of a survey on bathrooms† where tenants were dissatisfied with bathrooms of less than 3.71m². The need for a separate w.c. was suggested by eight tenants of the larger Oldham flats, and complaints were also voiced about the lack of a cover to the w.c.

187. The most satisfactory house bathroom was the largest one—that of the 3B5P house. Only 28% of these tenants had criticisms, mainly about details of design‡ compared to 60% of the 2B4P tenants who criticised their bathroom. Here the major complaints (mentioned by two-fifths of all those with this type of bathroom) was that the pipes were visible—'They should be boxed in'. Of those in 4B7P houses three-quarters were unhappy mainly because of the lack of daylighting.

4b(vi) Cladding and windows

General notes

188. Because concrete cladding was chosen and this was too heavy to be supported by the structural floor a system of bay width components had to be used. Furthermore in addition to the requirements that no components should weigh more than 2.51 tonnes (see paragraph 75) it was decided that all cladding components would arrive on site pre-finished so that the only site operation would be to fix them into position.

189. Two types of cladding were evolved. The most apparent is a two-component cladding formed of cill-height concrete spandrel panels and a timber-framed window unit (Figure 21). The spandrel spans between structural walls, and supports the timber component.

190. The second type of cladding is a storey-height timber component with or without windows but including a door (Figure 22). This is also as wide as the structural bay and is used wherever an external door to a dwelling is required. At deck conditions in flats, the bay is only 13 ft (3.96m) wide and therefore, due to its relative lightness, this cladding component could be supported by the Jespersen floor slabs. Otherwise this cladding is only used at ground floors where there is an *in situ* concrete slab.

191. A bye-law waiver was required to enable the timber components to be run across the end of the party wall. This was allowed on advice from the Fire Research Station due to the heavy sections of timber employed and provided the gap between cladding and party wall was packed with some material like mineral wool.

* It is the opinion of the local authority that the bathrooms in flats might not have appeared so small to tenants if a sliding door had been employed. This was considered at the time of design but rejected for reasons of cost. Because of the small size of these bathrooms and because they had no window, it might have been better if the doors had been designed and hung to open outwards in the same way as those in dwellings specifically designed for old people (see ⁷ MHLG Circular 82/69 *Housing standards and costs: accommodation specially designed for old people* 1969)

† DEPARTMENT OF THE ENVIRONMENT Design Bulletin 24 *Spaces in the home: Part 1 Bathrooms and W.Cs.* HMSO 1971

‡ The details of design mentioned by a few in each dwelling type, included 'bad workmanship' and the fact that the washbasin was considered too small, leading to splashing onto the wall and floor.

192. Both types of cladding were designed to have a U value of 1.14 W/m² deg. C. at the solid portion (see paragraph 75).

Window units

193. Window units form part of the timber components and consist of fixed and opening lights. The opening lights are practically all horizontally pivoted, and are of a common size. Living room windows have a lower cill-height which is achieved by using an area of fixed glazing below the pivoted windows.

194. Pivoted windows are made from a combination of softwood and hardwood. Glazed with putty and cleats and hung on simple back-flap hinges they are fitted with two cockspur fasteners on the bottom rail and a pair of friction stays on the sides. These stays hold the window open at points up to 100 mm wide and are detachable when the window is reversed.

195. Trouble was experienced with these pre-glazed pivots. The first problem was that the specified linseed oil putty often slumped down the glazing due to vibration during transit. Investigation showed that because little delay was experienced between completing the component in the factory and shipping to site the putty had had no chance to harden, so a change was made to a rapid-set casement putty.

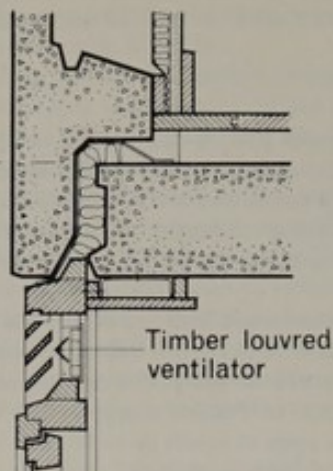
196. Other troubles developed after the dwellings had been occupied and, of the tenants interviewed, 68% reported that they had had trouble with draughty and/or leaking windows. Rain penetration occurred between opening light and frame and through glued joints while draughts were, to a certain extent, aggravated by a slight twisting of the window frames (see also paragraph 202).

197. In answer to a general question 'What would you say you particularly like about the dwelling itself?', the fifth most frequent answer (from 15%) was that tenants liked the light, airiness and big windows.

198. Observation shows that where pivoted windows are right up against the cross walls, curtains get in the way when the window is opened for ventilation and even more so when it is reversed for cleaning. Although it is the architect's opinion that these curtains enhance rather than detract from the external appearance of the dwellings, this is fortuitous. With a less repetitive form of design they might have had the opposite effect. The fixed window above the cill in living areas has also provided an unexpected bonus, for by keeping opening lights away from the cill the fixed light has enabled the cill to take the place of the mantelpiece for the display of knick-knacks.

199. Paragraph 106 of Design Bulletin 13¹⁹ states that windows above three storeys should be designed to be cleaned from the inside of a dwelling as normal domestic window-cleaners' ladders will not reach above this point. This was confirmed by this appraisal which showed that only 18% of interviewed tenants living in flats employed a window cleaner compared to 70% of those living in houses. However, this also means that 30% of house dwellers, very few of whom could have had access to a ladder, chose to clean the windows themselves. In the Layout Study it was found that two-thirds of all tenants had problems cleaning their windows and that complaints from those in houses were as frequent as those from people in flats.

¹⁹ DEPARTMENT OF THE ENVIRONMENT Design Bulletin 13 *Safety in the home* Metric edition HMSO 1971 p 23



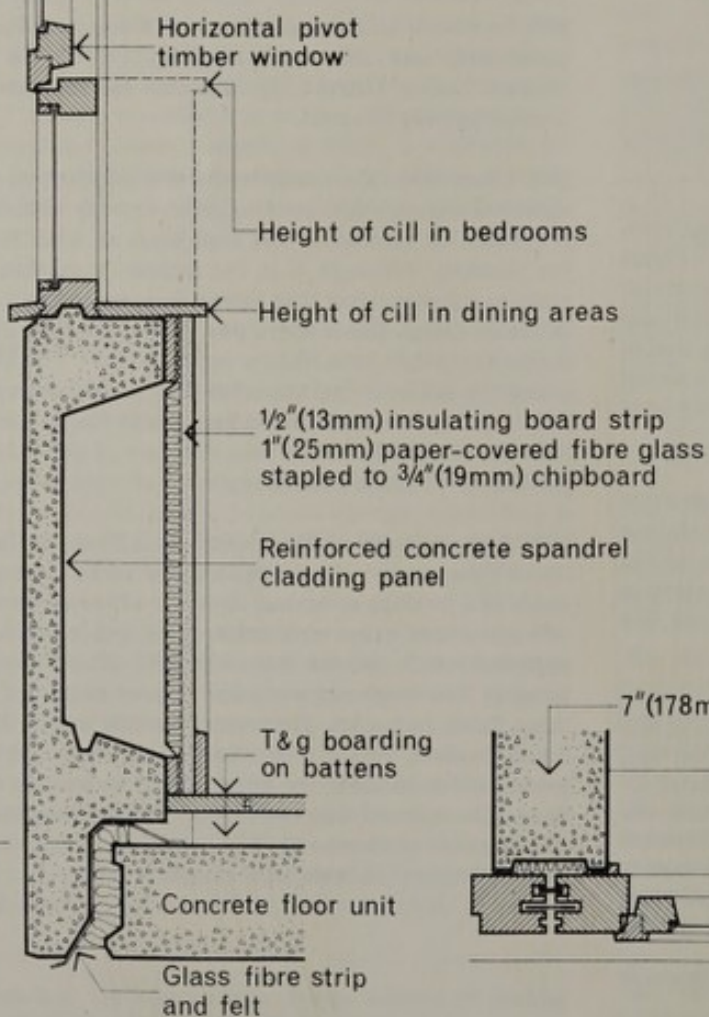
Timber louvred ventilator



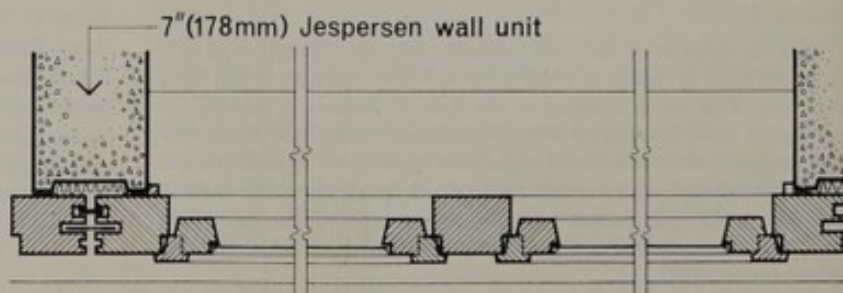
21 Two-component cladding.

In the background of the photograph the change in cill height between living room and bedrooms is shown.

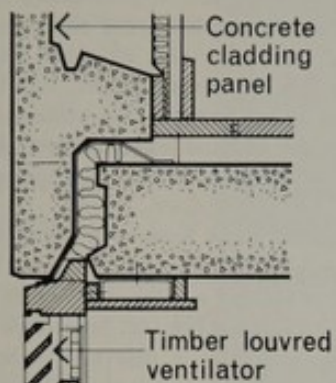
8'-4" (2 540mm)



SECTION



PLAN



22 Storey-height timber cladding.
The photograph shows use of storey-height timber cladding on the ground floor of 2B4P-type dwellings.

8'-4" (2 540 mm)

Horizontal pivot timber window

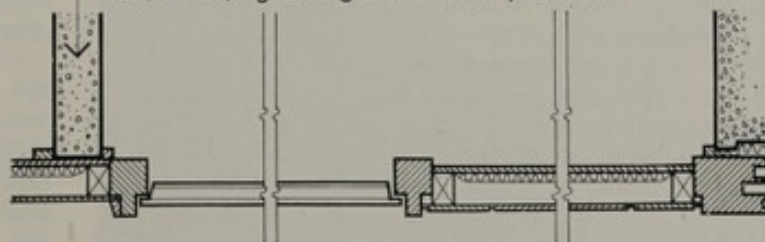
5/8" (16mm) cedar boarding
 2" (51mm) cavity
 1" (25mm) paper-covered fibre glass
 1/2" (13mm) chipboard

T&g boarding
 on battens

Insitu site slab

SECTION

3" (76mm) lightweight concrete partition



PLAN

200. Of the 82% of windows in flats not cleaned professionally, 55% were cleaned by the housewife, 27% by the husband and 18% by others (e.g. old people's relatives). Comparable figures for houses were 57%, 33% and 10%. Of those housewives in flats who did not clean the outsides of windows themselves and gave a reason for not doing so, 75% (84 tenants) said that the window was too heavy and difficult to hold,* five mentioned the fear of falling and five said that they could not reach because they were too small.

Ventilators

201. Simple timber louvred ventilators were positioned over each opening window and external door to provide at high level an alternative source of fresh air to the very large pivot windows. There is no adjusting device, so the internal plywood flap has to be either fully opened or closed. They were designed to give 9 sq in (60 cm²) of ventilation to every foot of run, which gave, in the average habitable room, a total ventilation area of 99 sq in (600 cm²).

202. Many tenants considered that these ventilators were draughty and, because the opening handle was too high, inconvenient. A number of tenants also complained that the ventilators leaked and that they allowed air in when closed. It was considered that the majority of complaints about draughts and rain-penetration were due to the fact that there was no means of regulating the amount of incoming air and that there was hardly any break to the direct flow of the wind. As a result of this a timber hood was fitted over the external louvres. This had the effect of not only reducing the area of ventilation to 3 sq in (20 cm²) a foot run but also made the flow of air less direct. Although it may only be coincidental the Housing Manager has reported complaints of condensation in some dwellings since these hoods were fitted.

Concrete units

203. The concrete gable units were cast in steel moulds and the spandrel panels in concrete moulds. Both were cast horizontally and were faced with $\frac{1}{4}$ in to $\frac{1}{2}$ in (6.3 mm to 12.7 mm) white calcined flint, tamped onto the top of the concrete in its mould. This type of facing was chosen, after consultation with manufacturers, both for its colour and self-cleansing characteristics.

204. Technical difficulties were initially experienced with the corner gable units where the facing material was required to return round the corner. Here the flint had to be applied to the vertical enclosed edge of the mould. The solution finally adopted was to roll out onto a board a shallow strip of modelling clay and to apply the flint to this. The board could then be slotted into the mould before casting. Once the unit had been stripped from the mould and the board removed the clay was hosed off exposing the flint.

205. The tenants' high level of satisfaction with the estate's general appearance (see paragraph 456) is no doubt the result of a combination of numerous items but it is likely that in part it is due to the appearance of the concrete cladding. After four years' exposure in a typically northern industrial area it appears as crisp, clean, and white as on the day it was erected. The Layout Study findings also indicate that buildings which are, and remain, bright in appearance, are much appreciated and tend to lead to higher tenant satisfaction with the whole estate.

Solid timber units

206. Externally, the cedar boarding was finished with polyurethane lacquer, the framework with a proprietary timber preservative, and the opening lights, doors and all exposed internal woodwork with gloss paint. Initially all these finishes were applied in the factory before delivery to site, but because the pre-finished components tended to appear off-white in comparison with *in situ* paint applied later to other internal joinery, the internal finishing coat of paint was eventually site-applied.

207. Deliberate damage to these units was minimal, possibly because the boarded surface is broken every 100 mm by a broad joint (which, though providing a corner suitable for casual whittling, interferes with the scope of large-scale artwork). However, the most likely reason is that the timber cladding always forms part of a dwelling and is therefore under fairly constant supervision (but see also paragraph 243).

208. On the other hand except for those units under cover on access decks the polyurethane lacquer has needed retreatment after three years exposure.

4b(vii) Access decks and the flats opening off them*

Use of decks by tenants as a means of access

209. The design team considered that the greater part of all pedestrian traffic from flats would be to and from the south-west in the direction of the town centre and market. Advantage was therefore taken of the fall in the site to run all access decks out to ground level on that side (see Figures 6 and 24). This also linked the flow of pedestrian traffic from flats to the main north-south pedestrian route running along the line of Radcliffe Street (see Figure 3).

210. To complete the means of circulation between blocks, bridges of steel sections clad in timber were employed (see Figures 23 and 24), while to give direct access to the ground pre-cast concrete staircases were run the complete height of the blocks (see Figures 6 and 26). These linked all decks vertically and were so positioned that the average of all maximum walks from any front door was 24.3m.

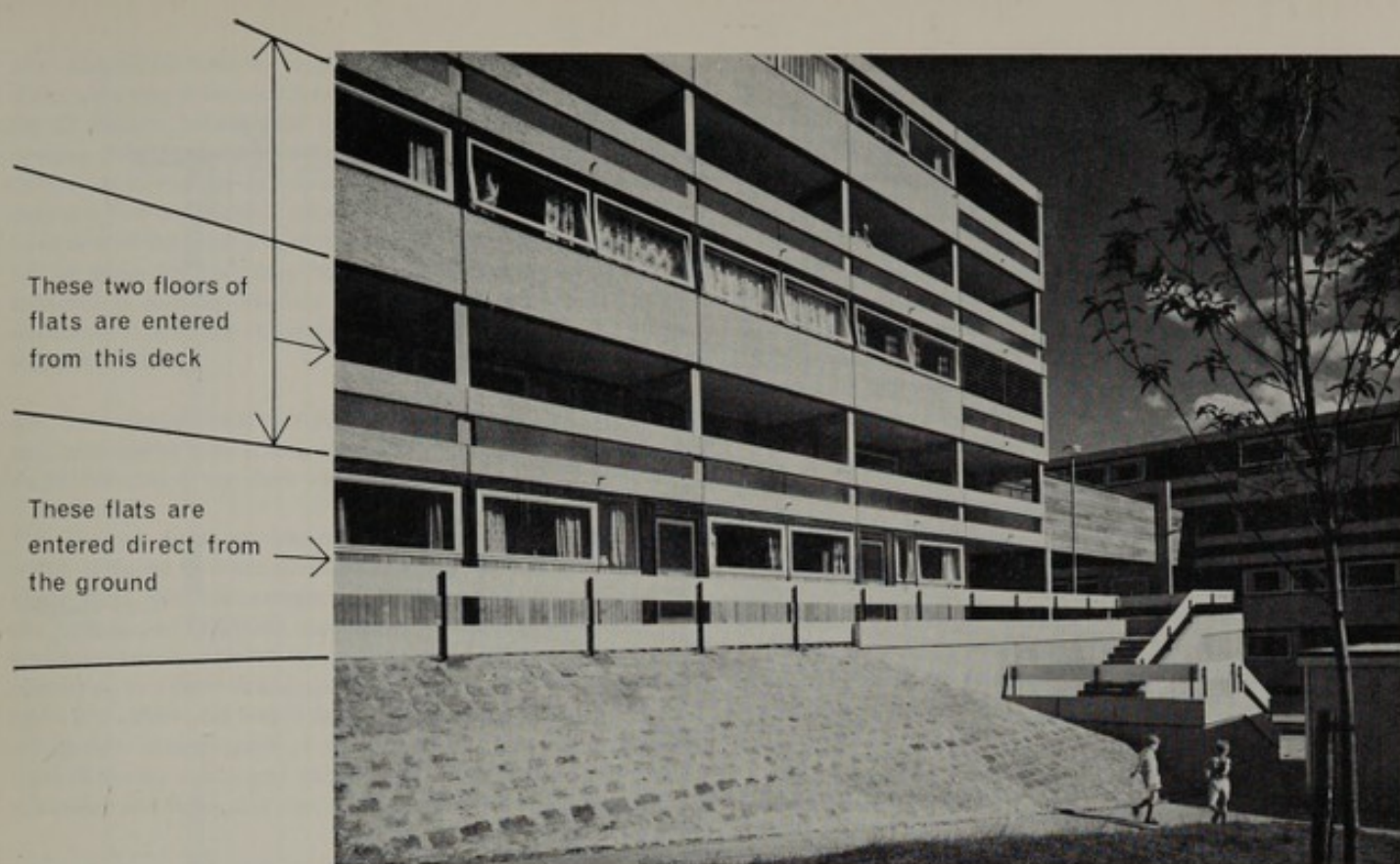
211. Eighty-four per cent of interviewed tenants whose front door was on the deck said that if they were going in the general direction of the market they used the deck rather than a public staircase. This figure rose to just over 90% when it was raining. The decks on the two southernmost blocks were most used in this respect—almost everyone used them, while only 75% did so on the other blocks.

212. The reason for the greater use of the decks on these two blocks may lie with the ground use to the south. Here the ground is of cleared slum areas with good north-south but very difficult east-west access. Tenants of other blocks, however, can take advantage of the easy, ramped east-west means of circulation offered by the new estate.

213. Within easy walking distance to the east of the site there are primary and secondary schools, a few corner shops, a church and the large car park. All these draw more pedestrian traffic than was expected—over half the tenants of flats on decks said that they often had to go in this direction. In using this route a number of

* These windows were not fitted with friction hinges and had no locking device for holding them steady when reversed.

* For a description of the decks and the positioning of both these and the dwellings within blocks see paragraphs 86-93 and for a description of the types of households living in flats see paragraph 99.



23 Decks as means of access.

The height and shape of the balustrade made it a convenient place to lean and watch the various activities taking place on the surrounding open spaces. See also cover photograph. Note also the louvered ventilators to drying areas at end of block.

tenants had therefore to negotiate a climb through more than two storeys to their front door. Despite this, when asked what it was they disliked about their flat or the estate, or what it was they specifically disliked about the public staircases, no one mentioned anything about the length of climb or distance between public staircases. However, there was an indication that those who found this secondary circulation inconvenient were slightly less satisfied.

