# C. METHODS & OUTPUTS

# 7. Preparatory Phase

During the first 4 weeks of the assignment, various tasks were undertaken to prepare the ground for the full survey:

#### 7.1 Address Schedule

One of the first operations undertaken, following project inception, was the compilation and validation of a comprehensive address list for the housing stock - in order to derive a fully up-to-date computerised listing that contained key information for all properties.

# 7.2 Survey Design

Through consultation with the officers, the scope, format and computer codes of the survey forms were determined. Draft forms were developed subsequently approved and printed. 3 survey formats were prepared for use (Appendix 1).

Internal Data Sheet: for use on all sample properties
External Data Sheet: for use on all sample properties
Flat Block Data Sheet: for use for each Flat Block

The survey forms were designed to record information and assessments on:- the form, character and construction of the dwellings; its level of appointments and services, with regard to improvement needs; maintenance needs and priorities.

In addition to repair and replacement needs, the survey documentation allows for the identification of obsolete systems and materials, inadequate service provisions, facilities and fittings, plan deficiencies, etc.

#### 7.3 Sample Design

The sample was designed to ensure coverage of every principal dwelling variant within each defined location. The following background is provided.

Normal statistical survey techniques employ a disproportionately stratified sample, selected randomly. Final survey data is held against only the surveyed properties - this data grossed to the full stock through the application of weights (or multiply factors): thus no information is held directly for the unsurveyed percentage of the stock

This approach, while appropriate to private sector surveys will not provide the level of detail that is required for the management and maintenance of the Council's own stock. Surveys designed to yield data for on-going use in planned maintenance must provide complete data records against each property on the housing register (thus allowing interrogation, and up-date, at an individual property level).

Consequently, for surveys of managed housing stocks a further step is normally required, whereby the survey data is 'extrapolated' to unsurveyed properties to ensure that data records are provided on a Per Property basis.

In order to permit this extrapolation, the sample stratification process requires detailed appraisal and must be designed to ensure coverage of each dwelling variant within each defined location. Data for unsurveyed properties can, thus, be derived from a surveyed property of the same type within the same defined location.

With the known uniformity and the repetition of types prevalent within public sector housing the extrapolation of data by repetitive dwelling types is, obviously, the most accurate and reliable method of expanding the data to all 100% of the dwellings

Following the completion of the 'address list', outlined above, and when all data relating to property types was configured and coded, the sample requirements were identified and properties selected for survey, briefly:

## 7.3.1 Selecting the Sample Criteria

Codes were given against each dwelling to define the property type and its location with reference to the following criteria:

Pro	perty	Ty	pes

Type: House, Bungalow, Flat, Maisonette
Age: Pre-1945, 1945-64, 1965-74, 1974+
Number of Bedrooms
Floor Location of flats
Construction Type

#### Location

Location referencing was established – with reference to Parish Codes and Streets

#### 7.3.2 Selecting the Sample: The Frequency Tables

The sample criteria, established above, provided the basis for sample selection and stratification. Frequency Tables of property type and Location were drawn up in order to determine the optimum sample size and structure for each. The alternative samples were illustrated and evaluated, depending on which criteria were selected to define property type and location, for each sample group.

	Property Type				Location		Sample			
	Туре	Age	Beds	Detach	Construction	Parish	Street	Block	Total	%
	House Bungalow Flat Maison. Sheltered	Pre-1919 1919-44 1945-64 1965-79 1980+	Bedsit 1 2 3 4 5	Floor Level of flats only	Construction Traditional or Airey, Reema, Wates, Cornish, Gregory,	41 Parishes	356 Streets	Unknown	Total 6,231	
A1	R	R	R	R	R	R			488	7.8%
A2	R	R	R	R	R		R		1,014	16.3%
A3	R	R	R	R	R			R		
B1	R	R	R		R	R			348	5.6%
B2	R	R	R		R		R		751	12.1%
В3	R	R	R		R			R		
C1	R	R	R	R		R			446	7.2%
C2	R	R	R	R			R		993	15.9%
C3	R	R	R	R				R		

As explanation of the frequency table provided, above:

	The Coded address list identifies a total rented stock that is subject to sampling of 6,231
dwelling	gs across 356 streets and 41 Parish locations
	To allow survey coverage of one of each unique variant (i.e. taking account of all the

property type criteria identified) within each Street (A2) would require a sample

of 16.3%.

