Finds Section Oracle Recording Forms

This manual discusses each of the forms available on the finds menu screen **Assessment Forms**.

1. Bulk finds
2. Registered finds
3. Glass
4 Coins
5 Pottery
6 Context dating
7 Clay pipes

These are discussed in the following manner:

1. **Title** : The form's number and name as listed on the menu system.

2. **Figure**: A screen shot(s) of the form itself.

3. **Purpose**: A brief description of what the form is built to record.

4. **Minimum to COMMIT**: Here are listed the block and field names of those fields that must receive a value for a row to be committed. Thus new rows must have an entry in each of these fields, while existing rows that are updated will only be committed if these fields are not null. Controls for uniqueness ensure that an attempt to COMMIT data to a table that already holds identical rows will fail. A failure of this type can be identified by pressing the F10 key (show error screen) after the error has occurred.

5. **Block descriptions**: Each block in the form is then described in the order of use. The description consists of two halves. The first lists each field name in the block as printed on the screen, and the data type and size that the field accepts. If this field is followed by a **NN**, this indicates that the field must be filled out, (i.e. it must be Not Null). In a single block form all such **NN** fields must receive a value. In a multi-row block however, it is only the **NN** fields of the first block that must be filled out in order for a record to be committed. It is only when data is to be inserted into a further blocks, that the **NN** fields of those other blocks have to receive values. The letters **LOV** after a field name indicate that a list of values, (acceptable key codes) exist for that field which can be seen by pressing the F6 key when in that field.

1. Bulk finds

Figure

```
                        Bulk Data  Screen 1

              Site
              Code      Context    Material
              ____      ____       ____
              ____      ____       ____
              ____      ____       ____
              ____      ____       ____
              ____      ____       ____
              ____      ____       ____
              ____      ____       ____
              ____      ____       ____
              ____      ____       ____
              ____      ____       ____

         During an insertion session the previous sitecode and context
           number is inserted when a new row is started. Please check.
      ------------------------------------------------------------------------------------
      Press <TAB> to move between fields and the arrow keys to move between rows.
      Press F5 to COMMIT all your entries

      Count: *0                              <Replace>
```

Screen 1

Purpose
To record the types of material retrieved as bulk finds from a given context.

Description
The form consists of a single block shown on a single screen that place data into a single table.

Minimum to COMMIT
Block 1 <**Sitecode**>, <**Context**>, <**Material**>

Block 1
<Sitecode> char 8 NN
<Context> number 5 NN
<Material> char 4 LOV NN

This consists of multiple rows, the first two fields of which record are the <**Sitecode**> and **<Context>** (non-decimal numbers only). During an insertion session when the user has pressed the down arrow to begin entering a further row of data, the sitecode and context number of the previous row will be inserted into the new row to save re-typing. The final field, <**Material**> records the material type code which must be up to 4 characters and can be entered directly by the user, or by selecting from the list of acceptable codes that are shown by pressing F6. As a single context may have many materials as bulk finds, (i.e. there is a one to many relationship) this block shows multiple rows. All fields must receive a value.

2. Registered finds

Figure
Screen 1
Screen 2

Purpose
To record details of registered - i.e. accessioned - finds coming from a single context. Objects such as glass, coins, pottery stamps etc. are recorded here initially, but also in more detail in type specific forms.

```
                          Registered Finds Screen 1

  Site
  code    Context    Acc No.    Material    Object  Peiord  Comp  Presn  Illus  Conserv
 _____  _____    _____    _____    _____    –     __     –      –       –
 _____  _____    _____    _____    _____    –     __     –      –       –
 _____  _____    _____    _____    _____    –     __     –      –       –
 _____  _____    _____    _____    _____    –     __     –      –       –
 _____  _____    _____    _____    _____    –     __     –      –       –
 _____  _____    _____    _____    _____    –     __     –      –       –
 _____  _____    _____    _____    _____    –     __     –      –       –
 _____  _____    _____    _____    _____    –     __     –      –       –
 _____  _____    _____    _____    _____    –     __     –      –       –

              During an insertion session the sitecode and context
              from the previous record will be inserted. Please check
 -----------------------------------------------------------------------------------------
 -
 Press <TAB> to move between fields and the arrow keys to move between rows
 Press F5 to COMMIT all your entries, update and deletions and F4 to exit

 Count: *0                                              <Replace>
```