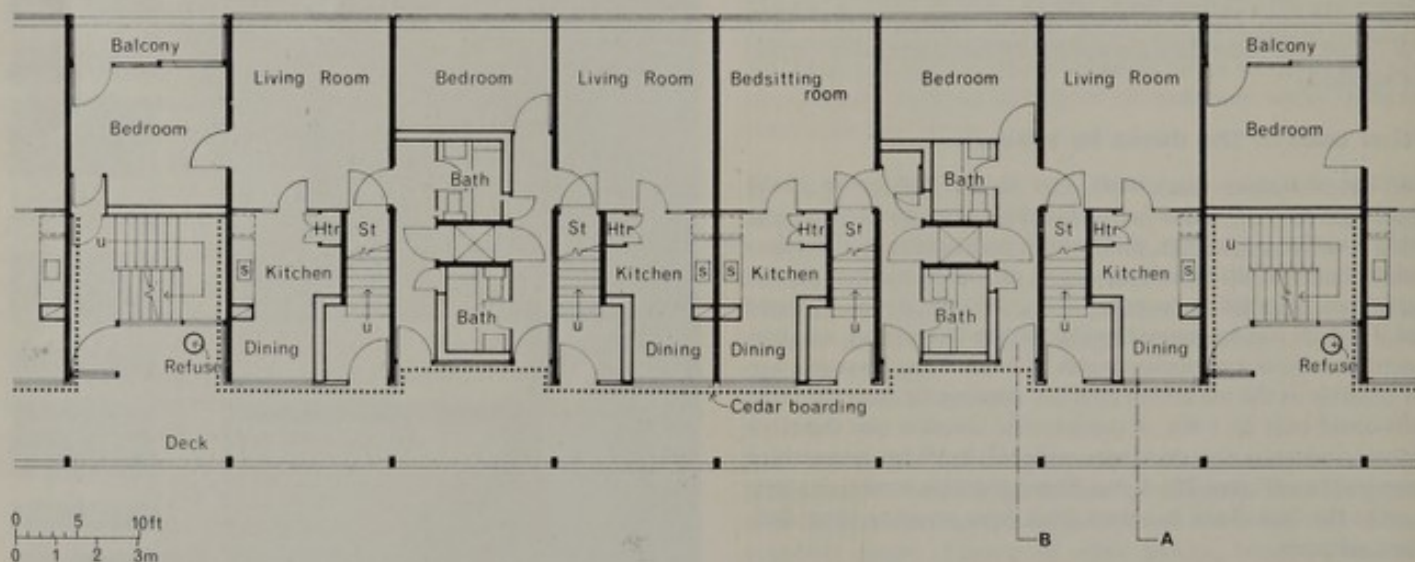
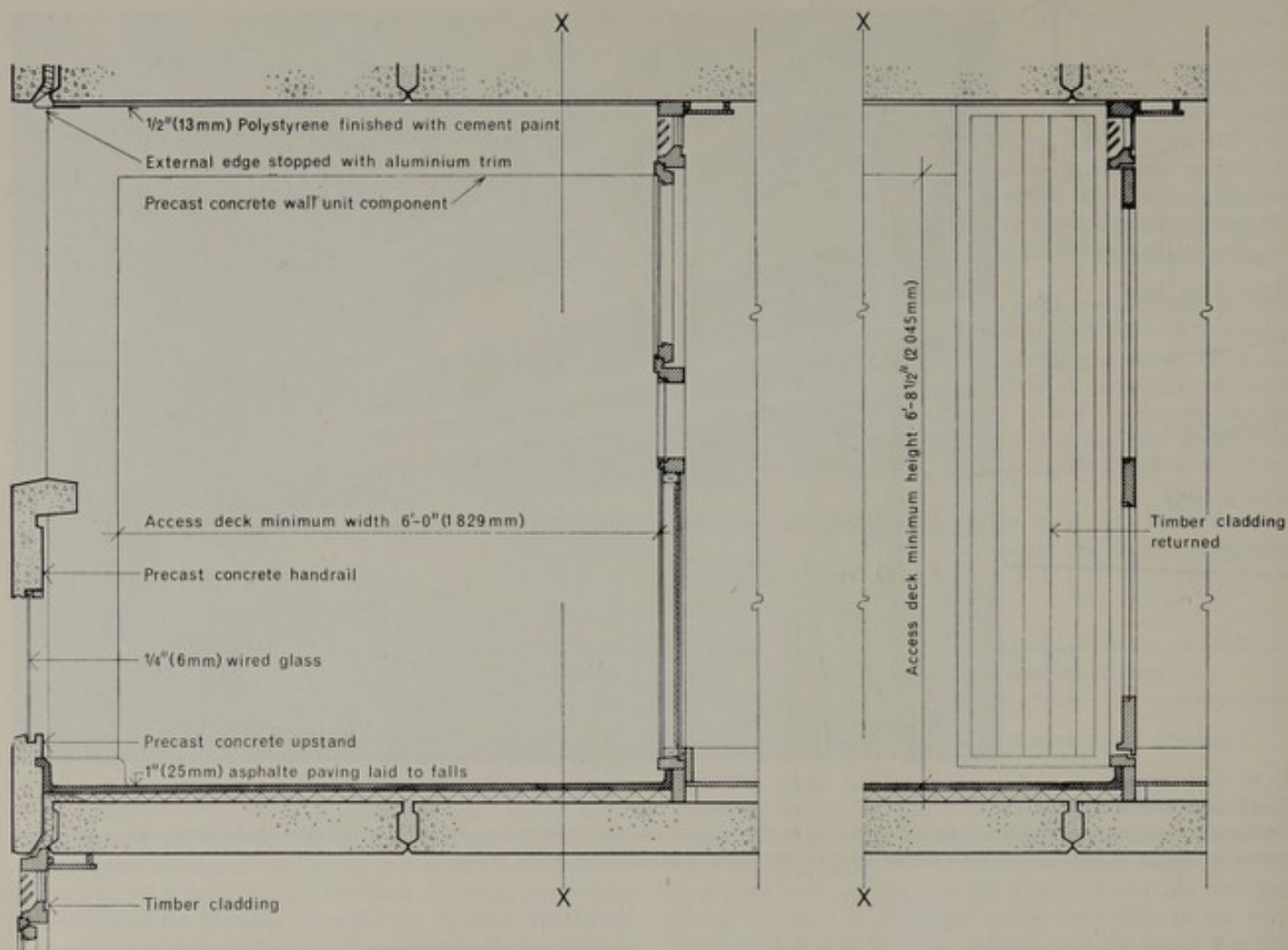
Other uses of the decks by tenants

214. The designers considered that decks had more social advantages than any other form of continuous access for, besides giving weather protection, their width and openness also allow such activities as sitting out, gossiping etc., to take place without causing an obstruction to other users. Initially it was expected that if a deck was to be used to the full for these other activities it needed to have a minimum width of 2.4m. This, however, was not possible as the maximum effective opening through the cross walls could only be 1.8m. A compromise solution was therefore adopted, whereby the deck was widened by 0.5m every third structural bay (Figure 25). It was hoped that this would also help to make the decks look less stark than those on some other deck access schemes.

215. Apart from access, the three most frequent uses of the decks, were looking over the rail, chatting to neighbours, and sitting out in the sun. Three-quarters of the housewives spent time just looking out at activity beyond the deck and over two-thirds said that they chatted to neighbours on the deck. Both these activities were more popular on the two longer blocks perhaps because here there was more chance of seeing other people. A quarter of all those interviewed said they sometimes sat out on the deck but very few did so frequently. This activity took place most often on the west-facing decks. All these activities were more popular with the elderly than with adult households or families.



24 Showing in the foreground a link bridge and in the background the way in which decks run out to ground level.



25 Decks: Section and Plan

216. Judging by mothers' replies and the results of observations, decks were very little used for play. The mothers of only nine of the 22 children between the ages of 1½–11 years living in flats opening onto the decks said their children used the deck for play. Of the total number of observations made of children's play during a five day period, only 4% took place on decks. Decks were one of the least frequented locations recorded. This small use of decks for play may be an understatement as data was collected in summer whereas in winter decks may prove more attractive. It is also a reflection of the small number of children living in the flats.

217. Two mothers said they put their prams out on the deck and one householder used it for repairing a bicycle. Other than these no further uses of the deck were volunteered.

218. No one made any comment on the appearance, length or width of the decks when asked what it was they liked or disliked about them. What did emerge was that the protection offered by the deck against inclement weather was greatly appreciated. This was quoted as its main advantage by nearly half those whose flats opened on to a deck. A fifth appreciated having no stairs to climb and a few others said simply that they found the deck convenient. Altogether three-quarters of the housewives mentioned advantages of having a deck and only a fifth offered positive criticisms, the major one being dirt and smell caused by household pets.

Use of deck by tradesmen

219. Although the deck was designed to be capable of taking a point load of 0.38 tonnes (based on the estimated weight of a fully-laden four-wheeled milk float), the height of the deck would restrict use to hand-drawn vehicles unless specially designed.

220. In general only milk, mail and newspapers were regularly delivered to dwellings. As hand-drawn vehicles were not considered to be an economic proposition in this area, milkmen had to use the public staircases in order to deliver to flats with access above the ground. Even had suitable vehicles been used the delivery pattern may well have been similar for only one deck leads round the site from ground level to ground level and as there are no lifts on the remaining decks roundsmen would have to retrace their steps. It may therefore prove quicker to continue to use public staircases when making deliveries. Similarly, though mail and paper deliveries work well at present, if lightweight trolleys are ever used to carry the load, stairs will have to be negotiated if waste of delivery time is to be avoided.

Flats at deck level

221. These flats were planned with the kitchen/dining area facing onto the deck. This arrangement not only avoided having to use blind-sided dwellings (which are wider and generally more expensive) it also provided some informal supervision of activities on the deck and gave a view of passers-by from smaller dwellings which were lived in by the elderly.

222. The window unit on decks had a sill height of 1 143 mm (see Figure 25). As it was at the back of the deck there was no problem of water penetration and the horizontal pivot could be hung the reverse to normal in order to avoid the danger of passers-by walking into it when open.

223. Housewives at deck level were asked whether or not they minded their kitchen being overlooked by those on the deck. Very few (8%) found it a nuisance while two-thirds had no particular feelings about it and 26% positively liked it saying it afforded company and they liked to see people. This compared favourably with overlooking satisfaction at ground level where barrier paving provided protection from passers-by. A few also

said that as they had hung blinds or curtains at kitchen windows they did not feel overlooked. In fact observation showed that two-fifths of the total number of windows on the decks were hung with net curtains, or venetian blinds, or the heavy curtains were kept half drawn. This was only a little higher than at ground level (30%) but far higher than at intermediate levels (3%).

224. Satisfaction with the degree of privacy was not significantly lower among those living at deck level (89% said they had enough privacy) than among those living on other floors off the ground (94%) and equal to ground level percentages. Those who were not satisfied said they had too little privacy and very few said they had too much privacy.

Flats with an internal staircase

225. These flats had a stair of parana pine which, for fire requirements, was backed with asbestos. Apart from its width which, for structural reasons was 1 029 mm over strings, it was sized in accordance with the recommendations given in Design Bulletin 8.⁴ In all cases the head of the stair was next to the living room door, and the space under it was used as a store for the flat below: this store opened directly into the living area of the lower flat (see plans pp 18–20).

226. According to Oldham's Housing Manager these flats were initially more difficult to let than any other type of dwelling. The reaction of housewives was also not particularly favourable as over a third of those who lived in these flats said they disliked having the staircase mainly because they were old or in ill health, or because it was inconvenient or difficult to negotiate the stairs every time the front door bell rang. A few mentioned the danger to children, perhaps because of the nearness of the living room door to the top of the stairs. However, two-fifths were not particularly worried by the staircase and a further quarter liked it mainly because it gave them extra privacy.

227. Noise was transmitted from the timber staircase to the flat below. A fifth of those interviewed at ground and deck levels mentioned this as a source of noise that they heard from neighbours' flats and just under half of these said that the noise bothered them. This was the second most frequently mentioned noise heard from other flats (see also Figure 33). In the houses there was virtually no problem of horizontal noise transmission from stairs.

228. The answers given by people in staircase flats to certain questions were compared to the answers from those living at ground and deck levels.* The particular level of the flats made very little difference to loneliness, the number of people known or having more or fewer neighbours to talk to than before moving. If anything the social life of the elderly in staircase flats was slightly better than that of the elderly in deck-level flats but for adults there was hardly any difference.

229. General satisfaction questions were also considered in the same way and the four questions used were; satisfaction with dwelling and with estate, the wish to move, and attitudes to living off the ground. Again differences were not significant.

Public staircases

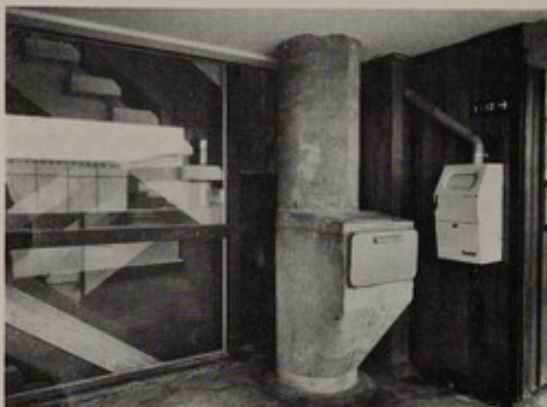
230. These are located as shown in Figures 3 and 25 and are of precast concrete with a timber handrail (Figure 26a). Designed to the recommendations in Design Bulletin 8 the stairs are

* Families were omitted as they only lived in staircase flats.

⁴ MHLG Design Bulletin 8 *Dimensions and components for housing* 1963 pp 22–25



(a) Details of precast treads and timber handrail;



(b) Glazed screen between staircase and deck.
Note position of refuse chute and incinerator;



(c) Detail of rooflights at head of staircase.

finished with precast granolithic treads and landings. To facilitate easy washing-down the treads were kept as far away from the adjacent walls as possible.

231. The stair-well receives daylighting from storey-height, bay-width, Georgian wired glazed units at decks (Figure 26b) and six 610 mm square georgian wired rooflights on the top floor (Figure 26c). One in each group of six rooflights was fully openable for maintenance purposes, though no gear was provided to hold them open. As a consequence workmen found them impossible to hold open against a strong wind and many had to be reglazed after having been slammed against the roof structure.

232. As it was thought that the cladding in the stair well would be more prone to attack by graffiti experts than that on the deck proper (see paragraph 243), use of the cedar-boarded timber cladding was restricted to the structural cross walls (see Figure 25) where it provided an economical way of getting the additional heat insulation needed. The remaining walls adjacent to bedrooms were of cavity construction with an outer skin constructed of 610 mm-wide proprietary woodwool slabs, rendered and painted on site.

233. Each stair well was fitted with self-closing smoke doors at every exit point both at deck and ground level. Although these doors were glazed with Georgian wired glass many have needed reglazing for, despite two complaints about the difficulty of holding the doors open, the spring action has not been strong enough to stop the door from slamming in extreme winds. These failures have all occurred at ground level where a through-draught is possible.

234. When asked if there was anything they particularly disliked about the public staircases 77 tenants (46% of those interviewed whose flats opened out onto decks) replied that there was.* There was no variation by household type but some had more than one complaint to make.

235. By far the most common criticism, 51% (39 complaints), was about the dirtiness of the stairs, allied to which were 16 complaints about smell or lack of ventilation. It is a condition of the tenancy that householders adjacent to public staircases are responsible for keeping them clean, but it would seem that they rarely do this. Cleaning is therefore left to the caretaker who periodically sweeps and swills down the staircases.

236. A minority specifically criticised the design: 11 said that either the steps (risers) were too steep and/or too high or that they did not like having to use stairs; two said they were badly lit and another two said that they found the doors difficult (presumably complaining about the difficulty of holding the smoke door open while laden with shopping).

237. Finally ten people said that children playing on these staircases caused a nuisance and another 11 complained that teenagers courted and congregated in these areas.

Insulation of the decks

238. Figure 25 shows in detail the methods adopted to increase the performance of the basic deck structure. Originally it was intended that the asphalt would be laid on a glass-fibre roof-board but it was later discovered, after one block had been completed, that such a roofboard could not resist point loads of the weight envisaged (0.38 tonnes). In the time available a substitute material could not be found that had the right insulation

* The Layout Study findings suggest that this level of dissatisfaction is somewhat high.

properties and yet did not occupy any more space and did not require the use of a 'wet' trade. The detail shown therefore was the best compromise solution possible even though it fails to give grade 1 sound insulation and only has a calculated U value of 1.42 W/m² deg. C.

239. Housewives in all the flats were asked about noise from the decks and 60% said they heard such noises.* This is very similar to the proportions who said they heard noises from other flats and also similar to those who said they heard noises from outside sources other than from the decks.

240. The main source of noises coming from the decks was of people walking along them especially at night. This formed nearly three-quarters of all deck noises mentioned and two-fifths of it was considered a nuisance. The only other type of deck noise mentioned frequently was talking and shouting which accounted for a further fifth of the noises mentioned. Half of this was said to be bothersome.

241. The number of housewives who said they heard noises from the deck varied greatly according to the proximity of the decks. 81% of those in flats with decks overhead and below said that they heard deck noises as did 28% of those on the ground floor without a deck over them. Two-thirds of those whose dwellings were vulnerable to one deck only also said they heard such noises.

242. Proportionally more complaints about noise from decks occurred in the southernmost block probably because these decks carried more pedestrian traffic than any other. The higher level of insulation on one block was not reflected in tenant reaction.

Damage to decks

243. Although wanton damage had very occasionally shown itself on the estate as a whole it was not apparent on the decks. Most damage was restricted to graffiti in the public staircase areas. Here the cement-rendered walls have had to be repainted three times. Possibly the major reason why these walls have been the subject of attack is that paint has a relatively poor bond to this type of surface and can therefore easily be stripped by metal combs, nail-files and the like. At the same time the smooth surface gives ample scope for large-scale felt pen or spray paint work. Little damage, has been noticed on the adjacent timber cladding (see paragraph 207).

4b(viii) Balconies

244. All 36 of the flats with 'extension' bedrooms into the public staircase bay have a balcony 3.8m long by 1.0m deep (see Figure 27). These balconies are entered from the bedroom by means of a glazed door.

245. Thirty-three of the tenants with private balconies were interviewed. Nearly four-fifths used them for sitting out and a half for drying occasional washing. A few grew flowers and used the balconies for storage. Asked what they particularly liked about the balcony, a quarter spontaneously mentioned that there was nothing particular that they liked and that they could do without it. Two-fifths said it was nice to sit out on and a tenth said it was cool on a hot day or convenient for letting fresh air into the flat. Dislikes were mentioned by only a quarter and included complaints of small size, flooding, extra rent, opening

* No comparable questions were asked in the Layout Study to allow any assessment to be made about the noise nuisance from these particular decks. However, the Layout Study did find that with the exception of point blocks, access decks in general created no greater noise problem than any other form of access.



27 Typical balconies.

onto the bedroom, making the bedroom cold. However, only four of the 33 were prepared to give up the balcony in order to have a larger bedroom.

246. Those without balconies were asked if they would like one if it meant making the space inside the flat smaller. Only a fifth said they would. This is much lower than the Layout Study findings where almost a half of those without balconies wanted one. The climate in Oldham may be a determining factor here.

4b(ix) Private gardens and back alleyways

General notes

247. The only private gardens provided were at the rear of all houses.*

248. All tenants were asked whether or not they had had the use of a garden or yard, or other space at their previous home. 74% said they used to have a yard, 17% had been used to a garden and 11% had had no space at all. Thus a few had previously had both a garden and yard. Those now living in houses had previously been better off in respect of private open space than those now living in flats.

Size of gardens

249. Three sizes of garden were provided on this scheme: small—between 21.0 and 25.5m²; medium—between 26.5 and 31.5m²; large—between 37.0 and 62.0m². The size of garden was not

* Everyone in flats was asked whether or not they would like a private garden, see paragraph 368.

[illegible]

42

258. With self-closing gates (Figure 32) at each end where they meet public thoroughfares, the alleys have a minimum width of 1.5m. In most cases this alley widens out over much of its length to give an area of flat paving either 3.3m or 4.8m wide depending on the fall in the ground (Figures 28 and 30).

259. As alleys were accessible to everyone all tenants in houses were asked what they used the back alley for and whether they used it often or only sometimes. A third said they sometimes entered or left their house by way of the back alley and gardens. Another 13% did this regularly. Of those with children (74) 44% sometimes let their children play there and 17% often did so. The back alleys were used very little for chatting, only 12% saying that they sometimes talked to neighbours there. By comparison,

a much higher percentage of people living in flats used the decks for this purpose (see paragraph 215). No other uses of the back alleys were mentioned by housewives when asked.

260. As the back alleys had been designed for toddlers' play the 41 mothers with children under five were asked whether or not they thought the back alleys were suitable places for young children to play. 65% said that they considered them unsuitable. Some



29 Typical arrangement of garden fences etc.



30 Low fences, back alleys and toddlers' play.



31 High fences at the end of each 'garden block'.



32 Back alley gates.

people gave more than one reason: eight said it was because it was dirty and there were steps which could be dangerous (Figure 30); seven said there was no need for their children to go out into alleys as they played quite safely in their gardens; six considered them unsuitable because the children annoyed other people with their noise, and five said children could not be supervised and could run into areas of traffic.

261. However, 13 considered it a suitable area because it was safe and free from traffic, though four of those also stated that other people sent the children away. Five people also considered it suitable because they could watch their children when at play.

262. Of all the interviewed tenants living in houses, 47% had no complaints when asked if they had any criticism to make about the back alleys. Of those who had one or more complaints two-fifths said that the back alleys behind the houses were dirty with rubbish and became smelly; 15% said the children were a nuisance; 13% had complaints about the gates (some of which had been broken off their hinges); 9% said they were noisy with people using them as a footpath, and 9% said they were either too narrow or dangerous.

4b(x) Noise disturbance

General notes

263. Noise from access decks and private staircases within blocks of flats have been discussed fully in paragraphs 227 and 239-242. Comments on these points have therefore been kept to the minimum suitable to allow comparisons to be drawn.

Noise between dwellings

264. Walls of 178 mm concrete between dwellings gave a House Party Wall standard of insulation (50dB reduction).

265. Floors between flats were of 178 mm hollow-cored concrete slabs with a floating floor of 22 mm T and G boarding fixed on 41 mm-deep x 48 mm-wide timber battens laid on 100 mm-wide continuous strips of sound-deadening quilt. 63% of those interviewed said they had had trouble with creaky or springy floors. About one-fifth of all flat tenants had complained to the Council about this and the Council had since had the perimeter battens shot-fired to the concrete floor through the quilt.

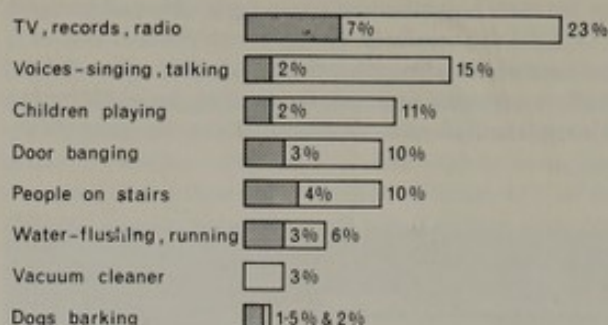
266. In all dwellings, glazing spanned the complete width of rooms.

267. Sixty-two per cent of those in houses said they could hear noises coming from neighbours' dwellings and so did 57% of those in flats. Altogether 358 noise sources of this nature were mentioned by 231 out of the 393 tenants interviewed. 28% of these noises bothered the housewives but there was a significant difference between flats, where 36.5% of the noises were disturbing, and houses where only 17.4% were.

268. In both flats and houses family households (72%) complained more than the adult or elderly (54%) which is possibly a reflection of the fact that families tended to be grouped together.

269. Of those interviewed in flats a quarter heard noises from adjacent flats on the same level, whilst of those living on all but the top floor, 43% heard noise from above, and a quarter of those living on all but the ground floor, heard noises from below.

270. The noises most frequently heard, given as a percentage of the total sample, were as follows:



33 Noises from neighbouring dwellings.

Whole bar represents percentage of total sample hearing noise.

Hatched bar represents percentage of total sample bothered by it.