To 'down-size' the sample, one can reduce the criteria used. Thus, to allow coverage of
one of each variant within each Parish (rather than Street) would require a sample of 7.8%(A1). If
we excluded the floor location of flats within our definition of variant, the sample could be
further reduced to 12.1% on a 'street basis' (B2) or 5.6% (B1) on a Parish basis
☐ Clearly, the more criteria employed in defining the sample, the more robust the
extrapolated data will be.

The survey specification allows for a sample of 628 (10%). It was agreed that the sample should be based B2 but limited to 628 surveys (representing 83.6% of the target) – where a specific property type was not covered within a given street, extrapolation was finally based on the 'closest match' available

## 7.4 Surveyor Briefing

The survey team was compiled of fully trained and experienced NBA personnel, all of whom had been involved in many similar assignments in the past. During the course of the preparatory phase operations, Guide-Notes were prepared and distributed to all surveyors for each of the main topics and operations of the survey.

# 8. Survey & Documentation

The survey fieldwork was undertaken during the period from 6<sup>th</sup> January to 7<sup>th</sup> February 2003. A total of 635 (10.2%) dwellings were inspected. In view of the fact that external surveys of flats allowed for the survey of the entire block where the flat was situated, the external survey covered 1,816 rented dwellings (29%)

### 8.1 The Survey Process

Households selected for survey were informed in writing by the Council shortly before the survey commenced

Initial 'calls' were based on the above notification. Where a response was not achieved, an appointment card was left, informing the householder that the surveyor would call at a particular time of day and requesting the householder to contact NBA's Low-Call (0845) Survey Line if this was inconvenient. All properties within the sample were called upon, in this fashion, on at least three occasions before the address was marked as 'No Response'.

Survey forms carried a unique Survey/Security Reference: this was a 5-digit figure, sequenced, wherever practicable, geographically. That was given on all correspondence (including appointment cards)

#### 8.2 Scope of Data

Data and assessments were collected for each main 'element' of the building. The survey records specific types of data and assessment, summarised as follows:-

- R Dwelling Data: Includes information on the form, age, accommodation size, etc. of the dwelling.
- R Elements: The 'componentisation' of the property in order to facilitate the inspection and the recording of the assessment.
- R Attributes: For each Element of the building (E.g.. Chimney, Roof, etc.), key Attribute are given (these attributes have a bearing on the cost of remedial action, improvement requirements or energy efficiency).

- R Age: the approximate age was recorded for all key elements
- R Action: There are, in most cases, two 'levels' of action to be selected for any given element: E.g.. 'Repair' or 'Replace'. An 'Action' can also refer to the need for an improvement measure designed to improve the standards of accommodation, amenity or service to benchmark standards and targets.
- R Priority: For each recorded action, above, an assessment is made regarding when the work should be undertaken in terms of A year-1, 3 years, 5 years, 10 years. They also record the period for next element replacement (beyond the 10 years) -15 years, 20 years, 25 years, 30 years (i.e. "remaining life")
- Backlog: For each action identified that falls within the definition of 'Catch-Up' or 'Back-Log': Defined as action which is outstanding at the time of the survey and which is required to bring the stock into reasonable condition.
- R Units: For each recorded action, the quantity of work is to be indicated by the recording of Units. The unit of work used varies from element to element, including:
  metric quantity e.g. linear metres (Ln. M), square metres (Sq. M);

  Storey Units: e.g. House/Maisonnette = 2, Flat/bungalow = 1. A partial replacement of windows on a house would be indicated by recording '1' unit

  SHDW units -Storey Height/Dwelling Width: (i.e.. a semi-detached house will have a total of 6 units) Each unit is approximately equivalent to 10 SqM. e.g. Repointing one unit = 10 Sq.M (approximately equivalent to one storey height/ dwelling width).

  Item e.g. number of Chimney Stacks, doors, requiring action;

  Dwell e.g. Reroofing the whole dwelling.

Clearly, where the property is a house or bungalow 'Dwell' units, above, will be recorded as '1' unit. In the case of Flats and maisonettes situated in blocks, however, the number of units recorded for example, for reroofing, or replacement of rainwater goods, will be the number of top floor flats.

R The habitability of dwellings: The survey recorded the habitability of dwellings in terms of the following:-

Condensation and dampness

Decent Homes: Compliance with the Decent Homes standard.

• Fitness assessments are made using a simple listing of the acts requirements -recording 'unfit' against each of the relevant standards.

☐ Hazards associated with staircases, glazing, balustrading, security, etc -identified, through attribute recordings

☐ Plan Deficiencies

□ Security

#### 8.3 Data Input:

All hard-copy attribute, condition and priority action data was input and verified progressively during the survey - employing graphic input tablets designed specifically for the purpose