2.1 Survey & Valuation Methodology

Mouchel has provided services to over 20,000 schools, academies and federations over the last 10 years. Over this time we have developed and refined efficient high quality estates services and we have set out below our approach to this commission based on this extensive experience.

Whilst we anticipate that the data provided will be sufficient for us to be able to rely on it as a basis for our valuation calculations, we know from our extensive experience of carrying out some 3,000 asset valuations each year, that other methods are often required to either validate and clarify the provided data or to complete it.

Where the background information appears to be accurate and consistent, we will note the relevant data within a shared spreadsheet, which will then be used to provide the base data for use in preparing the valuation. The spreadsheet will uniquely identify each property and its features. Use of conditional formatting will help highlight empty data cells, and Excel's consolidation and lookup functions will enable us to read and combine data as necessary.

We operate web based extranet type collaboration software (Business Collaborator) throughout the business, and will set up a dedicated workspace for the nationwide valuation teams to upload and share all information on the institutions. This will enable our analysis teams to collate information and upload it for use by the valuation and QA teams. The workspace will also act as a repository for incoming information, for downloading and use by the regional teams.

As this work is to be carried out on a desktop basis, it is very important that we have regard to alternative methods of clarifying the factors that affect a given site, thus enabling our valuers to complete their valuations as accurately as possible. Current technology allows the surveyor to research a geographical area using a computer or tablet device, and the IT resources at Mouchel's disposal include:

- Google Streetview
- Google Earth
- maps@mouchel (our internal digital mapping solution)
- ArcGIS GIS software
- BCIS subscriptions
- iSurv licences

We have found that a combination of Streetview and maps@mouchel allows us to pinpoint (with the use of Royal Mail's postcode finder if necessary) any given property address, and view its general location and neighbourhood factors, as well as site details in plan and satellite form, and from the street.

In this way we are able to quickly and easily clarify any inconsistencies or omissions in the data provided, including identifying properties and outbuildings, and in some cases identifying where properties have been redeveloped or extended. Where the academy is unable to provide a site plan we are able to use our own mapping systems to identify up to date site information.

In the rare event that using these technologies did not resolve any uncertainties regarding site conditions, we will arrange an external inspection from the nearest public space, heeding of course the sensitive issue of inspecting school premises, even from outside the boundary.

Once we have completed our exercise we will of course report any anomalies to the client.

We possess electronic site and building measurement capabilities, so any properties where the dimensions could not be provided will be assessed by scale measurement of the Ordnance Survey maps, from which we are able to make an adjustment from Gross External Area (GEA) to Gross Internal Area (GIA) based on our experience of measuring other properties. Using the available satellite/Streetview facilities allows us to establish building ages, heights and uses. Any assumptions made in preparing the valuation on this limited-information basis will be stated in our report.

If not provided within the data supplied, the GIA of the modern equivalent asset will be calculated by reference to the information that is provided on the current school capacity and pupil roll. We will liaise with our QS and Design teams, who are active in the Education field, as to current school standards and make any adjustments considered necessary as a result. If pupil roll and capacity figures are not provided, we will extrapolate information provided on other institutions in an area to arrive at a reasonable estimate for the subject academy. This approach applies equally to the land and non-land elements of the modern equivalent asset.

There will inevitably be instances where we are not comfortable with the quality of the information we have been able to glean; in those instances, for reasons of quality assurance and sound project management, we expect to carry out limited external inspections of the academies.

If, as a result of our investigations, there appear to be factors that would mean our valuation would be materially different from that which would have been provided on the basis of the supplied information, we will notify EFA immediately and obtain further instructions.

The task that is required as part of this commission is the preparation of appropriate Depreciated Replacement Cost valuation for a number of academies (ie schools). The Commission, although being a desktop exercise, relates to schools spread across the country. Mouchel has an extensive network of regional offices, and thus has experienced valuation staff with an in-depth knowledge of the areas in which they are carrying out the valuations. In order to ensure consistency of approach, Mouchel will identify staff to coordinate the work at a regional and national level.

In asset management terms, schools are included in the "Property, Plant and Equipment" (PPE) category (formerly known as "operational" properties). All assets of an organisation are now valued to Fair Value as defined by the International Financial Reporting Standards (IFRS), as follows:-

"Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date."

which in the case of PPE assets is considered equivalent to the RICS definition of Existing Use Value (EUV). EUV is defined as follows:-

"The estimated amount for which a property should exchange on the date of valuation between a willing buyer and a willing seller in an arms-length transaction, after proper marketing wherein the parties had acted knowledgeably, prudently and without compulsion, assuming that the buyer is granted vacant possession of all parts of the property required by the business and disregarding potential alternative uses and any other characteristics of the property that would cause its Market Value to differ from that needed to replace the remaining service potential at least cost."

Schools are specialised properties for which there is no market (ie they are not generally bought or sold). EUV is derived for specialised properties using the Depreciated Replacement Cost (DRC) method. This involves the calculation of the construction cost of a modern equivalent asset, which is then depreciated to allow for the factors of age and obsolescence. The value of the site is then added to the resulting sum, to give the asset value.

The land valuation is based on the value of the nearest alternative, which with schools tends to be residential, although commercial is also a possibility in some locations. As part of our data-gathering exercise we will research local land values by speaking with local agents and the district councils, analysing auction results, and researching transactions online using such facilities as Focus/CoStar and EGi.