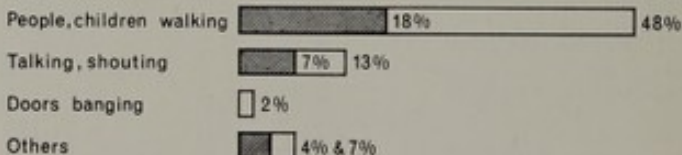
The frequency of these noise sources varied between flats and houses in that 'people on the stairs' ranked second in flats but was very low in houses.

For every single noise mentioned a higher proportion of people in flats were bothered than in houses.

Noise from decks

271. Sixty per cent of those living in flats interviewed said they heard noises from the decks. 174 sources of noise were mentioned, 42% of which were considered to be bothersome.

272. Percentages of the total sample mentioning each noise was as follows:



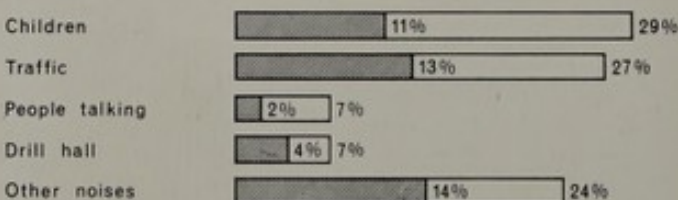
34 Noise from decks.

Noise from outside the dwelling

273. Altogether 64% of those interviewed said that they heard noises from outside (other than deck noises). 86% of housewives in houses said that they heard noises from outside compared to only half of those living in flats.

274. Three-hundred and fifty-nine sources of noise were mentioned by those who heard outside noises of which 167 (47%) were said to bother housewives. These bothersome noises affected proportionally equal numbers of housewives in flats and houses.

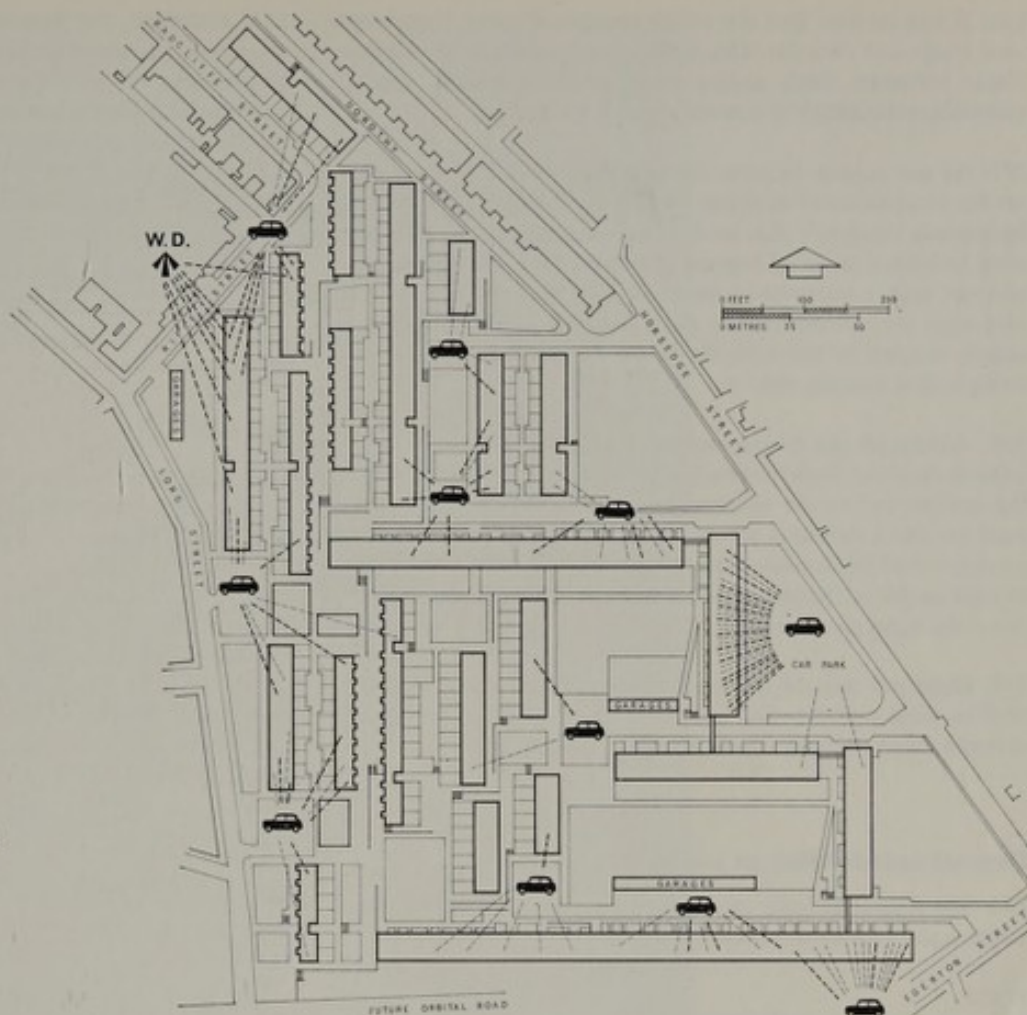
275. Sources of noise mentioned as a percentage of the total sample were as follows:



35 Noise from outside.

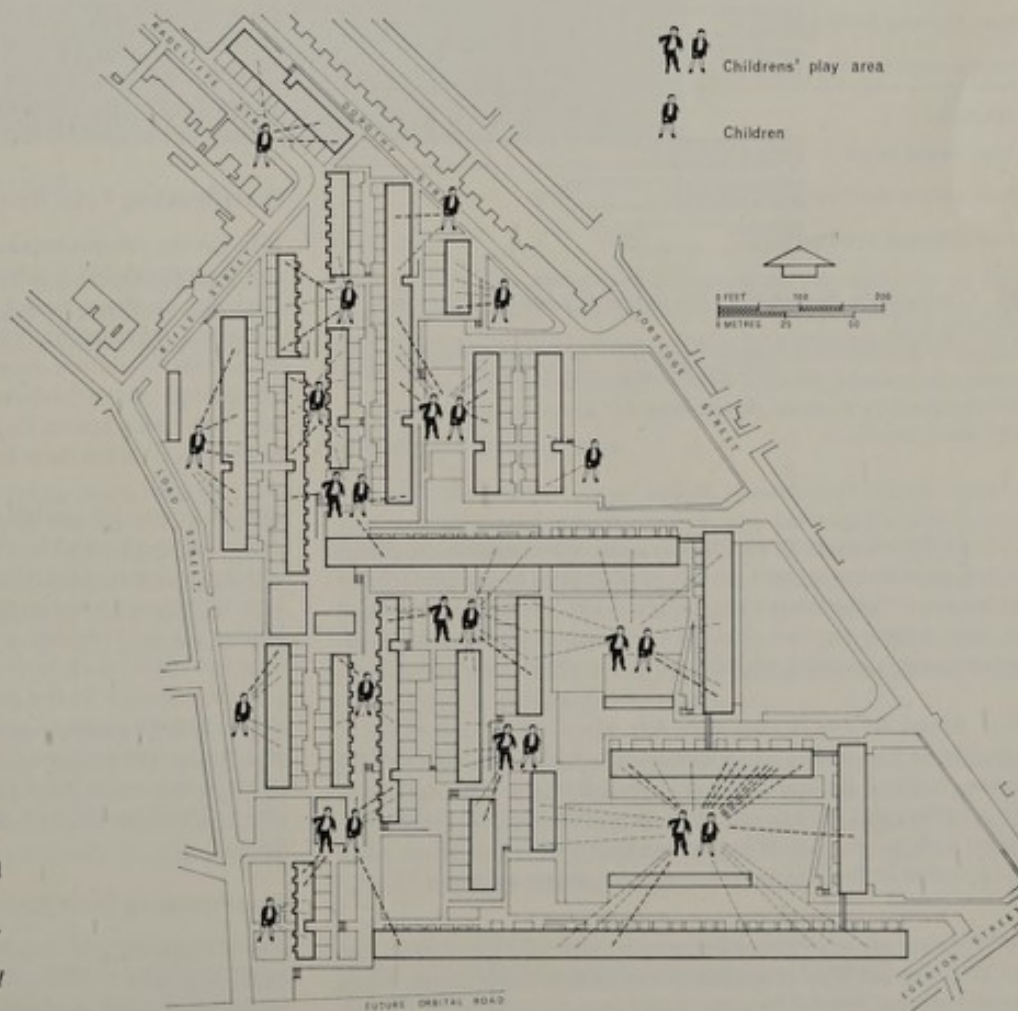
36 Diagram showing approximate position of dwelling in which the tenant interviewed complained of traffic or the T.A. centre as a source of noise from outside.

Thick broken lines denote bothersome noise, thin broken lines denote noise heard but not bothersome.



37 Noise from children's play showing approximate position of dwelling in which the tenant interviewed complained of children's play areas and children playing as a source of noise from outside.

Thick broken lines denote bothersome noise, thin broken lines denote noise heard but not bothersome.



276. It can be seen that the major sources of noise complaints were traffic and children. This is the same as those in the Layout Study although there, unlike the Oldham appraisal, specific questions were asked of tenants about these points.

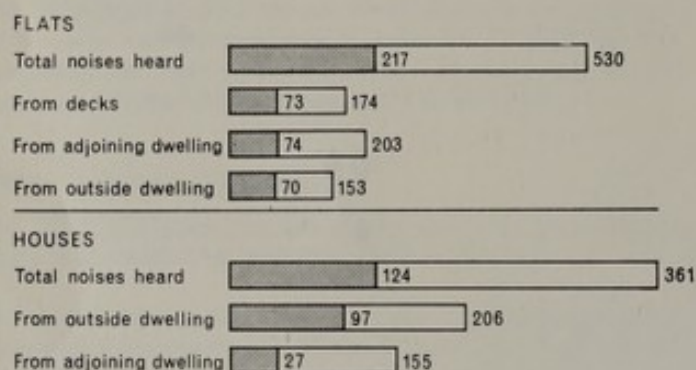
277. As can further be seen from Figures 36 and 37 the major source of annoyance to those tenants at Oldham who lived in houses was children's play as there was opportunity to play very close to both sides of all houses. However, for those in flats play was not such a nuisance as traffic noise, for although the main play area was surrounded by flats, the only block to be particularly worried by the noise that came from it was the one with living rooms looking onto it.

278. Almost all the complaints from those in flats about traffic noise came either from the block overlooking the car park or from the eastern end of the southernmost block, which has a main road on one side and a service road on the other. Hardly any complaints of noise came from housewives in the block of flats at right angles to the service road, whose kitchens and bedrooms faced the main play area.

279. Eight per cent of the households included night workers. Half of these said they had problems trying to sleep, traffic and children again being the main causes of disturbance.

Overall assessment of noise nuisance

280. The following table summarises the responses on all three major noise sources considered:



38 Comparative diagram showing source of noise in relation to dwelling type.

Length of bar represents number of sources in relation to number of tenants interviewed. Hence a total of 530 noise sources from 250 flat dwellers is shown shorter than 361 noise sources from 143 house dwellers.

281. Noise nuisance from outside rather than between dwellings would seem to cause most trouble at Oldham. On the whole those in houses suffered from noise nuisance just as much as did those in flats despite the fact that flats were open to more potential annoyances (i.e. more neighbours, decks above and below, etc.).

282. Asked to assess how they felt about noise overall, 64% considered that it was not a source of nuisance;* a quarter said it was rather a nuisance and 11% said it was a great nuisance. 31% in flats said it was a nuisance compared with 44% in houses. Height above ground of the living room, or being on or off a deck, made little difference to nuisance caused by noise.

* This was not high compared to the Layout Study estates where percentages not worried by noise ranged from 62%–88%.

283. Although the individual sources of noise (from other dwellings, outside or decks) were not highly correlated with estate satisfaction, overall noise nuisance was (0.52). Correlation with other satisfaction indicators was not quite so high but still important (dwelling satisfaction 0.33, glad to have moved 0.36, not wanting to move 0.35). Other related factors were play problems (0.38), disliking the kitchen overlooking a pedestrian route; too little privacy; being 'neurotic'. (See Appendix D 'Correlations'.)

4b(xi) Privacy, overlooking and view

Privacy

284. Lack of privacy was linked not only with being overlooked but also with being disturbed by noise, especially that created by children's play.

285. Only five people on the whole estate (one in a house and four in flats) complained about having too much privacy. In the flats there were no substantial complaints about too little privacy: only 7% had this problem, and these were mainly concentrated on the ground and deck levels where 11% complained compared to only 2% at all other levels. Those in ground-floor flats who said that they would not in future choose a similar dwelling and those in flats who had criticisms of the deck also tended to have too little privacy.

286. In the houses, some of which were only 14m apart (see Figure 3 and paragraph 59), a third felt they had too little privacy.

287. Housewives were also asked if they would prefer to be more separated from other people on the estate. 29% of those in houses wanted to be more separate from others compared to 11% of those in flats. For the adults and elderly in flats, wanting to be more separate was linked to the same factors as privacy. For families in houses, however, it was linked somewhat more strongly to wanting to live further out from the town centre, lack of privacy in the garden and wanting to move.

Overlooking into living areas

288. On the whole overlooking into the living rooms of the flats was not considered a major problem—only 7% felt overlooked. However, on the ground floor a third were worried and there was a marked relationship between those who felt overlooked and those who would not choose to live on the ground floor again. Complaints of overlooking were also high (18%) in the block of flats with living rooms facing the main children's play area (the centre block of the three east-west blocks—see Figure 44).

289. In houses the problem was much greater as almost half felt they were overlooked in the living room. The main reason given was the nearness of the houses at the rear. This was aggravated by lack of privacy fencing at the back of the small gardens (see Figure 30) as there was a significant association between those who felt overlooked in the living room and those who had insufficient privacy in the garden. The slope of the site also contributed to the problem as some houses could look directly down into living rooms opposite (see Figure 39). Others complained about being overlooked by adults and children using the back alleys. Three people said they felt overlooked by those living in flats.

Overlooking into bedrooms

290. Complaints of overlooking into bedrooms in flats were negligible, only 7% being worried. Most of these seemed to occur where blocks met at corners.



39 View taken from third-floor flat living room.

291. Twenty-three per cent of those in houses complained that bedrooms were overlooked from houses opposite. In nearly all cases this was where there was a change in level and living rooms had a direct view into bedrooms.

Views from living areas

292. Opinions on the view from the living room differed completely between housewives in flats and housewives in houses. Eighty-three per cent of those in flats liked their view. However, those in ground-floor flats and those in flats which overlooked the main children's play area were significantly less satisfied than housewives in the other flats. Only a third and a half respectively said they liked their view.

293. Apart from general favourable comments the most common specific reason for liking the view from the flats was that you could see a long way and this made a nice light outlook. The second important reason was that those in flats liked looking out on grass and open spaces. Seeing the children at play and the lights at night were also appreciated.

294. Those in the houses were not nearly so enthusiastic; only a tenth said they liked their view, two-fifths were not worried about it but a half said they disliked it. The living rooms of the houses

had none of the advantages possessed by the majority of flats and the most usual comment spontaneously mentioned by over half was that there was no view at all—only the house behind, or a fence or the steep garden (see Figure 40).

Views from kitchens

295. The kitchens of most houses looked immediately onto a public pedestrian footpath which it was felt might worry housewives (see Figures 41–43). There was a similar situation in ground-floor and deck-level flats. Only 12 tenants of these flats said that they did not like the location of the kitchen, the rest said they did not mind (63%) or that they liked it (27%). In the houses it was more of a problem as almost a quarter disliked it, although a fifth liked it and the rest did not mind.

296. On the whole tenants said they liked to see people, it afforded company and with a blind or a net curtain it was not a worry. It should be remembered that most of the older houses in Oldham from which these tenants came opened straight onto the street without a garden barrier.

297. Liking the kitchen overlooking decks or footpaths was linked to satisfaction with the kitchen as a whole and to various aspects of it.



40 Living room of 4B7P house. Compare view from window with that of Figure 39.

298. Wider views from kitchen windows varied considerably. Deck flats and some houses overlooked little except the pedestrian route. Other flats had views from the kitchen over various parts of the estate. The remaining houses looked on to small play areas, or grassed areas and peripheral roads. Thus some of the views were fairly open and some obstructed by houses opposite or the deck balustrade.

299. A quarter of the housewives in houses said they had no view from the kitchen but only a few of the housewives in flats said this. Over half the flat dwellers liked the view—those on the ground floor being slightly less happy. Only a quarter (37) of the housewives in houses liked the view from the kitchen and of these 14 (out of 17 interviewed) lived in houses which overlooked the same large grassed areas as did the flats. The remainder were scattered haphazardly throughout the site.

300. Housewives who did not like the wider view from their kitchens tended also to be the ones who did not like the kitchen looking immediately on to a pedestrian route. They also tended to criticise the untidiness of the estate.

4b(xii) Refuse disposal

General note

301. In 1967 the Ministry of Housing and Local Government published a report by a working party investigating refuse collection.²⁰ This particular scheme was of course designed before these findings were available.

Paper sack refuse disposal

302. The paper sack method of refuse disposal was used for all houses and for all flats entered from ground level.* With access

from the outside, pre-fabricated stores to take the sacks were attached to the storey-height timber cladding next to the front entrance doors. With this arrangement, stores projected into the dwellings and, in 48 flats, a habitable part of that dwelling (see plans, pp 18, 19).

303. Although the volume of each store was over 0.22m³ (686 mm wide × 330 mm deep × 1 016 mm high) and therefore theoretically adequate for tenants' needs (see *Refuse storage and collection*) the depth and height of the store combined with the position of the sack holder in the centre of the access door meant that only one nominal 0.07m³ paper sack (occupying an area 228 mm × 432 mm) could be provided for each dwelling.

304. Access doors to these stores were not initially ventilated. Following complaints from the tenants the Council were advised in the autumn of 1967 to drill holes in horizontal lines at the top and bottom of these doors, but, at the time of the appraisal, this work had only been carried out on a few selected dwellings.

305. Although half of those tenants interviewed who used this form of refuse disposal stated that they found it quite satisfactory, the incidence of dissatisfaction rose steeply the larger the household. For instance the level of dissatisfaction in houses larger than 2B4P was 83% whilst in 1B2P flats only one household complained.

306. The outstanding causes of dissatisfaction were that the bags were not big enough and/or that there was a lack of space for overflow bags (74% of those giving a reason) or else that it was smelly and unhygienic (29%). In answer to the specific question 'Are you bothered by smells from your refuse bag?' the number who were rose to 39% of all users. Again there was a very close relationship between this answer and the size of family unit—56% of those tenants living in houses larger than 2B4P complaining.

307. A study of the complaints about smells shows that they are more frequent where stores project into small, and usually badly ventilated, areas like an internal store or w.c. than when they project into habitable areas where smells are presumably more

* Refuse collections from these dwellings are made once a week.

²⁰ MINISTRY OF HOUSING AND LOCAL GOVERNMENT *Refuse storage and collection* HMSO 1967



41 2B4P dwellings on main pedestrian route. A good example of the conflicting opinions as to view. When the tenants of five adjacent houses were asked for an opinion of their view from the ground floor kitchen windows of this block, one said she disliked it, one liked it, two said they had no feelings about it and the fifth said there was no view.



42 and 43 Two examples of barrier paving to stop passers-by approaching too close to the dwelling. Constructed of setts which formed the surface of the roads before redevelopment; the angled version (Figure 43) had the advantage of being more effective but had the disadvantage of holding dirt, cigarette ends, waste paper etc.

easily dispersed. It would appear therefore that when tenants complained of smells they were largely referring to those which seeped from refuse stores into the dwelling.

Refuse chutes

308. The remainder of the tenants disposed of their refuse by means of 11 refuse chutes provided throughout the flats complex. Chutes are positioned adjacent to public staircases and the maximum walking distance between a chute and any front door is 33.5m.

309. The chutes, which are of spun-concrete sections with an internal diameter of 457 mm are fitted with steel cut-offs at the base and steel hoppers at every deck level (to fit a 235 mm x 432 mm opening in the concrete casting). These chutes discharge into steel containers with a capacity of 1.0m³.

310. Only 5% of those tenants interviewed who used this form of refuse disposal considered it to be unsatisfactory, and no one complained of noise nuisance from chutes. Three people complained that their chute was too far away. These tenants were all grouped together and theoretically only had a walk of some 18.3m across a bridge to a chute in the next block. However, a tenant in this next block, whose dwelling was adjacent to the chute in question, was a bit of a barrack room lawyer and had convinced these other tenants that the chute was not for their use. Although they complained of the distance involved in using the chute in their own block this was no greater than that of several other tenants who made no such complaint.

311. It is not possible to say with any certainty why this very high level of satisfaction was recorded (high that is compared to the findings of the Layout Study) but the following points are worth noting:

- (a) the size of the households using chutes was generally small with very few family households;
- (b) adequate arrangements were made for the disposal of large items of rubbish from flats (see paragraph 312);
- (c) access to the chutes was under cover and did not involve a climb of public staircases;
- (d) the ratio of dwellings to chutes was reasonably low compared to tall slab or point blocks—an average of under 21 dwellings per complete vertical length of chute;
- (e) as the chutes were on general view to all passing along the deck, tenants may have been influenced to use them properly;
- (f) no blockage of the chutes has ever been recorded or spillage of refuse observed; facts which may owe something to points (b) (d) and (e) but which are most probably the result of designing chutes to the standards recommended in *Refuse storage and collection*, which are higher than mandatory standards.

Large items of rubbish

312. The disposal of large items of rubbish was no problem in flats as arrangements were made for them to be left beside chute hoppers for collection by the caretaker. In houses, however, no such arrangement existed and a quarter of these tenants found the disposal of large items of rubbish a problem. This was sometimes because dustmen refused to take them but mainly because there was no place to store them before collection.

Incinerators

313. In order that soiled articles of a personal nature such as sanitary towels and surgical dressings could be instantly disposed of, six small electrically-operated incinerators were positioned alongside refuse chutes throughout the flat complex. To simplify flueing all six were located on the top deck.

314. In 80% of all households where interviews took place it was stated that no member had ever used the incinerators and an additional 4% stated that they did not know that there were any. These last households were either elderly or all-male establishments. There was very little difference in the amount of use between houses and flats.