Description
The form consists of a single block spread over two screens that place data into a single table.

```
                          Registered Finds Screen 2

 Object       Comments                          Publications
 _____  _ |_____    _____
 _____  _ |_____    _____
 _____  _ |_____    _____
 _____  _ |_____    _____
 _____  _ |_____    _____
 _____  _ |_____    _____
 _____  _ |_____    _____
 _____  _ |_____    _____
 _____  _ |_____    _____
 _____  _ |_____    _____
 _____  _ |_____    _____
 -----------------------------------------------------------------------------------------
 Press <TAB> to move between fields and the arrow keys to move between rows
 Press F5 to COMMIT all your entries, updates and deletions and F4 to exit

 Count: *0                                              <Replace>
```

Minimum to COMMIT
Block 1
<**Sitecode**>,
<**Context**>,
<**Acc No.**>,
<**Material**>,
<**Object**>

Block 1
<Sitecode> char 8 NN
<Context> number 5 NN
<Acc No.> number 5 NN
<Material> char 4 LOV NN
<Object> char 6 LOV NN
<Period> char 2
<Comp(leteness)> char 1
<Presen(tability)> char 1
<Illus(stration)> char 1
<Conserv(ation)> char 1
<Comments> char 30
<Publications> char 30

During an insertion session, the first fields <**Sitecode**> and **<Context>** are automatically inserted into a new row when it is begun to save retyping. The context number is naturally required, but in the case of stray accessioned finds, (i.e. finds not recovered during excavation of a context and therefore without a context number) then a zero should be entered. The third field <**Acc No**.> requires the accession number of the object, (decimals or character suffix unacceptable) to be entered. As this is a not null field, it is the case that objects must have had an accession number assigned in order to be acceptable to this form.

The fields <**Material**> and <**Object**> require 4 and 6 character code words respectively, that may be entered directly by the user or inserted by selection from the list of values available for each field that is obtained by pressing F6. If the appropriate values for either of these not null field is unknown then the string 'UNK' is acceptable. The object field currently defaults to UNK. Any items that you are uncertain about should be mentioned in the comments field. The <**Material**> field is mirrored when a new row is started.

Note on the recording of objects made of more than one material (Composites), or consisting of more than one component

If the material is a composite, then the string 'COMP' is acceptable in the <**Material**> field, and appears on the list of acceptable values. The actual materials of which such an object is composed should be recorded in the <**Comments**> field.

Items such as belt straps that may have a brass buckle, iron studs and a leather strap should receive the <**Material**> code 'COMP' and the code 'MULT' in the <**Object**> field. The actual components themselves should be entered as <**Comments**>. The MULT <**Object**> code indicates that the accessioned object consists of multiple components, and one we always know that the comments field needs to be consulted for a description of those components.

The eighth field <**Period**> requires one of the acceptable alphabetic period codes to be entered; P=Prehistoric, R=Roman, S=Saxon, M=Medieval and PM=Post-Medieval. The same period codes are used in other finds tables, (such as that for recording details of the pottery) and help with the management, interrogation and presentation of data.

The following fields are straightforward; <**Comp**(leteness)> requires a W if the object is whole and an H if it is half complete. Leaving the field null indicates that only a fragment was recovered. A Y is entered into the field <**Presen**(tability)> if the object is thought to be worthy of display, while a Y in the field <**Illus**(stration)> indicates that object has been illustrated by the drawing office. A Y in the field <**Conserv**(ation)> indicates that the object has been conserved.

The first field on screen two <**Object**> is simply a repeat of the same field on screen 1 and is meant merely to remind you which line you are on when you have many rows on the screen, it cannot be entered. The <**Comments**> field of screen 2 allows for 30 characters as does the field for <**Publications**>. The latter is meant for recording which publications have mentioned the object in question. As there is no way for this to be validated, reference conventions will need to be self imposed. Voluminous observation are best made elsewhere with a note made to that effect here.