We have developed a DRC valuation model that has been tested over many years with a wide range of schools clients. To ensure a consistent approach across the teams involved in this exercise we have created a programmed spreadsheet for the valuation process. Once the QS teams have provided us with the data on build costs, obsolescence, depreciation etc, we will load that into the model, which is partially locked, to enable the valuation to be calculated. This ensures total consistency across the entire programme of schools, with valuers being able to enter data into selected cells only, and with the same background data being hard-coded into the template. The model allows us to select, for example, age bands, temporary buildings, unit size, land area and value.

This system ensures that all aspects of the valuation are correctly addressed, that a consistent approach is used across properties, and that the resulting valuations are mathematically accurate.

The stages of the DRC valuation include:

- A consideration of the modern equivalent property, as this may be different from the actual property. We assess this by reference to the pupil roll of the school and its physical size. A recent relevant example is a valuation of a local authority primary school which was original constructed to house both a secondary and a primary school. Clearly, the modern replacement asset could be much smaller here than the current range of buildings.
- The site area is either established from provided information, or assessed from mapping/aerial photography systems, which we consider sufficiently accurate for asset valuation purposes. A site plan would be useful to establish actual boundaries of school site if not clear from mapping. Aerial photographs will show any unused or

under-utilised areas of the site, parts of the site, or excessively large playing fields, which could be excluded from the adopted area of a modern equivalent site.

- Gross replacement cost is calculated by the product of the GIA multiplied by the appropriate construction cost rate. Mouchel will establish this cost rate from the Building Cost Information Service (BCIS) as provided by the RICS. This approach is in accordance with the standard industry practice for the preparation of DRC valuations. The BCIS includes information on the construction costs of a range of school types as well as a large number of other property types, and provides upper and lower quartile figures in addition to the mean (average) values. The project cocoordinators will ensure that this was consistently applied across all the valuations undertaken.
- We then assess the expenditure necessary for broader site assets (e.g. the costs of providing hard play surfaces, car parking, walls, fencing, lighting etc). These costs are not specifically allowed for in BCIS, but will be assessed by our specialist QS team.
- The resulting reconstruction cost is then adjusted for location, again using BCIS data. Data is now available at the level of district council authorities, allowing very accurate adjustment of the data to local construction cost levels, even when carrying out a large number of valuations nationwide.
- The next adjustment is to allow for the fees incurred in designing and constructing the building and for statutory fees (e.g. planning permission etc). Previously, an adjustment has also been made for finance costs; however recent guidance now explicitly states that this adjustment is not to be made.
- The above step results in the Gross Replacement Cost of the building. This cost has to be adjusted to allow for age and obsolescence, to give the Depreciated Replacement Cost of the building element or asset. Given the number of properties involved, our specialist QS team will establish a methodology to assess depreciation levels across all the properties considered. This scheme will consider the following elements:-

(a) The assessment of depreciation involves the consideration of the level of depreciation to which the asset is subject over its lifespan. The asset is considered to depreciate in value from full value when it is new to a nil value in its current use at the end of its life (although it will often have a residual value when disposed of for a different use). This depreciation is most simply thought of as a straight line, and this is something that Mouchel would calculate. We will however make appropriate adjustments to that straight line – for example, a property that is only a few years old may be almost as good as new and subject to less depreciation than the straight line assessment would suggest.

(b) The other way to look at depreciation is in respect of the three main types of obsolescence, as follows

- physical obsolescence the deterioration of the fabric of the building itself. This
 can be quite high with schools, particularly in respect of interior finishes which
 are subject to a high degree of wear and tear;
- functional obsolescence the fact that the building does not fulfil its intended use as well as a modern replacement would. School design does change over time;
- economic obsolescence a school is not particularly subject to this, as it is a service that is always required, but it would apply for instance in an area that had been cleared of much of its surrounding housing, reducing the demand for the school's services.
- The final stage is the assessment of the value of the land element, which is not the value of the particular site but of a suitable modern equivalent site. The way in which this is done is covered in detail in the CIPFA/RICS guidance, but the basic requirement is to look at the most cost effective way of acquiring a site that would be suitable for the school if it were in the process of being established. This means in some cases that a lower value site could be acquired than the one already occupied (for instance, fire stations are often in residential areas but could go on industrial sites which would have a lower value). In the case of schools, the school buildings nearly always need to be on land with residential value, as they need to be near existing housing. However, the guidance specifically refers to the fact that the school playing fields could in many cases be on land outside the limits of the settlement that has a far lower value, and pupils transported to it. We would therefore identify, from local knowledge and mapping systems, whether or not it is for example feasible to locate playing fields outside development limits. The project co-ordinator will establish guidance for this, to be agreed with the client, which ensures consistency of approach across all the work provided. The actual residential land values will be established at the outset by the project co-coordinators, in the form of a scale of land values that varies as appropriate across the country. This will again ensure that the valuation advice provided is consistent.

The above steps allow the completion of the valuation of each of the academy assets, which will then be reported to the client in the prescribed format.

Along with the required information, an indication of the valuation uncertainty that applies to each asset will be given. This uncertainty relates to the accuracy and completeness of the information with which we have been provided.