315. As far as could be ascertained there was at least one woman of childbearing age in 100 of the houses and in 60 of the flats. 28% of all respondents (35% of those living in houses and 18% of those living in flats) said that they used internal protection and 13% said that they used soluble sanitary towels which they flushed down the w.c. (16% in houses and 8% in flats). The remaining 59% (49% in houses and 74% in flats) disposed of sanitary towels in the following ways:

Method of disposal	Living in houses %	Living in flats %
Used incinerator	11	53
Used refuse sack	28	6
Used refuse chute		12
Took them off the site, generally to a relative's dwelling where there was an open fire	10	3

316. It can be seen that the incinerators were well used by those in flats, a fact which conflicts with the views of the Institute of Housing Managers²⁹ who '... found that where incinerators were provided they were little used ...' and mentioned '... the reluctance shown by women to be seen using [them]'. If this view is correct it would seem that positioning incinerators next to refuse chutes, as on this estate, is advantageous in that sanitary towels can be disposed of unobtrusively at the same time as general refuse.

317. It is quite possible that there is some connection between the numbers of women using soluble sanitary towels on this estate and the more than normal trouble which has been experienced with blocked drains.

4b(xiii) General storage

Overall design and use of storage areas

318. Not all the dwellings complied with the minimum storage provision laid down in Circular 27/70. At the time the scheme was approved such standards were not mandatory. Storage in the 4B7P type houses was 1.3m² below standard but the rest of the houses were well provided with storage. The flats, however, were badly off especially the 2B3P and the larger flats not on the ground floor. Although some of the 1B2P flats approached Circular 27/70 storage standards the rest did not have even half the required amount (see plans pp 18-22).

319. All flats had a drying cabinet and meter cupboard which housewives used for storage; this was not intended and these areas are not included in the storage area totals. In addition some flats had a large store under the stairs leading to the flat above. Observation showed that the whole of this space was used for storage whereas only that part over 1.5m-high has been included in the storage area totals.

320. In addition to internal storage shown on the type plans, all houses had a shed providing 1.67m² of storage. These were positioned at the far end of the garden (see Figures 30 and 39).

321. Tenants were asked about the storage of specific items with which it was felt that they might have problems. These included clothes, ironing boards, vacuum cleaners, long-handled brooms, suitcases, spare blankets, large toys, sports kits, paints and tools, lawn-mowers, prams and bicycles.

322. Most households in houses kept their coats and working clothes in the open space under the stairs while those in flats utilized one of the cupboards or a bedroom. The need for fitted clothes cupboards in bedrooms was expressed most strongly in the 2B3P and very large flats, and overall half the housewives who did not already have fitted wardrobes said they would have preferred to have them.

323. Over a quarter of the tenants interviewed did not own an ironing board but few lacked a vacuum cleaner. Lack of these items rose to two-thirds and a fifth respectively among housewives in bedsitter flats. These two items together with long-handled brooms were mainly kept in hall cupboards or under the stairs. However, in half the 2B3P flats and in some very large flats suitable broom storage was not provided and these items were kept either in the kitchen, hallway or bedroom. Similarly in the 3B5P houses; there was no convenient store on the ground floor, consequently long-handled brooms were kept in either the external shed or the downstairs w.c. None-the-less, with the exception of the 2B3P and the larger flats previously mentioned, storage facilities for these items was considered satisfactory by the tenants.

324. In houses, suitcases were kept in upstairs store rooms, in the linen cupboard or in bedrooms. In the 2B3P and larger flats they were kept in the bedrooms; in bedsitters they were kept in the large store cupboard under the stairs and in 1B2P flats they were kept in both places equally. Again tenants of the same large flats were dissatisfied with this arrangement.

325. Most housewives in houses used the linen cupboard to store spare blankets and linen. Those in flats where no linen cupboard had been provided most often used free-standing linen boxes or tallboys. There was no great dissatisfaction about this.

326. Families in houses who had large toys to store, kept them in the shed, under the stairs, or in one of the big upstairs store rooms. Some also kept them in the bedrooms. These arrangements proved to be satisfactory. The few families in flats, however, were much less happy as they generally had to keep large toys in bedrooms or the living room.

327. Two-thirds of the sample had tools, paints and the like to keep somewhere. Nearly all those in houses kept them in the shed or garage. Those in the flats generally kept them in the kitchen, or one of the cupboards. Bedrooms were also used in the larger flats, the tenants of which were once more least satisfied with these arrangements.

328. A third of those in houses did not own a lawn-mower or large garden tools. Those who did were satisfied with keeping them in the shed.

329. Of the 35 housewives who owned prams nearly all were able to store them satisfactorily in the downstairs hallways of flats or under the stairs in houses.

330. About half the bicycles owned by those in houses were also stored under the stairs but housewives did not seem to find it as satisfactory to keep bicycles there as prams. The rest of the bicycles were mainly kept in the shed. In flats bicycles were kept in hallways.

²⁹ MHLG *Refuse storage and collection* 1967 p 52

331. Most housewives in houses said that they found the shed satisfactory for their needs. Of the 16 criticisms received, half were about the small size, and other things mentioned were damp, lack of shelves, and being too far from the house.

General comments and tenant satisfaction

332. Altogether just over a quarter of the housewives felt there were more items for which cupboard space was needed but variations occurred among housewives in different dwellings. Only 13% of those in bedsitters and 1B2P flats felt more storage was needed whereas half of those in the other flats and in the large houses said this. Half of these said they needed storage space for vacuum cleaners and brooms, nearly a third mentioned shoes, clothes and linen, and a few, suitcases and ironing boards.

333. Overall satisfaction with storage was related mainly to the actual provision of storage within the dwelling. In the houses, tenants of the 2B4P types were the most satisfied with their storage—four-fifths found it very satisfactory. In the larger house types where storage provision was lower only 60% were very satisfied. The main difference in flats emerged between those with and those without the large store cupboard. All bedsitters, all 1B2P flats and 24 2B4P flats had this store and two-thirds of these tenants found storage very satisfactory. This figure was not as high as that for the small houses where Circular 27/70 standards were achieved. In the flats where there was no large store, satisfaction was down to a fifth.

4b(xiv) Clothes drying facilities

For tenants in flats

334. All flats were equipped with an electrically operated clothes-drying cabinet ventilated into a central duct. These cabinets were positioned next to bathrooms with access from the internal passage-way (see plans pp 18–22). They were storey-height and 914 mm wide by 381 mm deep.

335. In addition to these cabinets all flat dwellers had the use of 24 drying areas positioned throughout the blocks of flats at the staircase bays (Figure 11). Approximately 3.6m square, these areas were ventilated by external louvres (Figure 23) with an obscured, wired-glass screen and door between them and the public staircase. To reach these areas tenants had to climb one flight of stairs from the deck. Due to complaints from tenants about misuse of these areas by children and teenagers, locks were fitted to the doors by the local authority. Keys were not issued to tenants, so consequently they had to obtain one from the housing office on site before they could use the area.

336. It was found that almost half those living in flats dried their washing on racks placed in the kitchen/dining area. 15% used their drying cabinet and the same number said they dried their washing in a launderette. 14% said they didn't do any washing; these were adult or elderly households who either used laundries or got their daughters to do their washing for them. 6% of people used the public drying areas; and a similar number used clothes racks in their living room, or had their own spin-dryers. Other places used regularly for drying by a few people were the balcony (by two out of 33 with balconies), bathroom and bedroom. However, when those with balconies were asked what they used them for, half said that they occasionally dried washing there.

337. The 85% in flats who didn't generally use the drying cabinet for drying washing were asked why they didn't use it. A third said it was because it was expensive to run and just under a third said they didn't need it and were quite happy using other means. Other reasons stated by a few people were that they used it for

other things; it was unsatisfactory because it was slow or dirty; they just didn't like it, they used it for only part of the year and they didn't know why but they just didn't use it. Those who didn't use it for drying were asked if they used it for any other purpose. The main use was for storage, especially by the elderly who used it for storing food.

338. Those who said they never used the public drying areas regularly for drying washing were asked why not. A quarter had no need to use them as they preferred other means. Almost a fifth, mostly elderly, said they were too far away or up too many stairs, and 17% said it was too much trouble to get a key. The remainder gave various other reasons, including not knowing they were entitled to use them or not knowing that they existed; 13 people said they thought it took too long to dry washing there, that there was no sun and it was old fashioned, and five thought it was too dirty and dusty.

For tenants in houses

339. The only clothes drying facility provided for tenants of houses was the usual clothes post in the garden.

340. However, in 87% of the houses (2B4P and 3B5P types) the hot water heat exchanger was located in a commodious store upstairs (see plans pp 16, 17). Thus these stores were comparatively well heated and tenants quickly adapted them to form clothes drying areas.

341. All those interviewed living in houses were asked where they dried washing in dry weather. Most people (94%) said outside, in the garden; 5% dried it in the large upstairs store and a few took it to a launderette or dried it in the bathroom.

342. Because it was felt that the problems would be greater they were also asked where they usually dried their washing in wet weather. Eight people mentioned more than one location. Of those in the 2B4P and 3B5P dwellings (i.e. those with the large upstairs store) 78% said they used the upstairs store. More families and fewer elderly households did this. 10% used clothes racks in the kitchen/dining area (this being a particularly common practice among the elderly), and 6% dried their washing at a launderette. Of the remainder, a few (in all cases less than four) used spin-dryers or hung washing up on racks in the living area or in the bathroom.

343. Of those living in 4B7P houses, 56% dried washing on clothes racks in the kitchen/dining area during wet weather and 29% used the bathroom.

General summary

344. Everyone interviewed, whether living in houses or flats, was asked to summarise whether or not on the whole they found drying washing a problem. The majority (77%) found it no problem at all; 17% found it rather a problem, and 6% found it a great problem. As might be expected more families (with larger washing loads) said they had problems than did the elderly. The Layout Study found that only two of the six estates had a lower percentage of complaints. These were two out of the three estates that had communal estate laundries.

4b(xv) Interior decoration by tenants

Wallpapering

345. All internal non-structural walls were of autoclaved aerated concrete (AAC). In order to avoid the skim-plastering of walls the dwellings were wallpapered direct onto the AAC partitions and

the structural, dense-concrete walls. The designers were worried that because of the softness of the AAC walls, they might be damaged by tenants when redecorating their dwellings. A note was therefore added to the tenants' handbook warning them of this and advising them to soak the old paper thoroughly before stripping it off the walls.

346. Asked whether they had changed the wallpaper in any of their rooms, 56% said they had—80% of all family households but only a third of the elderly. Of those who had repapered well over half said that two or three rooms had been done; 17% said four or more rooms and a quarter had done just one room.

347. Half had left the old paper on the walls and half had stripped it before repapering. Those who had stripped the paper were asked whether or not they had had any difficulty in getting it off. Nearly a third said that they had, mostly because they did not follow the instructions, and said it was hard work scraping the old paper off.

Picture hanging

348. Because the structural walls were of dense concrete, tenants were advised of it in their handbooks, and were told that if they wished to hang pictures etc. the easiest method would be to use hardened masonry pins.

349. Four-fifths of all tenants interviewed had hung things on their walls. Over half of these people had used an electric drill when doing so. 24% had followed the suggestion in the handbook and used masonry pins and a further 10% just used ordinary nails or screws. Other methods were rawl-plugs, stick-on or suction picture hangings, and a hardboard panel wall for hanging things on.

4c Tenants' overall reaction to their type of dwelling

General note

350. It has been shown in paragraphs 60–73 that the majority of tenants on the new estate at St Mary's had many reasons to be favourably disposed towards living there. They knew the area well, many having lived only a few minutes' walk away; their previous housing was considerably lacking in material comforts; they wanted to live in the St Mary's area, and on the whole their choice of dwelling type was respected. Although most had had to face a considerable rise in their rents, this was foreseen and accepted.

351. However, only about a third had had any choice in whether they moved or stayed in their previous homes and the lack of such a choice may have influenced some tenants unfavourably towards their new dwellings.

Tenants' satisfaction with their dwelling

352. After answering the questions about particular facets of their dwellings, tenants were asked to take everything into consideration and rate their overall satisfaction with their dwelling on a five-point scale.

353. Almost two-thirds (64%) said they were very satisfied, over a quarter (29%) said they were fairly satisfied, 4% were rather dissatisfied and only six people (1.5%) were very dissatisfied. The proportion very satisfied is far higher than for any of the Layout

Study estates. Taking those who were very and fairly satisfied, Oldham's dwelling satisfaction level of 93% falls just below that of one of the Layout Study estates—Fleury Road, Sheffield, (96%).

354. On the St Mary's estate, more elderly (75%) and adult (65%) households were very satisfied with their dwelling than families (51%)—a pattern also found in the Layout Study. Although these figures did not vary greatly for families and adults (whether they were living in houses or flats) they did for the elderly. Of these only 82.4% living in houses were very or fairly satisfied with their dwelling compared to 95.3% of those living in flats (with 77% very satisfied as against 59% in houses).

355. Factors linked with dwelling satisfaction are indicated by the correlation matrices,* to be found in Appendix E (see also Appendix F for factors relating to estate satisfaction). The most important of these factors were the ones which possibly reflected a more general satisfaction, such as being glad to have moved to St Mary's in the first place, finding the move an improvement and not wanting to move away. Dwelling satisfaction and estate satisfaction (including various aspects of estate satisfaction such as attractiveness and pride in the estate) also went very closely together.

356. The items of internal design which were most highly correlated with dwelling satisfaction were the kitchen and various associated details of kitchen design. Criticisms of the main bedroom were not so closely related as those of kitchens, and bathrooms were not significantly linked with dwelling satisfaction at all. There was no comparable question about living rooms.

357. The other item of internal design that correlated with dwelling satisfaction was the amount of cupboard space provided.

358. Not finding noise a nuisance and being happy with various aspects of privacy and social life on the estate were also significantly linked with dwelling satisfaction.

359. There were lower correlation values for considering the heating and the rent to be reasonable and not finding problems with drying washing.

360. Among families living in houses satisfaction with the garden and having lived near to St Mary's before moving also proved important. For adults and elderly living in flats other important factors proved to be not wanting to live further out in order to have a garden, and having enough daylight in the kitchen. (The latter reflects the dissatisfaction of those with the small internal kitchen.)

361. Unexpectedly socio-economic group and level of income were not linked to dwelling satisfaction, nor were attitudes to play, choice of estate or whether or not tenants had previously been owner-occupiers or had lived in a dwelling with a high standard of basic amenities.

362. As might be expected the internal design of the dwelling proved to be more important to overall dwelling satisfaction than to estate satisfaction.

363. Social contact variables seem to play about the same part in both dwelling and estate satisfaction, but privacy and noise ranked lower among the variables associated with dwelling satisfaction. On the other hand, while problems with play do not feature at all in relation to dwelling satisfaction they are closely

* See Appendix D for a description of the significance of the correlation technique.

linked to estate satisfaction. This is probably because mothers worried more when their children played outside (rather than inside), and those tenants with no children could in general only be affected by the noise from children playing out of doors.

364. Comparison with correlations on dwelling satisfaction from the Layout Study is difficult because in the latter case there were few questions asked about the internal design of the dwelling. However, of the important variables common to both studies correlations were of similar magnitude except for privacy and rent which correlated more highly with dwelling satisfaction at Oldham than in the Layout Study; while with play, the view from kitchen and living room, and choice of estate, the situation was reversed. Choice of estate played a more important part in dwelling satisfaction in the Layout Study than at Oldham, possibly because St Mary's was usually tenants' first choice whereas over half those interviewed on the other survey said they had not particularly wanted to come to the estate they were on.

Tenants' views on living in a flat

365. Before any demolition started, residents living in St Mary's were interviewed about their dwelling preferences.² Although it was clear that there was considerable reluctance to live in a flat, a later survey³ (after demolition) showed that some of these residents were in fact allocated flats and seemed to adapt to them very well.

366. Residents from the next clearance area were much more receptive to flats (see paragraph 72) and those who were in fact allocated a flat in the new St Mary's estate were asked certain limited questions to ascertain how they had adapted to flat life and living off the ground. As most of these tenants formed adult or elderly households, the results are mainly applicable to these household types.

367. When tenants of flats were asked whether there was anything they or their family could not do in the flat which they had enjoyed doing in their old home, a third said that there was. Most of the points raised reflected a need for private open space. A third said that they missed being able to hang washing out, though this did not seem to cause excessive worry, as washing was dried without too much inconvenience inside the dwelling. Being unable to sit out in a garden or yard, worrying about noise disturbing neighbours, and not being able to do joinery, gardening or odd jobs, were each missed by a fifth. Some other aspects mentioned were the lack of a coal fire, being unable to shake mats outside and not having a back door, being unable to keep pets (an Oldham condition of tenancy often ignored by tenants) and not having a spare room for visitors.

368. All tenants of flats were also asked whether or not they would like a private garden. Overall, 60% said they would not, but the few family households (32) were much stronger in this demand, almost two-thirds wanting one. These replies are very similar to replies given on one Sheffield estate in the Layout Study but demand on the four London estates was much higher. However, when asked whether they would prefer to live on an estate further out from the town centre in order to have a garden, only a quarter of those wanting a garden and a tenth of the total sample said they would. Families were no more willing to move than other households.

369. Tenants of flats above ground-floor level were asked if they had ever lived above the ground floor before, and 95% said they had not. Asked what they felt about the prospect of living above

the ground floor when they first moved in, almost half said they were happy about it, one quarter said they were unhappy and the remainder said they had no feelings either way. When asked what they now thought about it (i.e. at the time of interview) only a tenth said that they were unhappy to live above the ground floor. Families with children appeared to adapt least easily.

370. Whether tenants were one, two, three or four floors above the ground made no consistent difference to their feelings on being off the ground as is shown by Table 2. Because the third floor was sometimes the top floor and sometimes had a deck it is difficult to say why those living there seemed to be particularly happy. Nothing similar happened in the Layout Study.

Table 2

Happy living off the ground	
	%
1st floor	79.3
2nd floor	76.9
3rd floor	94.0
4th floor	75.0

371. In contrast to these results Table 3 shows that those furthest from the ground had a slightly stronger wish to move:

Table 3

Wanting to move	Ground-floor flat	Floors above the ground			
		1	2	3	4
	%	%	%	%	%
Wanting to move and taking steps to do so	11	14	21	16	20
Wanting to move but not taking steps to do so	10	4	8	10	19
Not wanting to move	79	82	71	74	61
Totals	100	100	100	100	100

372. A similar pattern is found on dwelling satisfaction when it is broken down by height above the ground (Table 4). Dissatisfaction with the dwelling and the wish to move do not increase consistently with height above the ground. They are considerably greater only at the level of four floors above the ground. It is extremely difficult to attribute this difference solely to height above the ground, as the picture is also complicated by the fact that there were no lifts, the flats were more exposed to the elements, and all the flats were of the slightly less popular staircase type—a situation which does not occur at any other level.

Table 4

Percentage very satisfied with dwelling	
	%
Ground floor	73
One floor above the ground	73
Two floors above the ground	65
Three floors above the ground	68
Four floors above the ground	61

² MHLG Design Bulletin 19 *Living in a slum* 1970 pp 31–32

³ MHLG Design Bulletin 20 *Moving out of a slum* 1970 p 20

373. There was, however, no such variation in satisfaction with the estate, 70–75% of those on any floor except the second being very happy with it. On the second floor the proportion was, for some unexplained reason, only 56%. Although actual height above the ground made little difference to general satisfaction, what people felt about living above the ground floor (regardless of the actual floor they were on) did tie up with dwelling and estate satisfaction.

374. All tenants living in flats off the ground were asked whether they would prefer a ground-floor flat. Most (79%) said they would not, the most frequent reasons given being that they felt that at present they had more privacy, a better view and it was quieter. Only 15% of the adult and elderly housewives living off the ground said that they would prefer a ground-floor flat compared with half of the households with children. Four of these mothers said that being on the ground floor would make it easier to supervise their children. Of the minority who would prefer to live on the ground floor two-thirds mentioned that this would avoid the inconvenience of the stairs; as some of these did not live in a flat with an internal staircase they must have been among the few who regularly used the nearest public staircase to reach ground level instead of using the deck.

375. Of the 62 tenants living on the ground floor, only three wanted to move higher. One felt the view would be better, one said it might be quieter and the other wanted more privacy. The great majority who opted to stay on the ground mainly did so because there they were not bothered by stairs.

376. These findings at Oldham are confirmed by the Layout Study where higher building forms were investigated and a more comprehensive enquiry made into living off the ground. The proportions unhappy living off the ground were similar to those found at Oldham and height above the ground seemed to make little difference to housewives' opinions on any of the general satisfaction questions. There were indications, however, that families with children, especially the ones with children under five, were least happy off the ground. Being happy off the ground was very closely linked with dwelling satisfaction.

Flats or houses?—a comparison

377. Although houses were mainly allocated to families, and flats to adult or elderly households, there were enough exceptions to merit an attempt to compare, on the basis of household type, the relative attractions of houses and flats. Such an exercise could only cover the general questions from the survey (the most important of which were those dealing with satisfaction) as all detailed questions affecting the design of dwellings, which in general showed greater satisfaction with houses, were only relevant to the particular plans used at St Mary's and offered no realistic comparison between houses and flats.

378. It was found from the survey that there was a tendency for the elderly households to be the most satisfied. Exactly how much of this was due to an inherent satisfaction or how much truly reflected their feelings about their environment would have been difficult to assess but for the fact that higher rates of satisfaction were persistently recorded amongst the elderly living in flats compared to those living in houses.

379. Answers to questions about dwelling satisfaction, being glad or sorry to have come to St Mary's, and finding the move a great improvement, showed that adult and family households recorded very similar levels of satisfaction regardless of where they lived. On the other hand in each case the elderly living in flats were much more satisfied than the elderly in houses.

380. Answers to the question about wishing to move showed a different response. Here it was the elderly and adult households who recorded similar levels of satisfaction regardless of whether they lived in flats or houses while families living in flats wanted to move slightly more than those in houses.

381. Questions about estate satisfaction and pride in the estate showed yet another variation in the answers. This time while families showed no significant differences the adults and elderly in flats were happier than those in houses. A greater proportion of all household types in flats felt that the appearance and cleanliness of the estate were satisfactory.