The final dating of a context as a whole must take account of all dated material, thus this information is recorded in a separate form, (**6. Context dating**). The discussion of that form below should be read, as it is there that the dates from all datable material are presented and the final date of the context is recorded, thus it is imperative for all finds specialist to be familiar with this form as well as that in which they record the own material.

3. Glass
Figure

Screen 1

Purpose
To record details of glass objects coming from a single context that have been accessioned.

Description
The form consists of a single block spread over a single screen that place data into a single table.

```
                        Glass Data  Screen 1
                                             T
                                             y
   Site              Acc           Early Late   p
   code  Context     No.   Colour  Form  Date  Date  e   Comments
   ____  ____        _____ _____   _____ ____  ____  _  _____
   ____  ____        _____ _____   _____ ____  ____  _  _____
   ____  ____        _____ _____   _____ ____  ____  _  _____
   ____  ____        _____ _____   _____ ____  ____  _  _____
   ____  ____        _____ _____   _____ ____  ____  _  _____
   ____  ____        _____ _____   _____ ____  ____  _  _____
   ____  ____        _____ _____   _____ ____  ____  _  _____
   ____  ____        _____ _____   _____ ____  ____  _  _____
   ____  ____        _____ _____   _____ ____  ____  _  _____

      During an insertion session the previous sitecode and context
      number is inserted when a new row is started. Please check.
   -------------------------------------------------------------------------------
   Press <TAB> to move between fields and the arrow keys to move between rows.
   Press F5 to COMMIT all your entries

   Count: *0                                  <Replace>
```

Minimum to COMMIT
Block 1 <**Sitecode**>, <**Context**>, <**Acc No.**>, <**Colour**>, <**Form**>

Block 1
<**Sitecode**> char 8 NN
<**Context**> number 5 NN
<**Acc No.**> number 5 NN
<**Colour**> char 5 LOV NN
<**Form**> char 6 LOV NN
<**Early Date**> number 4
<**Late Date**> number 4
<**Type**> char 1
<**Comments**> char 20

The <**Sitecode**> and <**Context**> fields have the normal controls and are echoed when new rows are commenced to save re-typing. The <**Acc No**.> field requires the accession number of the object, thus objects *must have* this number before this form can be used.

The fields <**Colour**> and <**Form**> require a code word for glass colour and vessel form respectively, that must appear on the list of acceptable codes. These codes can be entered directly by the user or by selecting from the list of acceptable values that can be seen by pressing F6 when the cursor is in the appropriate field.

The <**Early Date**> and <**Late Date**> fields will accept numeric values up to 4 digits long expressing the date range of the object in years AD, (decimals not allowed). Clearly, the final dating of the context as a whole must take account of all dated material, thus this information is recorded in a separate form, (**6. Context dating**). The discussion of that form below should be read, as it is there that the dates from all datable material are presented and the final date of the context is recorded, thus it is imperative for all finds specialist to be familiar with this form as well as that in which they record the own material.

The eighth field, <**Type**> requires a single character that indicates the type of glass in which the object is fashioned. Currently these are S= Soda, L=Lead, P=Potash and F=Flint. The final field <**Comments**> allows space for a short 20 character observation.