382. To sum up the three previous paragraphs it would seem that, taking satisfaction and estate questions only, flats were extremely successful where the elderly were concerned and the houses much less so. The picture was nearly equal on most points for adult and family households the only contradiction being that more families in flats would choose to move if they could. This probably reflects the conflicting feelings of mothers that while the dwelling and the estate were much appreciated, their children might benefit from a house with a garden.

383. On most other points considered, flats were more satisfactory for all those who lived in them than were the houses. This was most marked on the various questions relating to privacy and view. Regardless of household type those in houses were, compared to those in flats, less satisfied with their privacy, more often wanted to be more separate from others on the estate, felt slightly more overlooked in bedrooms, more overlooked in living rooms (especially families) and were less enthusiastic about the view from their kitchens and living rooms.

384. There was only a little difference between flats and houses on general noise nuisance, those in houses being slightly more worried. Again this was so for all three types of household.

385. More housewives regarded play as a general problem of living in houses—even mothers with children. On the other hand more family households than adult or elderly said there were things they found they couldn't do in a flat, more were unhappy living off the ground and a greater number than other households wanted a garden although they were no more prepared to move further out of town to get one.

5 The layout







5a Children's play

General notes

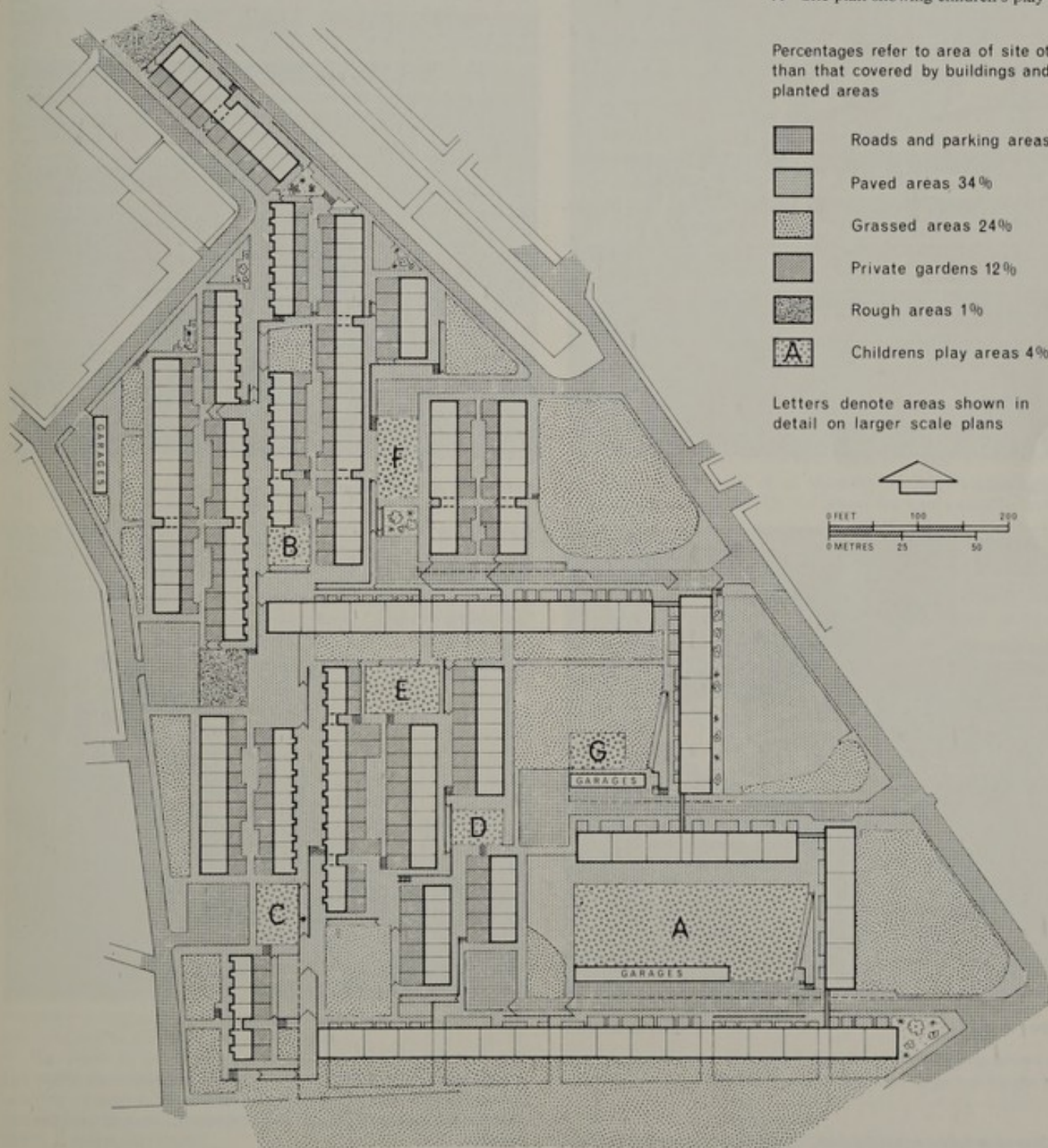
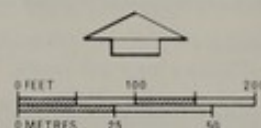
386. Of the children under 16 living on the estate 27% were under five, 40% were between five and ten and the remaining 33% were over ten years old. This corresponds approximately to the proportions of children in each age group in England and Wales as a whole.

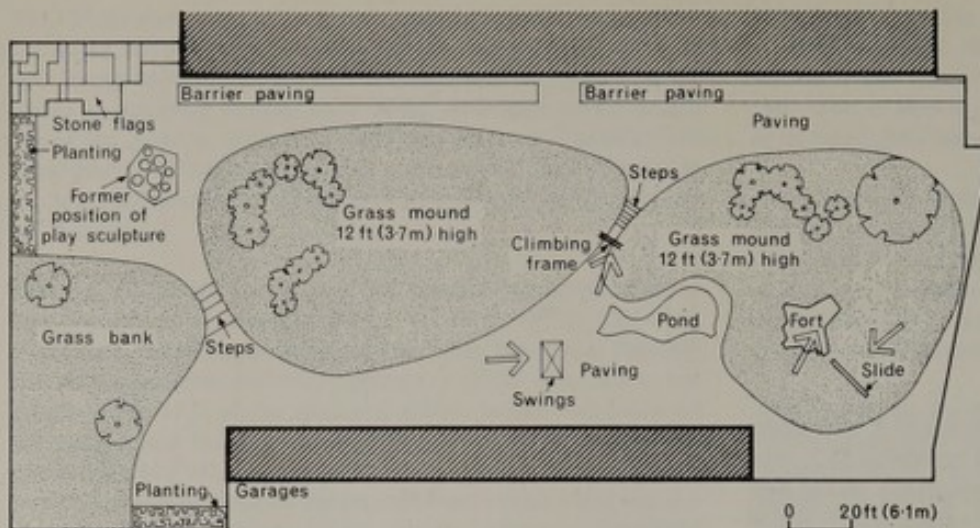
44 Site plan showing children's play areas.

Percentages refer to area of site other than that covered by buildings and planted areas

-  Roads and parking areas 25%
-  Paved areas 34%
-  Grassed areas 24%
-  Private gardens 12%
-  Rough areas 1%
-  Children's play areas 4%

Letters denote areas shown in detail on larger scale plans





Climbing frame



Swings with pool, mound and fort in the background



Entrance to the fort



Slide

Note

In Figures 45-51, the arrows on plans show positions from which the photographs were taken. Children were posed in these photographs to show scale and do not typify the amount each item was used.

387. As the great majority of these children lived in the houses this study can throw no light on the problems of play in deck access schemes, or of children living off the ground.

The children who played outside and their activities

388. Systematic observations²¹ of children playing out on the estate (Figure 52) over four dry and sunny days during the school holidays in the summer of 1968, showed that 28% of all the children were seen out which, compared with similar studies on other estates, was high.* Twenty-nine per cent of the under fives, 39% of the five-ten-year-olds and 13% of the 11-15 year-olds played outside on the estate. The proportion of under fives seen out was high and a contributory factor may have been that almost all of them lived in houses.

389. Twenty-three per cent of all children were observed walking about the estate either alone, with friends or with an adult. They may have been taking part in a game or running errands. A further 23% were observed sitting down or standing about, sometimes alone but mainly in groups. These children were either engaged in some imaginative game, were talking or were simply watching other children at play.

390. For girls the only other activity which occurred frequently was playing on the play equipment provided on the estate. Boys on the other hand frequently indulged in running games and riding bicycles or other wheeled toys. However, boys aged over 11 were more interested in playing ball games than simple running games.

Play areas

391. The arrangement of children's play areas is shown in Figure 44 and details of the equipment in Figures 45-51. Changes in the layout or the design of certain items have been made since the scheme has been completed, owing to complaints from tenants. These alterations were all carried out before the appraisal and are as follows.

392. The concrete play sculpture (Figure 47) constructed of pre-cast pipe sections now in Area C was originally in the paved area at the north-west corner of Area A (see Figure 45). It was moved following repeated complaints from the tenants of the adjacent houses that it was an eyesore right outside their front doors. As a consequence it was re-sited in its present position where, on account of levels and site layout, it was not readily noticeable from the ground floor of any dwelling. It nevertheless still remains unpopular visually with many of the adult tenants.

393. The maze (Figure 49-Area E) constructed of flagstones found on site also received unfavourable comments from the adult tenants of the flats overlooking it. Although some objections were aimed at its appearance ('A pile of dirty old flagstones'), the main criticism from tenants was that children tended to use it as a public convenience. However, these complaints were not so strongly voiced as those against the concrete play sculpture and the tenants agreed to it being left where it was for a year or so. Since this time the tenants have grown to accept it.

* Other similar studies include observations of play on the six Layout Study estates, an area of old housing surrounding St Mary's, a GLC recreation ground and a GLC estate in Paddington. All these studies are to be used in a bulletin on children's play.

²¹ For details of methodology used see MINISTRY OF HOUSING AND LOCAL GOVERNMENT Sociological Research Section *Children's outdoor activities on three medium density estates* 1968 pp 5-6 Unpublished, but available from the Department of the Environment, 2 Marsham Street, London SW1P 3EB.

394. The circular stone seat (Figure 50-Area F) originally surrounded a semi-circular sand pit. Although the sand pit proved extremely popular with the children it was expensive to maintain—it was quickly emptied by small children from all over the estate using toy wheelbarrows—and was a source of irritation to adult tenants because the sand was being spread over a fairly wide area of the surroundings.

395. The final change in play equipment was to the paddling pool. Owing to difficulties in keeping the water clean (children sliding down the adjacent grassed banks dislodged turf straight into the pool) and free from wind-blown rubbish, the pool is only filled on very hot days in the summer. Originally the bottom of the pool was of granite setts but this has now been rendered smooth with a concrete skim to facilitate cleaning. Previously small sharp objects between the setts were overlooked during cleaning and not noticed until too late by children paddling.

396. Areas that were designed primarily for children's play accounted for 18% of all play observations which, in proportion to the area involved, meant that they were used more intensively than any other area. This percentage is as high as on the best equipped estate (in terms of type and amount of equipment) studied by the Layout Study. They were found to be used almost equally by boys and girls in each age group but the equipment itself was used more by girls.

397. Areas A and B were the most popular, with 77% of all children on play areas being observed there. It is of interest to note that these areas are the ones on which traditional equipment is to be found, Area A consisting of two mounds (one of which was surmounted by a fort with a slide), a climbing frame, two swings and a paddling pool (see Figure 45), B on the other hand merely having two swings at the foot of a grassed bank (Figure 46). This confirms previous findings* that conventional equipment is most used by children and most enjoyed.

398. Area A (referred to by children as 'the park') with 552 observations or 60% of the total, was easily the most popular play area overall and, of the equipment provided, the swings with 150 observations (16% of all observations in play areas) proved to be the most popular. Of the others the fort and slide had 102 observations, the pool 86 and the climbing frame 85. However, it should be pointed out that these observations were over a four-day period and on only one of these days was the pool filled, a day on which 60 of the pool's 86 observations were made. Although this day's figures are probably the result of weather conditions and/or novelty value, it nevertheless does confirm the Building Research Station's findings that paddling pools are one of the most popular types of static equipment that can be provided.¹

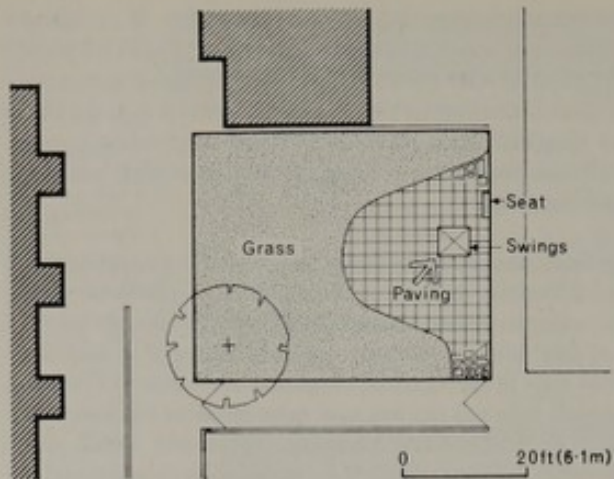
399. Comparison of Area B (the only area beside A on which more than a hundred observations were recorded) with the other small play areas shows that not only is 'architectural' equipment disliked by adults for its appearance but also it is not nearly so popular for play as the more traditional equipment. For instance, whereas 17% of all children in play areas were observed on the two swings in Area B, none of the other four zones with static equipment (Areas C to F—Figures 47 to 50) or the ball games area (Area G Figure 51) attracted more than 6% individually or 22% altogether. The ball games area was the only place used mainly by the older children.

Paved areas

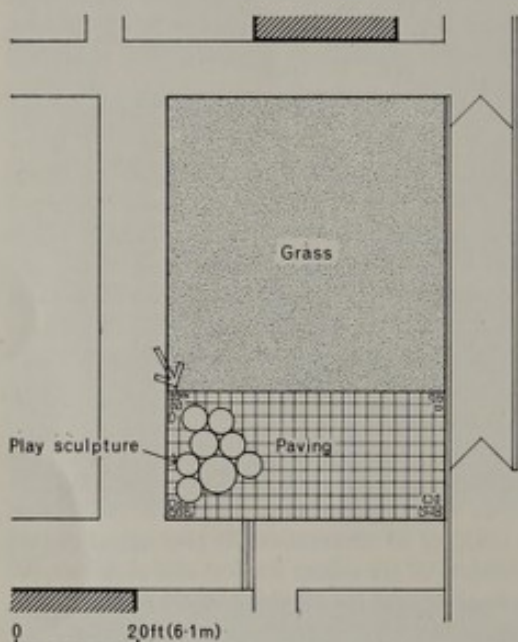
400. Paved areas accounted for 32% of the site not covered by buildings (Figure 48). Of this area 5% was taken up by the back

* See footnote to paragraph 388.

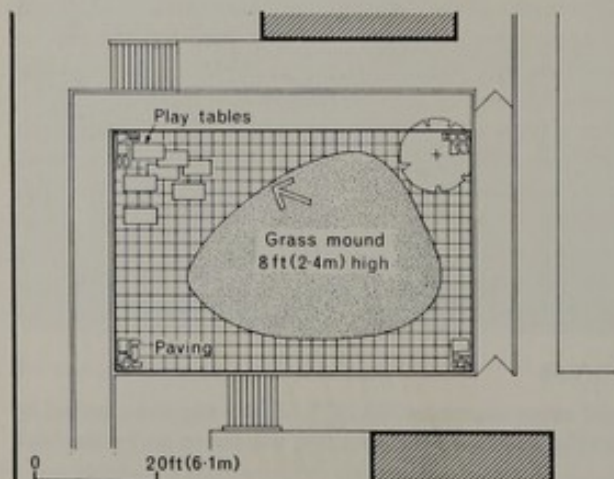
¹ BUILDING RESEARCH STATION *Children's play on housing estates* 1966



46 Play area B

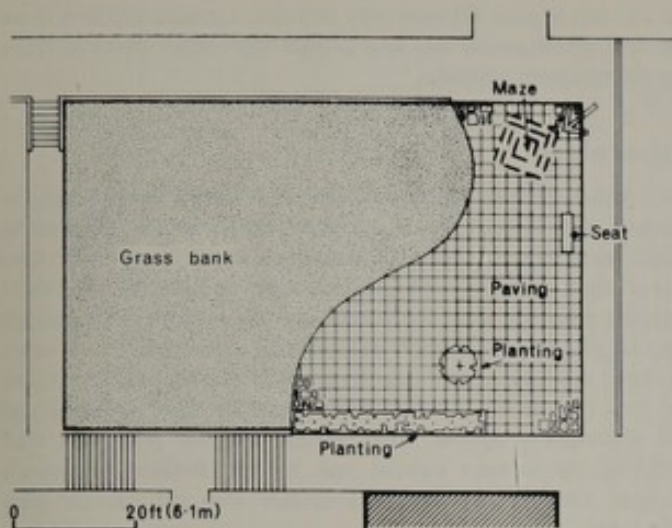


47 Play area C

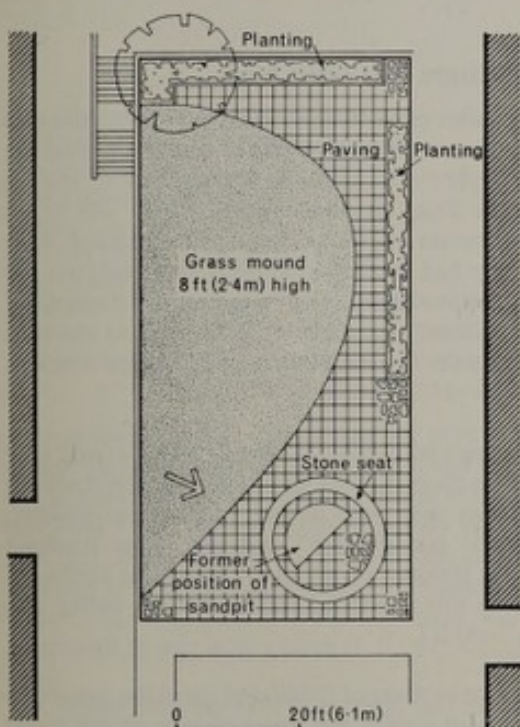


48 Play area D

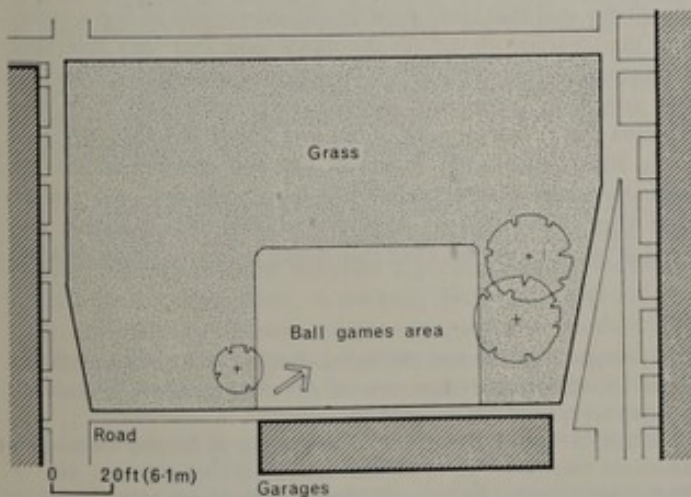




49 Play area E



50 Play area F



51 Play area G



alleyways between two rows of rear gardens. It was hoped that these areas would be used as play areas for the under fives—being places where small children could meet but still be under supervision from mothers in the houses. For this reason self-closing gates were fixed across the ends of these back alleys to stop toddlers wandering onto the roads. However, at the time children's play observations were made it was noted that few of the gates were actually shut and that some had been broken off their hinges.

401. Paved areas were the most popular places to play, with 43% of all children being observed there. Although popular with all children, they were especially so for the under-fives—possibly a reflection of parents' wishes to have very young children near at hand and of the children's desire to remain near to their dwelling. In a similar study of play in the area adjacent to the new estate toddlers under five years old were found playing on doorsteps more than any other age group.

402. While the back alleys were fairly popular with children (see Figure 52 and paragraph 260) the open footpaths outside dwellings, especially those at the corners of blocks, proved to be even more popular gathering points.

403. Observations also showed that a scaffolding frame (Figure 53) left on a paved area by workmen proved to be more popular with children than any of the 'architectural' pieces of play equipment provided.

Rough areas

404. On the site proper only one rough area existed—the proposed public house site. However, two additional rough areas exist adjacent to the site: a large zone to the west of Lord Street and a smaller one which is a continuation of the north-west 'extension' to the site (see Figure 44). These additional areas were taken into account during children's play observations.

405. Although less than 2% of all recorded children's play activities took place on the public house site, in terms of the size of the area involved it was a very intensively used play zone. Much of the attraction of this area was undoubtedly a pile of sand which had been left behind by the contractor (but see paragraph 394).

406. Little activity was noted on the smaller of the two additional areas, but the larger was used by older boys playing football. This proved to be at least as popular for ball games as the special area provided within the site, due possibly to the fact that it was larger, and its surface of ashes may have been more suitable for such games as football than the tarmac of the ball games area. As it was not surrounded by dwellings there was no likelihood of upsetting adults and therefore games could be noisier and carefree.

Roads, pavements and parking areas

407. Roads, pavements and parking areas were not very frequently used for play in relation to their total area, only 17% of all children being observed there. This is low compared with the 54% recorded on these areas in the study done of the adjacent old area. It should also be mentioned that many children included in the observations were in fact not playing but walking down Lord Street, often with adults, in the direction of the market and town centre.

408. While there were groups of children who used a parking square and a particular area of road for play during two of the days on which observations were made, most of the children were observed on pavements. The pavements either side of Radcliffe Street behind the block of houses on the north-west extension to

the site (see Figure 52) were very popular, for here children from the new development met and played with other children from the older homes opposite.

Other areas

409. Although only 3% of all children observed were playing in gardens, this is probably an underestimate as not all gardens could be observed. A fifth of mothers with children under five, and a tenth of those with children aged five to ten, said their children regularly used the garden for play. However, previous play studies (see paragraph 388) clearly show that in all cases mothers' replies overestimate the amount of play in gardens and the true picture most probably lies between their opinions and the observation figures. Low garden use for play was also recorded by surveys carried out by the Building Research Station¹ and on Layout Study estates with comparable play provision.

410. Grassed areas accounted for 9% of all observations but in proportion to the area involved were no more intensively used than the planted areas on which less than 1% of children were seen playing.

Difficulties mothers had with play

411. Just over a quarter of mothers with children under five said that they worried when their children played outside the dwelling because of the possibility of accidents on play equipment, and the danger from traffic. This last worry seemed to be out of all proportion to the amount of play on roads (see paragraph 407). Asked whether they had ever temporarily lost a child on the estate, a third of these mothers said that they had, but it was never spontaneously mentioned as a problem. According to mothers, 10% of all children under five stayed indoors during fine weather. (Layout Study (L S)=13%–76%)*

412. A fifth of mothers with children aged 5 to 10 also said they had difficulties when their children played outside the dwelling, though in these cases they were mainly worried that children quarrelled or bullied one another²² and that other residents complained or told children to go away. From the replies of mothers no child in this age group stayed indoors during fine weather (L S=0%–47%).

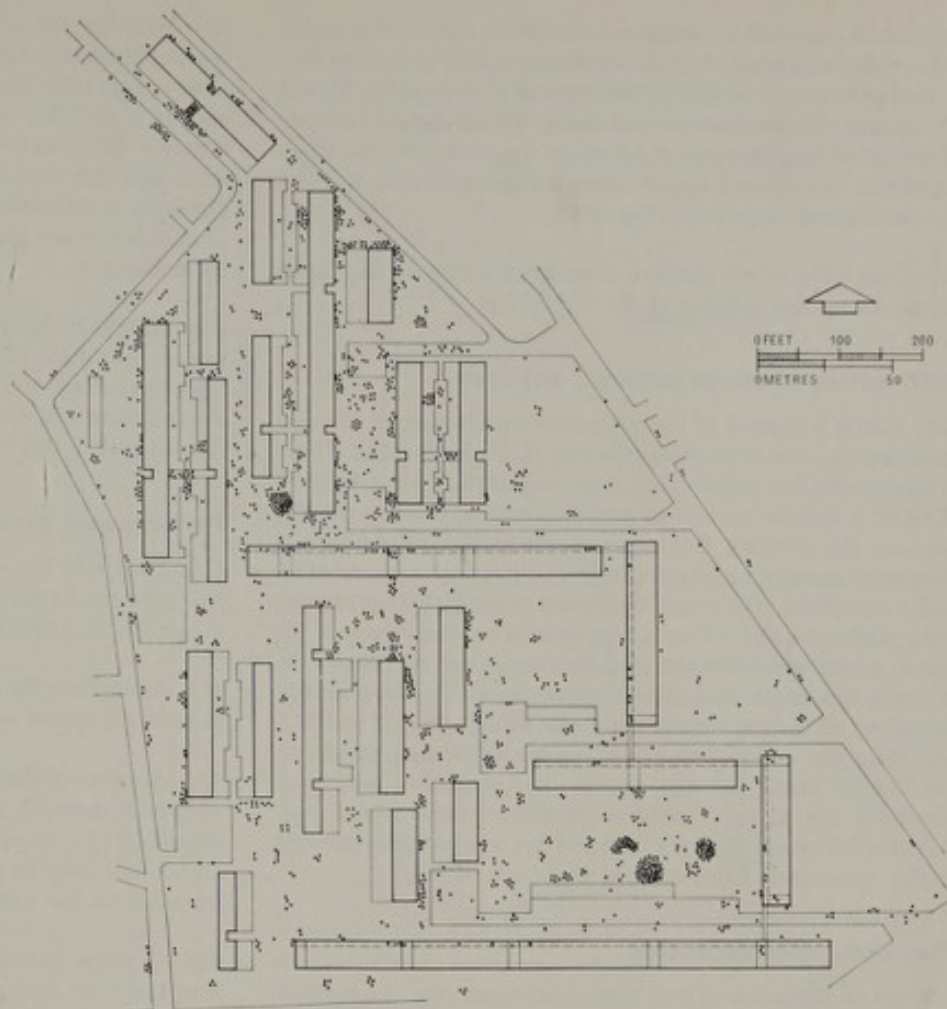
413. According to the mothers of children in the oldest age group (11–16) leisure time for a third was spent playing on the estate and nearly as many usually spent their time in the house. Others visited friends or sports or youth clubs or went somewhere else off the estate.

414. All mothers were asked about play locations and most of those who said that their children played outside in fine weather said the children played on the estate and that very few went further afield (L S=3%–28%). Over three-quarters of all mothers and especially those with under-five-year-olds said that their children played within sight of the dwelling (L S=53%–62%). It seems from observation, however, that few children of any age could have been within sight of their own dwelling for most of the time they were playing outside. Probably this question was 'loaded', making mothers feel they ought to say that their children

* Throughout this section the highest and lowest figures from the six Layout Study estates (where most of the children were living off the ground) are quoted for comparison.

¹ BUILDING RESEARCH STATION *Children's play on housing estates* 1966 p 6

²² See also HOLME Anthea and MASSIE P *Children's play: a study of needs and opportunities* Michael Joseph 1970 p 142



52 Diagrammatic representation of one day's observation of children's play, each spot showing the position of a child during hourly walk rounds.

Compare position of children with detailed layout of Figure 44. On the day observations were made the pool was not filled.

were always in sight. In wet weather most children of all age groups played inside, including the few who lived in flats, despite the fact that these could take advantage of the access decks and staircases which offered facilities for play under cover. Mothers said that there were two major problems with inside play—the necessity of keeping children quiet mentioned by over a quarter (LS=21%–61%) and shortage of space within the dwelling mentioned by just over a tenth (LS=4%–51%).

415. Twenty-one per cent of mothers said that they would prefer their children to play outside more (LS=34%–60%). An examination of the Layout Study figures tends to show that the lower figures (like those recorded at Oldham) probably only reflect either a child's own preference for staying inside or adverse weather conditions. The higher figures on the other hand show a definite relationship with some forms of high-rise building such as point blocks (though not deck access) which limit the opportunities to play outside owing to the height of the child's dwelling above play areas.²³ This particularly affects younger children and reflects the natural desire of their mothers, who want them to play within sight and hearing of their dwelling.

416. Just over half the mothers at Oldham (LS=41%–83%) felt that facilities for play on the estate were not satisfactory. Suggestions for improvement included a grassed area for football—mainly for the over fives; a properly enclosed playground or park; and more equipment. A larger proportion of mothers with children under five mentioned these last two items and they wanted some equipment to be specially earmarked for small



53 'A scaffolding frame left by workmen proved to be more popular with children than any of the "architectural" pieces of play equipment provided.'

²³ See also DANISH NATIONAL INSTITUTE OF BUILDING RESEARCH *Children's play on flatted estates* (Jeanne Morville) Copenhagen: The Institute 1969 pp 75–76 In Danish with English summary.

children. A few mothers suggested changes in the existing equipment; either they wanted it positioned nearer their own dwellings, or further from old people, or they wanted it made safer. Almost all mothers with children over 11 thought there should be more leisure provision for older children on the estate and the main suggestion was a youth centre. Since the appraisal such a centre has been opened adjacent to the estate.

417. Only 17% of all mothers considered traffic on the estate dangerous to their children (LS=9%-67%).

Difficulties of those without children

418. Nearly a quarter of these housewives complained of being disturbed by noise from children's play (LS=21%-29%). Those in houses who had children living all around them were the most affected. A quarter mentioned problems such as children playing too near the dwelling looking in at windows, and playing the traditional game of ringing doorbells and running away. Another major complaint was rough boisterous play, including bicycles being ridden too fast. Of equal importance was the misuse of the estate—either wilful damage, throwing stones and rubbish about, or using the estate as a public convenience. To the observer, vandalism on the site seemed slight (see paragraphs 207 and 243) and these last complaints would appear unjustified. However, the Layout Study findings suggest that vandalism was more frequently felt to be a problem on those estates where most residents felt proud of their estate and this was probably due to a greater awareness of and concern about any damage.

Play and other attitudes

419. As an indication of how highly they rated play as a problem all housewives were asked whether overall they considered it 'a great problem', 'rather a problem' or 'no problem'. Of family households, a third found play a great problem and a quarter rather a problem (LS great problem and rather a problem=56%-86%). Just over two-fifths were not worried by play at all. Households without children were much less worried about play; only a quarter said it was a problem (LS=24%-56%).

420. Difficulties concerning play for the different age groups were found to be interrelated: thus, families who had problems with the play of children under five frequently also experienced difficulties with the play of their five to 11-year-olds. There was no relationship between the size of family and difficulties of play.

5b Traffic on the estate

Access and carriageways

421. Although at present the site is surrounded by roads there are no through-traffic routes. Dwellings are serviced by vehicles using the finger roads leading into the site from the east and west, though those from the west, for reasons explained in paragraph 55, are very short.

422. Walking distances from roads to houses are shown in Figure 54.

423. Everybody was asked what they felt about most of the traffic being kept out of the centre of the estate. Just over half thought it was a good idea and a fifth thought it gave safety for old people and children. This opinion was held particularly by family households. Just over a fifth thought it made the estate quieter and others thought it was all right even if it was not directly advantageous to them. 4% thought it meant they had too far to carry things and made other unfavourable remarks.

424. Keeping the greater part of an estate free from traffic inevitably means that many dwellings do not have direct road access. This may cause problems with deliveries etc. However, only 18% said they ever had any difficulty getting things to their house or flat from a vehicle parked at the nearest point. Most of these said they had experienced trouble carrying furniture long distances or up steps; a tenth said delivery people were reluctant to call and others mentioned difficulties in getting to and from an ambulance.

425. Although this 18% was mainly to be found amongst flat tenants and those whose houses faced onto the main pedestrian route, no pattern of complaint arose from the survey. For instance at least three with front doors less than 9m from a carriageway formed part of this 18%.

Parking and garaging

426. Thirty-six lock-up garages, and hardstandings for a further 162 cars, were provided for residents and visitors as shown in Figure 55. This provided for a car/dwelling relationship of 38%.

427. Apart from the main car park on the eastern side of the site, car parking spaces were not marked out as such.

428. A survey of the old St Mary's carried out in 1962 found that 13% of households owned cars. By the time the new estate was appraised 17% owned cars and 2% (10) motorcycles or scooters.* Hardly any families owned two vehicles. Only 4% of the elderly owned a car but a quarter of the remaining households did so.

429. Of those interviewed at Oldham, just over a third said they kept their car in a garage, and half used the car parks or the parking spaces at the end of the service roads. A few people parked in other places. Three motorcycle owners had garages and the rest parked elsewhere on the estate. One motorcycle was kept in the hallway of a dwelling.

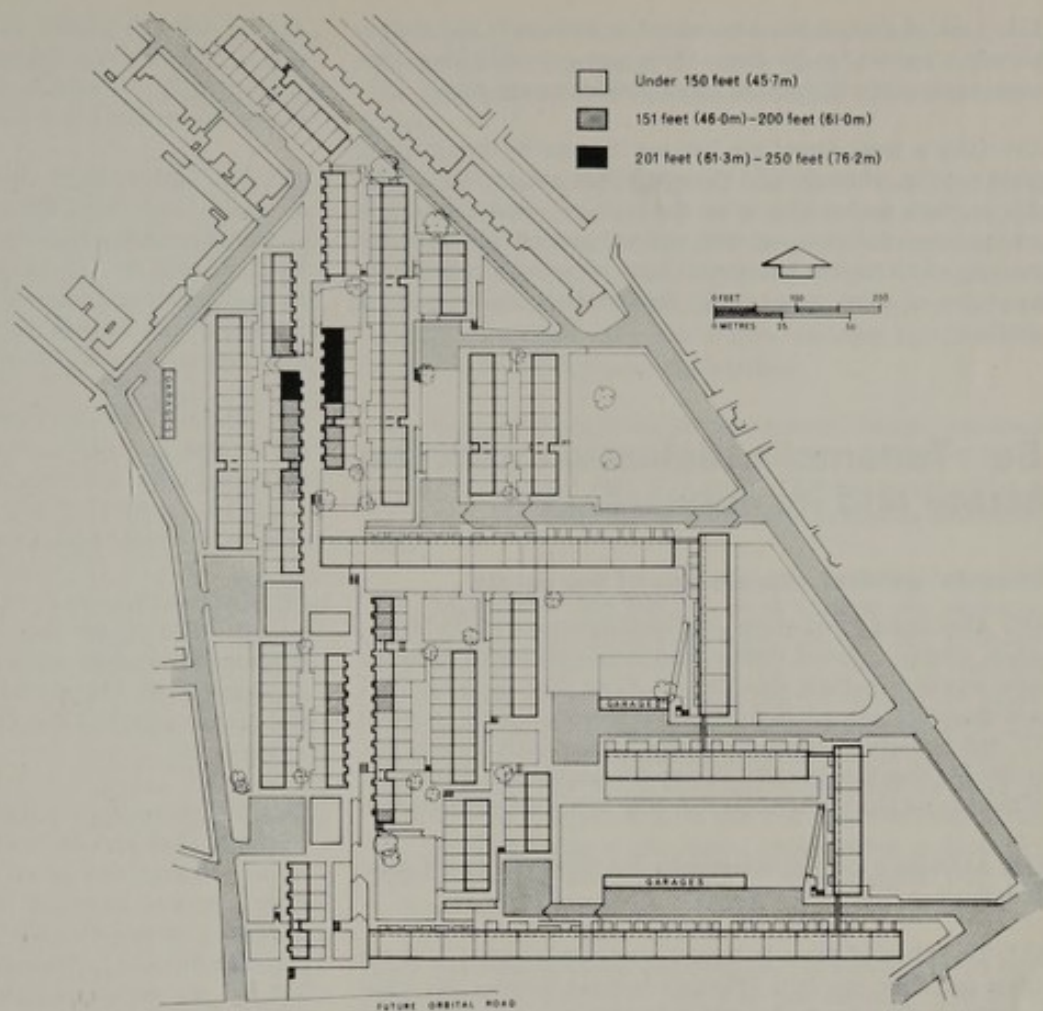
430. When parking locations were observed between 5.20 pm and 5.40 pm on a Saturday, the number of vehicles counted (87—Figure 55) was equal to the 17% car-ownership figure established by the interviews. Most of these observed cars were in the parking areas at the ends of the service roads and only nine were in the large eastern car park. Nine cars were also parked in the service roads. Some of these may have been visitors' cars or may have been garaged at night.

431. The caretaker felt very strongly about the haphazard parking at the ends and along the length of the service roads. He said that when cars were parked in the wrong places there was no easy access in case of fire, ambulances could not turn, and children who ran through the flats into the service roads were not seen by moving vehicles. If the dustmen were unable to park directly next to the refuse chutes they would not empty them. The caretaker thought that the clear marking-out of parking places would ease these problems.

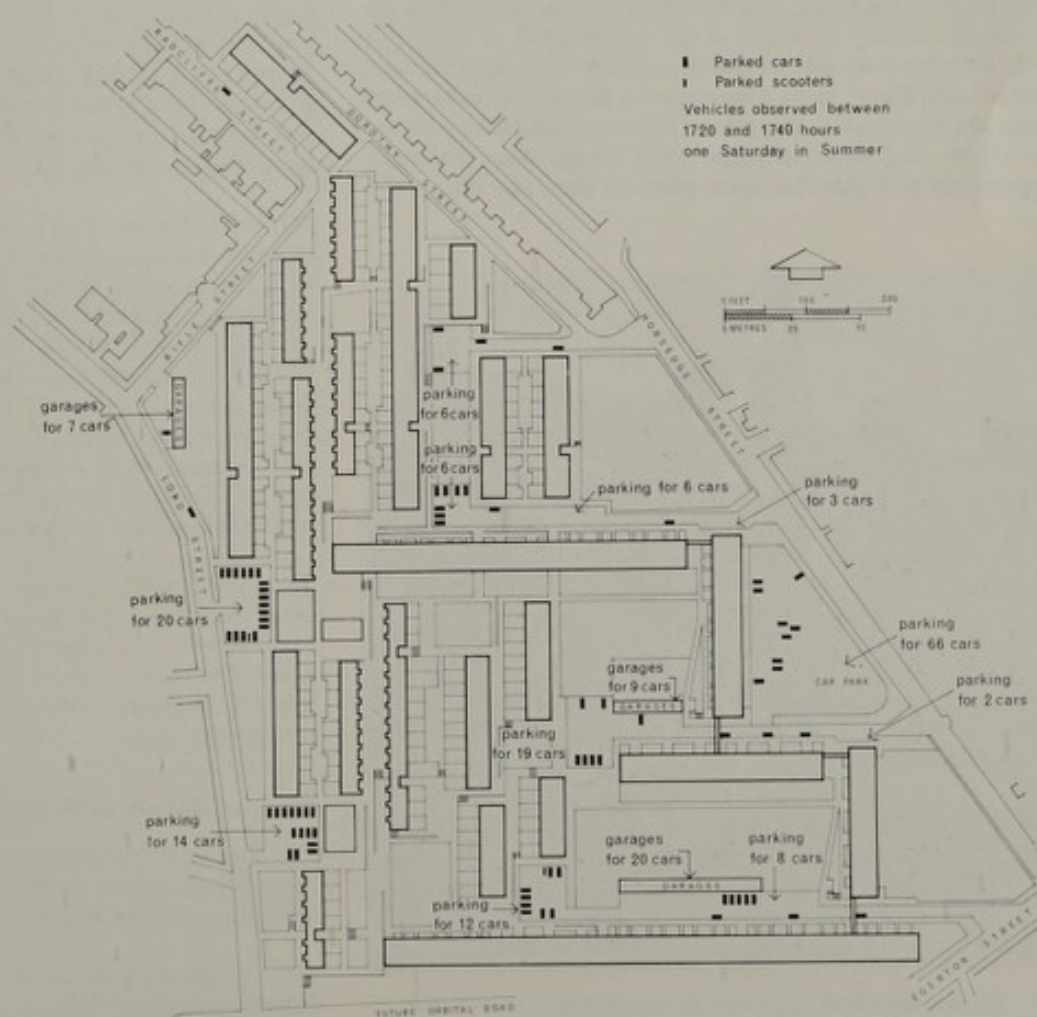
432. Nearly three-quarters of the car and motorcycle owners considered that parking facilities were satisfactory. The most frequent reasons given by the remainder for considering the parking arrangements unsatisfactory included fear of damage and theft; being blocked-in or prevented from parking by people off the estate; inadequate lighting and washing facilities. These complaints were similar to those made by tenants in the Layout Study.

* The 1966 Sample Census gave 24% of local authority households owning cars in the South East Lancashire conurbation. Car ownership in England and Wales as a whole was higher than this—34% of local authority households.

54 Site plan showing walking distances from roads to front door of houses.



55 Site plan showing actual and proposed parking.



433. Lack of garages was commented on by tenants and there is already a waiting list for them. More garages would have overcome some of the complaints about parking on the estate.

434. Only a tenth found the walking distance to their parking place too far, while the rest thought it was alright. Those with this problem tended also to be the ones who had difficulty in getting things delivered and with visitors' parking. However, the majority of all tenants interviewed had visitors who came by car and most of them were usually able to find suitable parking spaces.

5c Tenants' satisfaction with the estate and its appearance

Tenants' general impressions of the estate

435. After being asked about particular aspects of the St Mary's estate, tenants assessed their overall satisfaction with it, in the same way as they rated their feelings about their dwelling. 59% said they were very satisfied; 30% said they were fairly satisfied; 5% had no feelings either way and 6% were fairly or very dissatisfied. These figures compare very favourably with the results of the Layout Study where, overall, only 28% were very satisfied.

436. At Oldham those in houses were less satisfied with the estate than those in flats.

437. Two-fifths of those in houses were very satisfied with the estate and there was little difference between families and other households. Occupants of some blocks of houses, especially those to the south of the site and nearest the flats, were more satisfied than those to the north. This difference is to be expected as the layout and density of houses in the northern half of the site is little different from that of the old adjacent brick-built terraces (see site plan Figure 3). As a consequence, landscaped and grassed areas are very small in this part of the estate compared with the remainder, and suffer, amongst other things, from the heavy concentration of play that takes place on them (see Figure 56).



56 'The few small landscaped areas in the northern part of the site suffer because of the heavy concentration of children's play.'

438. In flats, 70% were very satisfied with the estate but this degree of satisfaction dropped to 53% for the 32 families with children in flats; as with the houses the latter percentage probably reflects the general lower satisfaction rates of families.

439. To further assess tenants' overall feelings about the estate they were asked if they would feel proud to show visitors around. Four-fifths said they would and the rest said that they were not sure or that they would not. The difference between those in houses and those in flats was not so marked as for estate satisfaction but those in the houses to the north of the site were again less proud to show visitors around than the others.

440. Tenants were asked their reasons for feeling proud of the estate. The majority said that they thought the estate was attractive, well laid out and very nice, or made other favourable comments, while 17% said it was an improvement on other estates or previous houses they had lived in.

441. The reasons given by those who were not proud of the estate included disliking the appearance of the houses and flats, and deterioration in their appearance; dirt and untidiness; and for those in flats the 'disgraceful condition' of the public staircases. One person suggested that outsiders looked down on the people on the estate.

442. Tenants were also asked open-ended questions about their particular likes and dislikes of the estate and how, given more money to spend, they would improve it. Most people mentioned more than one aspect of the estate but the most important, mentioned by two-fifths (45% in flats, 28% in houses), was that the estate was nice to look at, well set out and pleasant. A further fifth did not mention anything in particular but made general appreciative comments or said they liked everything. Just over a tenth appreciated the proximity to the town centre and a tenth (again mostly those in flats) mentioned particularly the lawns, trees and open spaces. A similar proportion noted the cleanliness, tidiness and the fact that there was no smoke. Plenty of space and equipment for children, parking facilities, no danger from traffic and the view, were other things mentioned spontaneously by more than one person.