4. Coins

Figure

```
┌─────────────────────────────────────────────────────────┐
│                    Coin Data  Screen 1                    │
│                                                           │
│                                                           │
│  Site              Acc       Coin Data  Screen 2   Early Late                  │
│  code   Context    No.    Material Type ime  Ruler  Date  Date  Denomination   │
│  ─────  ──────    ─────   ──────  ────  ─   ────   ──── ────  ──────────       │
│  Acc              │ Max                                                         │
│  No.    Material  │ Diam Mint     Moneyer    Condition     References          │
│  ─────  ──────   ─│──  ────  ─────────   ─  ────────   ───  ────────────       │
│  ─────  ──────   ─│──  ────  ─────────   ─  ────────   ───  ────────────       │
│  ─────  ──────   ─│──  ────  ─────────   ─  ────────   ───  ────────────       │
│  ─────  ──────   ─│──  ────  ─────────   ─  ────────   ───  ────────────       │
│  ─────  ──────   ─│──  ────  ─────────   ─  ────────   ───  ────────────       │
│  ─────  ──────   ─│──  ────  ─────────   ─  ────────   ───  ────────────       │
│  ─────  ──────   ─│──  ────  ─────────   ─  ────────   ───  ────────────       │
│     During an insertion session the previous sitecode and context             │
│       number is inserted when a new row is started. Please check.              │
│  ----------------------+----------------------------------------------------   │
│  Press <TAB> to move between fields and the arrow keys to move between rows.    │
│  Press F5 to COMMIT all your entries----------------------------------------   │
│  Press <TAB> to move between fields and the arrow keys to move between rows.    │
│  Press F5 to COMMIT all your entries              <Replace>                     │
│                                                                                │
│  Count: *0                                           <Replace>                  │
└─────────────────────────────────────────────────────────┘
```

Screen 2

Purpose
To record details of coins coming from a single context that have been accessioned.

Description
The form consists of a single block spread over a single screen that place data into a single table.

Minimum to COMMIT
Block 1 <**Sitecode**>, <**Context**>, <**Acc No.**>, <**Material**>, <**Denomination**>

Block 1
<Sitecode> char 8 NN
<Context> number 5 NN
<Acc No.> number 5 NN
<Material> char 4 NN
<Type> char 7
<Regime> char 1
<Ruler> char 4
<Early Date> number 4
<Late Date> number 4
<Denomination> char 4 NN
<Max Diam> number 2
<Mint> char 4
<Moneyer> char 15
<Condition> char 8
<References> char 20

The first fields <**Sitecode**> and <**Context**> must be filled in, and during an insertion session the sitecode and context of the previous row is automatically inserted when a new row is started to save retyping. The context number is naturally required, but in the case of stray accessioned finds, (i.e. finds not recovered during excavation of a context and therefore without a context number) then a zero should be entered.

The third field <**Acc No**.> requires the accession number of the object, (decimals or character suffix unacceptable) to be entered. As this is a not null field, it is the case that objects *must have had an accession number assigned* in order to be acceptable to this form.

The fields <**Material**> and <**Type**> require 4 and 7 character code words respectively, that are entered directly by the user and validated by the form. As there is only a small number of codes for each field these are listed in the prompt line and currently consist of;
<**Material**> COPP= Cooper, GOLD, ORIC=Orichalcum SIL= Silver (the default is COPP).
and
<**Type**> COIN, COPY, JETTON or TOKEN. For reasons of expediency the <**Type**> codes may be followed by a question mark to indicate uncertainty, (the default is COIN).

The <**Regime**> field relates to those of <**Ruler**>, <**Denomination**> on screen 1 and <**Mint**> on screen 2. In the <**Regime**> field, either an E for an English coin or R for a Roman one can be entered. The form refers to this entry here to ensure that only English/Roman rulers, denominations and mints are subsequently acceptable. For example if an E is enetered into regime, then only English Monarchs will be acceptable in the <**Ruler**> field, only English denominations in the <**Denomination**> field and only English <**Mints**> in that field. Concurrently the list of values available when F6 is pressed when in the respective fields will only present those codes appropriate to the regime specified.

If the regime field is left null then the list of values for <**Ruler**>, <**Denomination**> and <**Mint**> will be empty, although it will be possible to enter a string into each of these fields if that data is known. If a row is updated and an existing regime of R or E changed to the other or to null, then any existing entries in the fields <**Ruler**>, <**Denomination**> and <**Mint**> will be wiped from the screen. This is necessary since the contents of those fields are related to the regime originally specified and have been validated against the list of acceptable codes for that regime.