443. Over half specifically said they disliked nothing about the estate; this rose to three-fifths for flat dwellers and dropped to 44% for those in houses. Nearly a tenth, however, (mainly families) suggested that there was a lack of amenities for children and 6% complained of the noise the children made and the fact that the playground was so near to dwellings. A few also mentioned damage done by children and teenagers. Apart from dislikes concerning problems with children, there were a variety of other sources of dissatisfaction, each mentioned by a small number of people; fouling by pets, untidiness, parking facilities, smells, appearance of houses, nowhere to sit out.

444. The list of desired improvements tenants would ideally make again highlighted play as a problem. Almost a third suggested better recreation facilities, a park, or better gardens for play. A launderette and a social club were mentioned by a tenth and some of the elderly said they would like seats on the estate and an old folks' club.

Factors linked with estate satisfaction

445. The factors revealed by the questions discussed above as important to estate satisfaction were emphasised again by a correlation exercise shown in full in Appendix F.

446. On the whole the results of this exercise showed that those factors most closely related to estate satisfaction on the Layout Study and on the Oldham appraisal were similar and tended to

confirm each other. The major exceptions were that not being worried by noise and adequate privacy were more important to estate satisfaction at St Mary's than on the six Layout Study estates.

447. First, as was expected, other indicators of general satisfaction correlated highly (0.4 or over) with estate satisfaction: those who found the move to St Mary's an improvement over their previous homes; those who were glad to have moved to St Mary's; those who did not want to move away; and those who would feel proud to show visitors the estate, all tended to be the people who were also satisfied with the estate. Satisfaction with the dwelling overall or certain aspects of its design was also correlated extremely highly with estate satisfaction.

448. After this general group came particular aspects of the estate—noise, attractiveness, play and privacy being the four most important in descending order. Housewives who found noise a nuisance and play a problem tended also to be dissatisfied with the estate. 'Attractiveness' covered a group of four variables which influenced people's findings on satisfaction with the estate—the correlation with attractiveness was highest but the cleanliness of the estate, the view from the kitchen and living room windows, and the proximity of those windows to the footpath were also important. The high correlation with privacy was backed up by only slightly lower values on overlooking in the living room and bedroom and by opinions on being more separated from others on the estate.

449. Next in order to these variables came a group of 'social contact' variables. Housewives who were 'nervous', lonely, and visited friends less since they moved tended also to be those who were dissatisfied with the estate.

450. On the other hand the length of time tenants had spent at their former address, whether a garden was available before, age of housewife, present costs incurred, and whether the rent was regarded as reasonable, also correlated with estate satisfaction but the correlation tended to be very low. Problems with drying washing, getting deliveries to the house, and disposing of refuse were associated with estate dissatisfaction but for families only and at a low level.

451. Some variables which might have been expected to correlate with estate satisfaction did not. For instance people were equally satisfied with the estate whether they had previously been council or other tenants or owner-occupiers. So were they whether or not St Mary's had been their first choice of estate and regardless of the distance away that they used to live. Knowing present neighbours before the move and having close relatives on the estate made little difference to estate satisfaction. Nor did the floor level at which those in flats lived. Other things which had no bearing on estate satisfaction were: tenants' feelings about their old home, the number of technical problems they had encountered in their dwellings, feelings about gardens or balconies, and parking problems.

The appearance of the estate

452. Of the four factors most closely related to satisfaction with the estate, three—noise, privacy and play—have been discussed elsewhere, so only appearance need be dealt with here.

453. Plans and photographs of the estate give some idea of the visual impact of the site. In particular the white cladding and fairly large green areas contrasted sharply with the immediate surroundings scheduled for redevelopment.

454. The Parks and Cemeteries Department of Oldham Corporation are responsible for the maintenance of the landscaping.

Throughout the summer they cut the grass almost weekly and replace the planting during the winter months. The winter before the appraisal they had replaced 300 shrubs and about a dozen trees.

455. The cleaning of the streets and public walkways on the estate are the responsibility of the Public Cleansing Department. Some parts of the decks and the fronts of many of the houses are swept by tenants as required by the conditions of tenancy. The caretaker has overall responsibility for the tidiness of the estate and also looks after the refuse chutes, staircases and those parts of the decks which tenants do not clean.

456. Three-quarters of the Oldham tenants thought the overall appearance of the estate attractive. Nearly a fifth had no feelings either way and the rest (8%) thought it unattractive. Of these, 24 lived in houses, generally to the north of the site, and eight in flats.

457. Asked what they thought about the way the paving had been laid out and the estate planted with trees and grass, over half thought it was very nice and 'artistic'. Nearly a third liked it very much but had reservations such as disliking the cobbles and paving or said it was very nice as long as the children didn't spoil it. Others liked the landscaping even though they didn't live near to any. A few people suggested there should be more play facilities and somewhere to sit out but only two people didn't like the landscaping at all. Again, people living in flats (68%) more frequently gave unqualified favourable replies than those living in houses (43%).

458. With regard to the cleanliness of the estate, a much larger proportion of favourable opinions was received from people living in flats (87%) compared with just over half from people living in houses. A quarter of the total sample, on the other hand, considered that the standard of estate cleanliness was unsatisfactory.

6 The social aspects of moving to a new house and of living on the estate

General background

459. When clearance started on the whole area of redevelopment covered by Max Lock and Partners' proposals, it was obviously impossible to rehouse within the same overall area those tenants affected by the first phase of demolition, although three-quarters would have liked to stay. The majority of these tenants therefore moved to council houses on estates further out from the centre of Oldham. When subsequently interviewed³ these households, though greatly appreciating their new homes because of their 'healthiness', quiet and pleasant outlook, nevertheless missed the convenience of being close to the town centre, especially the shops.

460. Once development of this first phase had been completed it became possible to offer an alternative to residents affected by the later phases of demolition, either to move into the new dwellings close to their existing homes or else to move to council estates further out from the town centre. Of those given this choice nearly all chose to move onto the new St Mary's estate.

461. It was therefore possible to compare the attitudes of those affected by the first demolition area (who had to move to an unfamiliar environment away from the amenities of the town centre) with the attitudes of tenants who had been able to stay in a familiar and very convenient area.

Original feelings about the move

462. As in *Moving out of a slum*³ this appraisal showed that there had been a certain amount of reluctance to leave their former dwellings by those now rehoused at St Mary's. Of those rehoused on this new estate the least happy to move were those who had formerly been owner-occupiers in the areas affected by the slum clearance programme and those displaced by road improvement schemes. Just over half of these had not wanted to move compared to under a fifth of those who had formerly lived in rented accommodation within the slum clearance area.

463. The elderly and those with previous dwellings in good or fairly good condition had been slightly more reluctant to move than other households.

464. Altogether 60% of housewives said that when they first heard about moving they had wanted to go and gave as their reason the need for a better or more suitable house. A quarter had not wanted to move, saying that they had owned their previous home, that they had had a nice house, were happy there or had lived there a long time. A few mentioned the difference in rent. The rest had had mixed feelings about the move as they knew they would have to pay more rent and would never own their next house.

465. Almost a third of those who moved from slum clearance or road improvement areas said they had expected to get some compensation and all but 7% had done so. However, nearly half were dissatisfied with the amount received—a similar proportion to that recorded in *Moving out of a slum*.³

Feelings about the move after it had taken place

466. After the move nearly three-quarters of the residents said that the move was a great improvement and that they were glad they now lived in the new St Mary's, a fifth had mixed feelings, and 7% regretted it. The elderly were somewhat more pleased than other households even though they had been the most reluctant to move from their previous dwellings. Of the few who regretted it, most had not wanted to move in the first place.

467. Although the data are not strictly comparable it seems that a greater proportion of those coming to the new St Mary's were happy with the move than of those moving from demolition areas to periphery estates documented in *Moving out of a slum*—44% of whom said they would prefer to be back in their old area. For the majority of tenants, the new St Mary's had been their first choice of estate. (Tenants from the first demolition area were given no option to stay in the vicinity and fewer—60%—were allocated their first choice of estate.) Over half chose to come to St Mary's because it was near the market and the town centre, a feature greatly missed by those who were moved to outlying estates. Other reasons for choosing St Mary's included familiarity with the neighbourhood, nearness to relatives or work, and liking the dwellings.

468. Of those who did not come from the demolition area and had not lived in the area before, half said they knew it well and nearly two-thirds said that there was nothing they missed that they had had in their previous locality. Some mentioned that they missed quietness and countryside, friends and neighbours, their garden or familiar local shops. But even these people mentioned compensations like the convenience of being close to the town centre, the play facilities on the estate, the open views, or particular points about their new house or flat.

469. It was almost certainly the location or familiarity of St Mary's estate that meant so much to the people living there and was missed by those who had had to move to outlying estates. Satisfaction with the dwelling (and its immediate surroundings) was almost identical in the two surveys indicating that there was little intrinsic criticism of any of the outlying estates.

Social dislocation due to the move

470. It was expected that the move would cause considerable social dislocation, though less than the earlier move from St Mary's to new estates around Oldham. In order to get an idea of its impact on tenants' lives, questions were asked about changes in participation in social activities such as clubs and pubs, work and school, shopping and travel.

471. In only three households, involving two of the husbands and one of the wives had the move meant a change of job. In 15% of households, however, someone had started working since the move. Half of these were children taking up first jobs on leaving school and half were housewives who said they started work

³ The complex question of compensation is covered fully in MHLG Design Bulletin 20 *Moving out of a slum* 1970 pp 11-13

³ MHLG Design Bulletin 20 *Moving out of a slum* 1970 p 16

because they needed the money—in some cases presumably to meet increased housing costs. Altogether a third of the wives worked full or part time.

472. In a third (32) of the households with children of school age the move involved a change of school. This may not have been entirely due to the move because many mothers chose to send their children to a newly completed school adjacent to the site. Only three said that they did not like the school their children had changed to.

473. The main difference in shopping patterns was that more people—mainly those newly moving into the area—used the market and town centre more frequently. On the whole this was regarded as a favourable change. Housewives liked the shopping facilities offered by the market, they thought it was cheaper, more convenient and had a wider variety of goods.

474. Visits to cinemas, bingo, pubs, social clubs, and churches, were asked about but there was no major change in attendance at these social activities. Over half said they had not changed their social life at all because of the move; many of these said they did not go out much anyway. Few had stopped attending social activities; 6% had stopped going to church and figures for other places were even less than this. However, a handful of other people had started going out; for example 6% said that since they had moved they had started going to the cinema. Some people had had to change their activities on moving; 17% had changed their regular pub, 9% went to a different church, and 7% had joined a different social club.

475. Of those who had originally lived on the site and had moved to estates further out from the town centre, probably about the same number had altered their social life. However, most said they went out less often than before, possibly because of longer distances to travel and restricted opportunities for similar activities on outlying estates.

476. Most of the housewives on the new St Mary's, especially those who had previously lived in the area, said that they had known at least a few of their neighbours before they had moved to the new estate. A third also said they had close relatives living on the estate.

477. Most housewives saw their close relatives about as frequently as before the move, 16% saw them more and a similar number saw them less often. Since moving 90% of all housewives had got to know at least a few of their new neighbours including a third who had got to know a lot or quite a lot. A tenth said they had got to know no one. This is consistent with all the estates in the Layout Study and is likely to be a personality factor rather than a symptom of physical isolation, as those people who said they knew no one were not necessarily living alone.

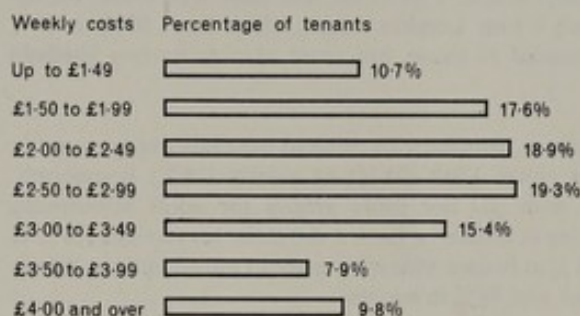
478. Nearly half the housewives said they had the same number of people to talk to before and after the move; a quarter had more and just over a quarter had less. Having more people to talk to was linked with general satisfaction and these figures give a more favourable picture than was obtained from those who had moved to estates further out from the town centre, over half of whom said that they now had fewer people to talk to.

The cost of moving and living in the new home

479. It was established in *Moving out of a slum*³ that the expenditure brought about by the actual move from one dwelling to another (i.e. hire of removal van, new furnishings etc.) caused little hardship.

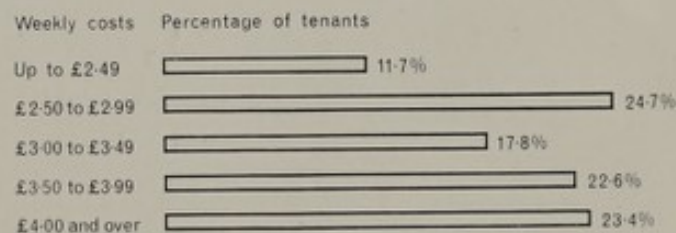
480. For most people interviewed in this appraisal the greatest rise in cost since moving was the combined rent and heating bill, for although nearly a quarter said that this housing cost had decreased a little, two-fifths said it had increased by up to £1 a week and just over a third said it had increased by more than this.

481. A number of tenants had previously no rent to pay, being owner-occupiers with a paid-up mortgage, and most of the others had previously paid less than £1 a week for rent (see paragraph 65). Previously their rates had also been light but expenditure on fuel for heating had been fairly heavy. Figure 57 shows tenants' own estimates of their previous average weekly outgoings for rent, rates and heating throughout the year. It should be pointed out that 19% of those interviewed gave no information on their previous expenses.



57 Previous average weekly outgoings

482. Figure 58 shows tenants' average weekly outgoings for rent, rates, hot water and heating throughout the year on the new estate. It can be seen that only a third of the tenants were spending £3 or less a week on housing costs at the time of the appraisal where previously it had been two-thirds. Furthermore, two-fifths on the new estate were spending between £3 and £4, and a quarter more than this. These were people in the larger houses whose rent and rates alone were over £4 a week.



58 Average weekly outgoings on new estate

483. For four-fifths of the sample it was possible to estimate what proportion of the husband and wife's joint income was spent on new housing costs—rents, rates, hot water and heating. From figures supplied by tenants nearly a quarter spent under 15%; two-fifths spent between 15% and 25%; and the remainder, mainly elderly, spent between a quarter and a third of their income; it is difficult to be accurate on this point as the figures are complicated by the fact that a great number of the elderly did not include supplementary benefit in their total income. It is known, however, that two-thirds of all elderly tenants received supplementary benefit for the rent and a third also received it for the heating. For most of these old people it was either the first time they had received benefit or else it represented a substantial increase in the amount they had formerly received.

484. Although half of those interviewed thought their outgoings were high, only a tenth admitted they had difficulties in meeting them.

485. For three-fifths of the households the move did not mean any extra expenditure on fares to work or school and these items cost less for a quarter. Nearly half said their daily journeys were easier than before the move. On this point the advantages of a central location and being rehoused in one's immediate area are clearly shown. Of those moved to the estates further from the town centre nearly two-thirds had to face extra transport costs and to some housewives this was a great worry.

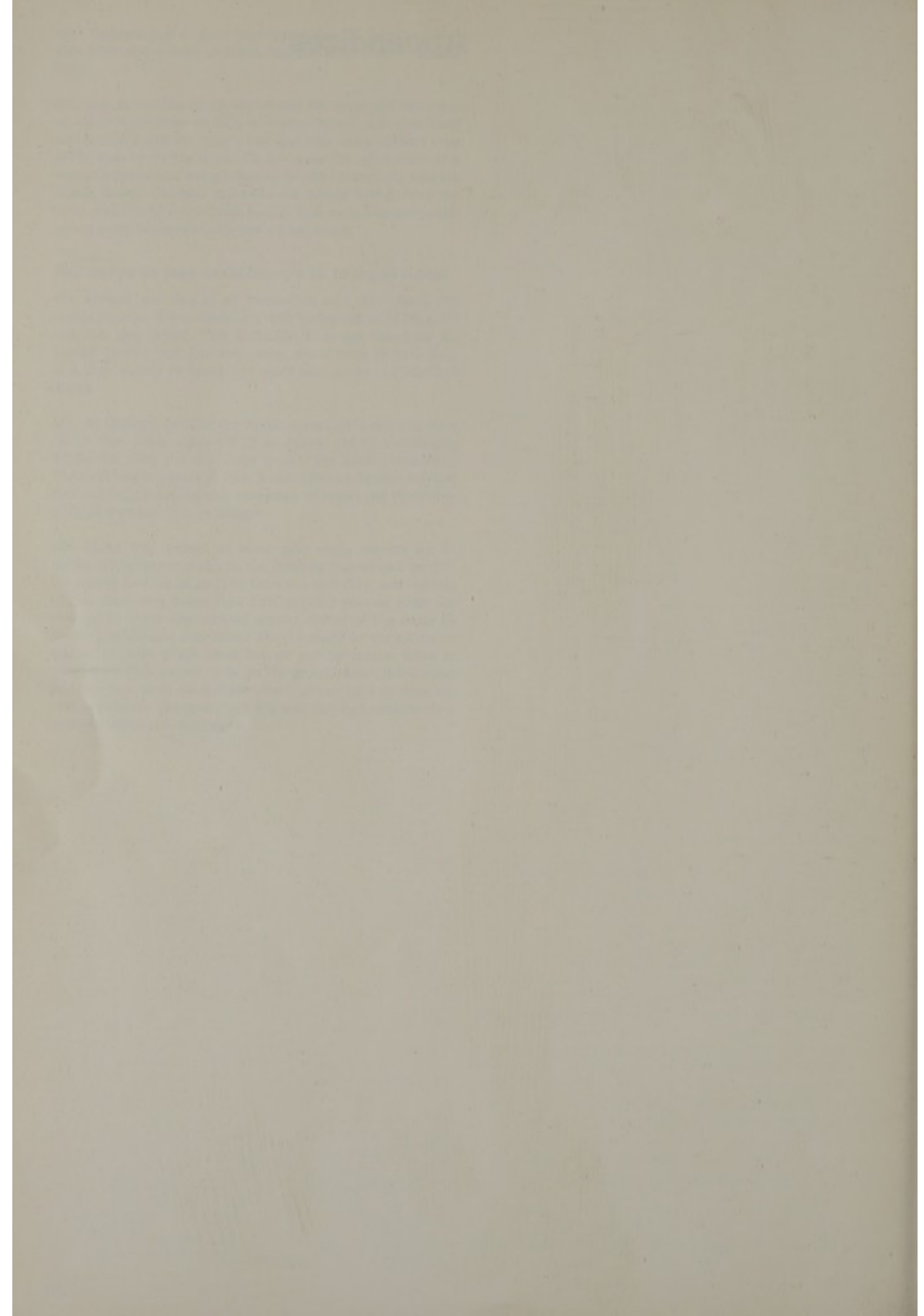
The desire to stay on St Mary's or to move away

486. Seventy per cent of all housewives said they would not choose to move if they could, 2% were undecided and 27% (107) said that they would. This is far less than was found on the Layout Study's four London estates where from 50% to 67% said they wanted to move, but more akin to its two Sheffield estates.

487. At Oldham, families with children were more eager to move (36%) than either adult (28%) or elderly (18%) households. While this wish did not differ greatly for adult households, whether living in houses or flats, it did differ for families (58% in flats and 34% in houses who were eager to move) and the elderly (15% in flats and 39% in houses).

488. Those who wanted to move gave many reasons for it: dislike of particular points in the dwelling (mentioned by 25); the noisiness of the estate (15); rents too high (11); and wanting to buy their own home (12). Less popular reasons given for wanting to move also centred around dislike of the estate or dwelling; eight said they didn't like the estate or the people or else would have preferred to live on another estate; seven in upper-floor flats wanted to be on the ground floor; five wanted more privacy, three disliked the view and two felt they were too near to relatives. However, only 8% said they had actually done anything about trying to move.

Appendices



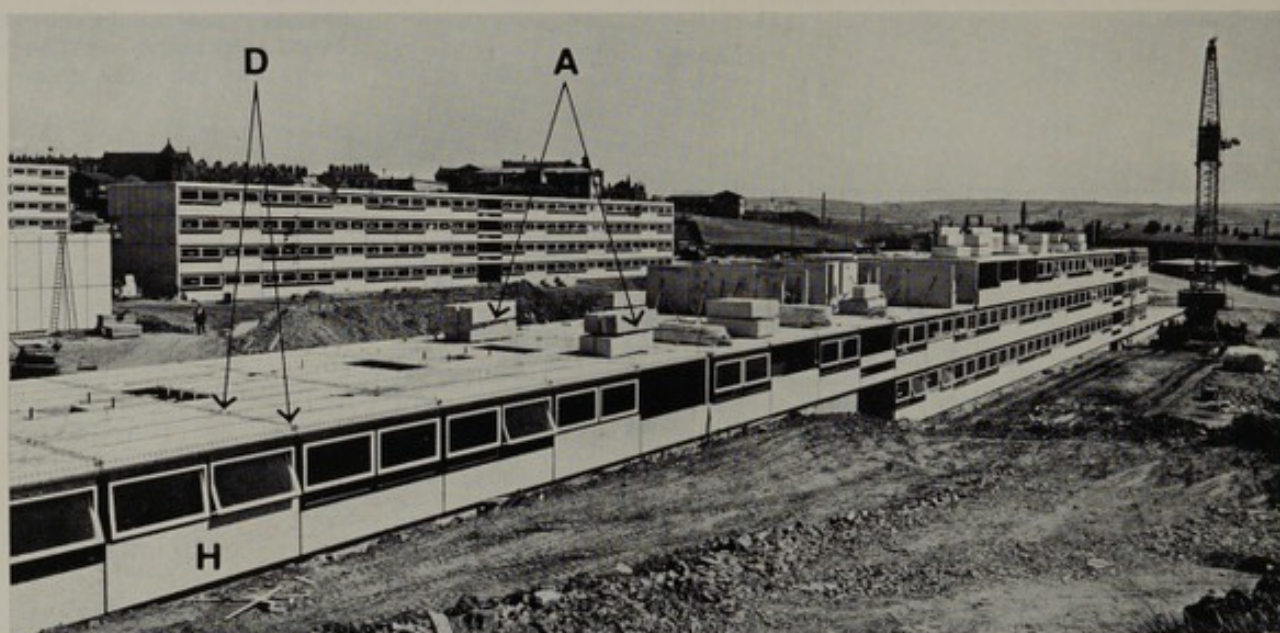
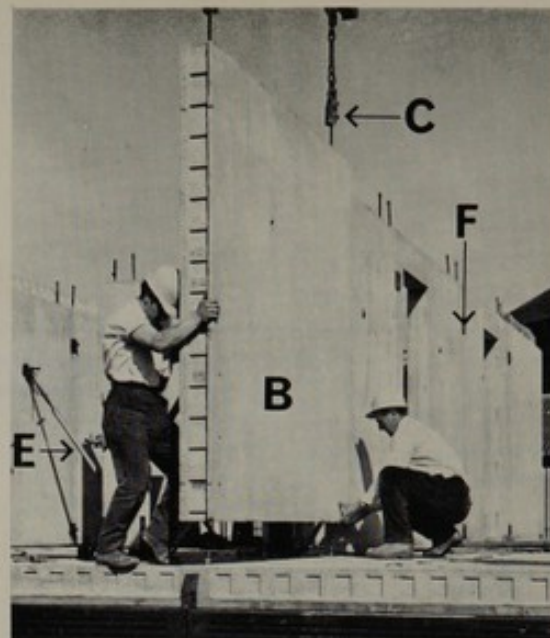
The Layout Study estates

Estate	Number of dwellings	Number of housewives interviewed	Bedspaces per acre	Building forms found on each estate
Sceaux Gardens, Southwark.	403	213	136	15-storey internal corridor block 6-storey balcony-access flats and maisonettes bungalows
Acorn Place, Southwark.	534	238	136	7-storey balcony-access flats and maisonettes 2-storey houses 3-storey stair-access flats and maisonettes
Canada Estate, G.L.C.	253	147	161	21-storey point blocks 3 and 4-storey balcony-access flats and maisonettes
Winstanley Road, Wandsworth.	504	301	154	11-storey point blocks 22-storey internal corridor slab block 4 and 5-storey balcony-access flats and maisonettes
Park Hill, Sheffield.	995	342	200	4 to 14-storey deck-access blocks
Fleury Road, Sheffield.	148	74	60-70	2-storey houses

Appendix B

The erection sequence of 12M Jespersen.

Following the casting of an *in situ* concrete ground floor slab, packages containing such items as complete dwelling sets of doors, partitions, flooring etc. were lowered into pre-arranged positions on the floor A. Erection of the structure proper started with the lowering into position of the precast concrete units B to form structural walls. These were lowered by means of bolts cast into the unit C which eventually formed the location points for the wall above D. In the case of ground floors, dummy bolts were cast into the *in situ* slab. Each wall, which was erected from the centre of the dwelling outwards to minimise the degree of error, was temporarily held upright by means of floor fixed supports E. After the complete wall had been plumbed (and individual wall units clamped together F) a dry mortar packing was placed under the walls and the locating bolts slackened off.



Once a number of walls had been erected the precast concrete units G were lowered into position to form the structural floor. When a required area of floor had been laid, reinforcement and wall prop anchor dowels were positioned, hollow cores blocked out and wall levelling bolts checked for alignment. Vertical wall and horizontal floor joints were then cast *in situ*, and cladding units H lowered, positioned and fixed.

Finally, after a period of time, wall clamps and prop supports were removed and work started on the fitting-out of the interior of the dwelling.

This sequence was followed for sections of a block of dwellings until the entire block had been completed.



Appendix C

Area of dwellings compared to 1970 mandatory requirements

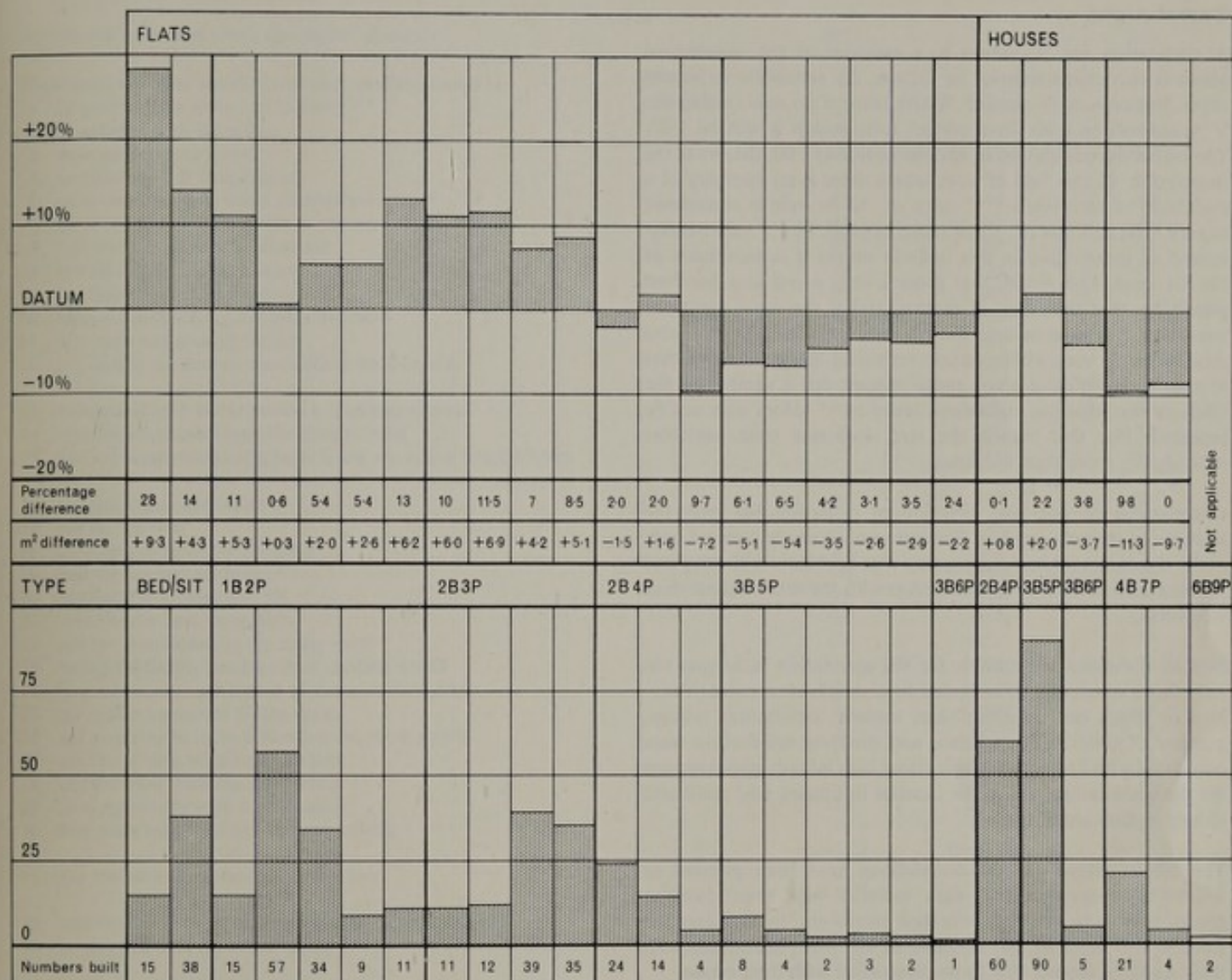


Chart showing

At top—variation, actual and percentage, between area of dwellings and 1970 mandatory requirements; areas to Parker Morris standards were requested by the brief.

At bottom—numbers of dwellings built.

Correlations

A correlation (or 'r' value) is a measure of the association between two characteristics or factors. Its reliability is largely dependent on sample size (n). Where there is no relationship the 'r' value will be 0.00. In a perfect relationship it will be 1.00. The higher the correlation is, and the nearer to 1.00, the closer the association. In this field of work where there is an interplay of a multitude of variables an 'r' value of .50 or over is considered as very high and one of .30 or more as high. No 'r' value is discussed as meaningful in this bulletin unless it is significant at the .01 level. This means that there is only a one in a hundred possibility that the result is chance, and if the same questions were put to a new sample the 'r' value obtained would most probably only vary within certain restricted limits. The fact that it may vary within a given range means, for a sample of the Oldham size, that the exact rank order of 'r' values may not be repeated. For this reason the text does not treat variables individually more than necessary.

Correlations do not give direction of causation but only the strength of the relationship. For instance we can at present only make the commonsense assumption that problems with play and parking lead to overall dissatisfaction with the estate rather than vice-versa.

Not all questions are suitable for the correlation technique but only those which can be answered by a simple alternative (Yes—No) or which can be scaled (age, income, satisfaction ratings, number of children etc.). Estate and dwelling satisfaction were correlated with 144 such variables from the Oldham questionnaire for the whole sample, then for families in houses, and adult and elderly in flats separately.

The tables setting out the correlations have been phrased as follows: 'housewives who were satisfied with their dwelling tended also to be satisfied with their estate' etc. In each case the obverse also holds so that housewives who were dissatisfied with their dwelling tended also to be dissatisfied with their estate.

A similar exercise was done on the Layout Study.

Appendix E

Factors relating to dwelling satisfaction

	Correlation coefficient		
	All	Families in houses	Adults and elderly in flats
Sample size (n) except where specifically stated	393	89	218
<i>Housewives who were satisfied with their dwelling tended to:</i>			
1 be glad to have moved to St Mary's	.55	.46	.57
2 be satisfied with the estate	.53	.46	.60
3 have no desire to move	.46	.33	.52
4 be satisfied with their kitchen	.45	.40	.63
5 have found moving was a great improvement	.45	.44	.47
6 be proud to show the estate to visitors	.42	.38	.44
7 feel that the estate was attractive	.39	.29	.42
8 not find noise a great nuisance	.33	.39	.38
9 not find the kitchen too small	.30	(.19)	.38
10 have no criticisms of the main bedroom	.30	.29	.39
11 feel there was enough privacy	.29	.41	.23
12 not dislike the kitchen overlooking the footpath	.29	(.25)	.38
	(n=266)		(n=121)
13 be satisfied with the provision of cupboard space	.29	(.18)	.40
14 visit friends more frequently since moving	.28	.51	.21
15 like the arrangement of a large living room and small kitchen	.27	(.15)	.30
	(n=363)		(n=190)
16 not feel lonely very often	.26	.30	.26
17 not be 'nervous'	.26	.37	.27
18 have no problems with heating	.26	.33	.23
19 find the kitchen convenient	.25	(.15)	.38
20 not find the kitchen too big	.25	(.03)	.30
21 consider the rent reasonable	.24	(.17)	.29
22 not feel overlooked in the living room	.24	(.22)	.27
23 have no difficulty getting rid of cooking smells	.24	(.23)	.36
24 have no trouble getting rid of steam in the kitchen	.24	(.15)	.31
25 not prefer a separate dining room	.24	(.16)	.36
26 not prefer to be more separate from other people	.21	(.21)	(.16)
27 not find drying washing a problem	.21	(.21)	.26
28 like the view from the living room	.21	(.06)	(.18)
29 have no trouble with condensation	.20	(.07)	.33
30 find more people to talk to since moving	.19	(.10)	(.17)
	(n=353)	(n=88)	(n=182)
31 like the view from the kitchen window	.19	(.10)	(.17)
	(n=353)	(n=88)	(n=182)
32 visit friends more or as frequently as before the move	.19	.28	.20
33 be satisfied with the refuse sacks	.18	(.13)	.30
	(n=217)		(n=67)
34 feel overlooked in the bedroom	.18	(.11)	(.10)
35 think the housing office a good idea	.17	(.13)	(.17)
36 be satisfied with the lighting on the estate	.16	.39	.21
37 be satisfied with the cleanliness of the estate	.16	(.07)	.23
<i>In addition the following were important to families in houses only:</i>			
1 not find it was too far to carry things from their home to the car	(.04)	.45	(.16)
	(n=75)	(n=29)	(n=13)
2 not have lived far from St Mary's before moving	(.12)	.37	.03
	(n=369)		(n=203)
3 not find the garden too small	—	.35	—
4 not previously have had the use of a garden or yard	(.13)	.28	(.07)
<i>The following were important to adult and elderly households in flats only:</i>			
1 not want to live further out	—	—	.33
			(n=77)
2 have enough daylight in the kitchen	(.15)	(.02)	.30
3 not have requested a move	(.15)	(.13)	.27
4 have got to know a lot of people since moving	(.13)	(.12)	.23
5 have fewer people in the household	—	—	.19
6 not be disturbed by children's play	—	—	.19
7 have no other problems with children's play	—	—	.19

Note

All 'r' values given for the total sample (393) are significant at the .01 level.

Those not significant are in brackets. A dash (—) denotes that this variable was not applicable.

Appendix F

Factors relating to estate satisfaction

	Correlation coefficient		
	All	Families in houses	Adults and elderly in flats
Sample size (n) except where specifically stated	393	89	218
<i>Housewives who were satisfied with their estate tended to:</i>			
1 be proud to show the estate to visitors	.56	.58	.59
2 be satisfied with their dwellings	.53	.46	.60
3 not find noise a great nuisance	.52	.50	.55
4 feel that the estate was attractive	.50	.52	.45
5 be glad they had moved to St Mary's	.46	.43	.50
6 have no desire to move	.42	.40	.48
7 have found moving was a great improvement	.40	.40	.52
8 not find children's play a problem	.40	.31	.39
9 not to dislike the kitchen overlooking the footpath	.39	.46	.43
	(n=266)		(n=121)
10 feel there was enough privacy	.38	(.26)	.51
11 not prefer to be more separate from other people	.36	.29	.34
12 be satisfied with the cleanliness of the estate	.35	.31	.34
13 not be 'nervous'	.32	.38	(.25)
14 not feel overlooked in their living room	.32	(.23)	.28
15 like the view from their kitchen window	.30	(.24)	.28
	(n=353)	(n=88)	(n=182)
16 like the view from their living room	.30	(.07)	(.24)
17 feel overlooked in the bedroom	.29	.35	(.12)
18 not prefer a separate dining room	.27	.27	.27
19 not feel lonely very often	.27	.45	(.16)
20 be satisfied with their kitchen	.24	.36	.35
21 have no trouble getting rid of steam in the kitchen	.24	.33	(.16)
22 have fewer people in the household	.24	(.22)	(.06)
23 have lower current costs	.24	(.19)	(.00)
24 have no trouble with condensation	.23	(.19)	.22
25 be satisfied with the rubbish bags	.22	(.13)	.23
	(n=217)		(n=67)
26 find the kitchen convenient	.21	.30	.29
27 like the arrangement of a large living room and small kitchen	.21	(.12)	.24
28 not hear noises from outside	.20	(.11)	(.15)
29 visit friends more frequently since moving	.20	(.21)	.21
30 find more people to talk to since moving	.19	(.20)	.27
31 be older	.18	(.16)	—
32 have no criticisms of the main bedroom	.18	(.19)	.24
33 not previously have had the use of a garden or yard	.18	(.22)	(.14)
34 have no difficulty getting rid of cooking smells	.17	(.15)	.30
35 be elderly	.17	—	(.17)
36 consider the rent reasonable	.17	(.15)	.20
37 have lived longer at previous address	.16	(.16)	(.15)
38 be nearer the ground	.16	—	(.01)
<i>The following were also important to families in houses only:</i>			
1 express no preference for living further out	—	.40	—
		(n=30)	
2 not find drying washing a problem	(.13)	.32	(.06)
3 like the bathroom fittings	(.13)	.28	(.16)
4 have no criticisms of bedroom 2	(.13)	.27	(.19)
5 have no trouble in having items delivered to the house	(.07)	.27	(.07)
<i>The following were also important to adult and elderly households in flats only:</i>			
1 have no other problems of children's play	—	—	.29
2 be satisfied with the provision of cupboard space	(.14)	(.15)	.29
3 not dislike the public steps	—	—	.29

Notes

All 'r' values given for the total sample (393) are significant at the .01 level.

Those not significant are in brackets. A dash (—) denotes that this variable was not applicable.

Design Bulletins

Design Bulletins give information and advice on current housing problems. Some provide data on specific aspects, others describe the results of development projects. All are illustrated and some contain a specially selected bibliography.

The numbers and titles of bulletins currently available are given below together with a brief note on their contents.

As from November 1970, the Department of the Environment assumed the previous functions of the Ministry of Housing and Local Government in relation to these publications.

Bulletins are Crown copyright and are published by Her Majesty's Stationery Office. Prices given are net.

1 SOME ASPECTS OF DESIGNING FOR OLD PEOPLE: (metric edition), 1968, 15p.

Primarily written for those concerned with the detailed design of accommodation for old people. The original information has been converted into metric terms and measure.

2 GROUPED FLATLETS FOR OLD PEOPLE: a sociological study: (metric edition), 1968, 37½p.

Report of a survey undertaken to provide background sociological material for flatlets project at Stevenage described in Bulletin 11. The information has been converted into metric terms and measure.

3 SERVICE CORES IN HIGH FLATS:

A series of bulletins dealing with engineering services in blocks of ten or more storeys.

Part 1 *Sanitary plumbing*: 1962, out of print.

2 *The selection and planning of passenger lifts*: 1962, reprinted 1967, 7½p.

3 *Mechanical ventilation of inner rooms*: 1963, 12½p.

4/5 *GPO telephones/Aerial installations*: 1964, 6p.

6 *Cold water services*: 1965, 30p.

7 *Protection against lightning*: 1967, 12½p.

4 SWIMMING POOLS: 1962, reprinted 1963, 12½p.

A guide outlining design requirements and technical data. (See also Bulletin 9.)

5 LANDSCAPING FOR FLATS: (second edition), 1967, 42½p.

A guide to the treatment of ground space in high density housing estates.

6 SPACE IN THE HOME: (metric edition), 1968, 25p.

Illustrates space and furniture requirements for different activities in the home.

7 HOUSING COST YARDSTICK: *for schemes at medium and high densities*, 1963, 12½p.

The original cost yardstick publication. The yardstick in this bulletin is now superseded, but the background information still holds good.

Cost yardstick information is now given in DOE Circulars obtainable from HMSO.

8 DIMENSIONS AND COMPONENTS FOR HOUSING: *with special reference to industrialised building*, 1963, reprinted 1964, 37½p.

Recommends preferred dimensions for housing with special

reference to industrialised building. This bulletin will remain valid for buildings in foot-inch dimensions.

(See also Bulletin 16.)

9 SWIMMING BATH COSTS: *with some notes on design*, 1965, 7½p.

This bulletin, together with Bulletin 4, gives data for the design of either covered or open-air baths.

10 CARS IN HOUSING 1: *some medium density layouts*, 1966, reprinted 1967, 62½p.

Describes alternative ways of achieving vehicular/pedestrian separation and illustrates typical medium density layouts. (See also Bulletin 12.)

11 OLD PEOPLE'S FLATLETS AT STEVENAGE: *an account of the project with an appraisal*, 1966, 40p.

The first bulletin dealing with a development project designed by the Ministry's Research and Development Group. It contains an illustrated account of the design and construction aspects and gives an appraisal of the scheme in use. (See also Bulletins 1 and 2.)

12 CARS IN HOUSING 2: I Dimensions: II Multi-storey parking garages (metric edition), 1971, 30p.

Gives detailed design data for the parking and garaging of cars in residential areas. The first section gives data for cars, garages, forecourts and parking bays. The second section is devoted to multi-storey garages for housing estates. (See also Bulletin 10.)

13 SAFETY IN THE HOME: (metric edition), 1970, 30p.

Describes safety requirements for both house planning and detailed design. The material is separately grouped under activities and elements and a check list is given. It does not deal with means of escape from fire. In this edition values are given in S.I. units, amendments made to meet requirements of new legislation, and recent research findings incorporated.

14 HOUSE PLANNING: *a guide to user needs with a check list*, 1968, 42½p.

For use in the preparation of house plans, and also of value to all concerned in the preparation of the design brief, i.e. private developers, housing managers and housing committees.

15 FAMILY HOUSES AT WEST HAM: *an account of the project with an appraisal*, 1969, £1.00.

Contains an illustrated account of the development and appraisal of a project undertaken to gain practical experience in applying the recommendations of the Parker Morris Report. The project was designed by the Ministry's Research and Development Group.

16 CO-ORDINATION OF COMPONENTS IN HOUSING: *Metric dimensional framework*, 1968, 30p.

This bulletin is one of a series on dimensions and components for housing. Written in metric terms, it discusses the objectives of dimensional co-ordination and describes the metric dimensional framework with the help of diagrams and tables. The application of the framework to a range of plan types is also demonstrated.

17 THE FAMILY AT HOME: *a study of households in Sheffield*, 1970, 37½p.

The first bulletin in a series dealing with a development project at Sheffield designed by the Ministry's Research and Development Group. It reports on the preliminary social study, summarises the data collected, and sets out the implications for the design brief. (See also Bulletin 18.)

18 DEVELOPING A LOW-RISE HOUSING SYSTEM:

—*the 5M system and its development*

—*the pilot project at Sheffield*, 1970, 50p.

The second bulletin in a series dealing with a development project at Sheffield designed by the Ministry's Research and Development Group. Sets out the purpose of the project, the evolution of the design, the development of the 5M industrialised building system, and the cost planning techniques adopted. (See also Bulletin 17.)

19 LIVING IN A SLUM: *a study of St. Mary's, Oldham*, 1970 35p.

The first bulletin in a series dealing with a development project at Oldham designed by the Ministry's Research and Development Group. Gives an account of the preliminary study in the investigation of the social problems involved in the redevelopment of a slum area. (See also Bulletins 20 and 21.)

20 MOVING OUT OF A SLUM: *a study of people moving from St. Mary's, Oldham*, 1970, 50p.

The second bulletin in a series dealing with a development project at Oldham designed by the Ministry's Research and Development Group. An account of a study which explores the experiences and attitudes of households displaced during the redevelopment of a slum area. (See also Bulletins 19 and 21.)

21 FAMILIES LIVING AT HIGH DENSITY: *a study of estates in Leeds, Liverpool and London*, 1970, 60p.

The third bulletin in a series of four dealing with a development project at Oldham by the Ministry's Research and Development Group. It is the last of three pre-design social studies and gives an account of the attitudes of families with children under 16 living on three estates at densities of 109, 130 and 140 persons per acre. (See also Bulletins 19 and 20.)



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