The <**Early Date**> and <**Late Date**> fields will accept numeric values up to 4 digits long expressing the date range of the object in years AD. (decimals not allowed). Clearly, the final dating of the context as a whole must take account of all dated material, thus this information is recorded in a separate form, (**6. Context dating**). The discussion of that form below should be read, as it is there that the dates from all datable material are presented and the final date of the context is recorded, thus it is imperative for all finds specialist to be familiar with this form as well as that in which they record the own material.

On screen two, the two fields <**Acc No**.> and <**Material**> are non-enterable fields that mirror the same fields on screen 1 and remind you of the rows identification. The field <**Max Diam**> requires the maximum diameter of the coin to be entered in whole mm. The field <**Mint**> has been discussed above, while <**Condition**> requires one of the following codes; 20BV, CUTQ, ELEC, FRAG, WORN or CORR.

The final <**References**> field takes a 20 character reference for the object.

5 Pottery

Figure

```
                            Pottery Recording Form  Screen 1          E
                                                               N    Cou nts
    Site   Context P    Fabric      ?      Form      ? Dec   V  Shd  S/Shd State
    ____   ____  __  _____  __  _____  __  ____  __  ___  ___  ___  ___
    ____   ____  __  _____  __  _____  __  ____  __  ___  ___  ___  ___
    ____   ____  __  _____  __  _____  __  ____  __  ___  ___  ___  ___
    ____   ____  __  _____  __  _____  __  ____  __  ___  ___  ___  ___
    ____   ____  __  _____  __  _____  __  ____  __  ___  ___  ___  ___
    ____   ____  __  _____  __  _____  __  ____  __  ___  ___  ___  ___
    ____   ____  __  _____  __  _____  __  ____  __  ___  ___  ___  ___
    ____   ____  __  _____  __  _____  __  ____  __  ___  ___  ___  ___
    ____   ____  __  _____  __  _____  __  ____  __  ___  ___  ___  ___
    ____   ____  __  _____  __  _____  __  ____  __  ___  ___  ___  ___

    ------------------ -----------------------------------------------------------------------------
                     Overall TPQ _____          Overall TAQ _____
            Roman            Saxon              Medieval           Post-medieval
    Size/IR     __  __                           __  __               __  __
    Adj    _100_  _200_       ____  ____         ____  ____          ____  ____
    DF     __90_  _180_       ____  ____         ____  ____          ____  ____
    ---------------------------------------------------------------------------------------------------
    Press <TAB> to move between fields and the arrow keys to move between rows
    Press F5 to COMMIT all your entries, updates and deletions
    Count: *0                              <Replace>
```

Screen 1

```
                     Pottery Recording Form Screen 2

            Type       Draw?            Type    comments
    _____   -   _____
    _____   -   _____
    _____   -   _____
    _____   -   _____
    _____   -   _____
    _____   -   _____
    _____   -   _____
    _____   -   _____
    _____   -   _____
    _____   -   _____

    -------------------------------------------------------------------------------
    Assemblage  Roman: _____
    comments.    Saxon: _____
                Medieval: _____
          Post Medieval: _____
    -------------------------------------------------------------------------------
    Press <TAB> to move between fields and the arrow keys to move between rows
    Press F5 to COMMIT all your entries, inserts and updates
```

Screen 2

Purpose

To record details of pottery from all periods coming from a single context. This form introduces some important changes to the way pottery is recorded, of which users of the older system should be aware. These changes stem from two design principles that the relational system follows.

The first is that data is <u>differentiated on a type rather than a site basis</u>, (see notes in the general Forms User Guide). Thus each row of data includes the sitecode as well as the context number, and the pottery from all sites, and from all periods of those sites is recorded in the one table. This is supported on the grounds that ceramicists should be aware of the pottery from all periods that a given context contains, (even though a *component* of their work is to assess the period specific assemblage within the whole) and that the means to easily access comparative data compiled about other sites will enhance the ability to recognise patterns and evaluate particularly rare, obscure or indeterminable identifications.

The second is that data redundancy has to be reduced as much as is practicable. Simply this means that data should not be stored in two places if it only need be stored in one. The consequence of this principle for the recording of pottery, is that the dates of types need not be recorded with the record of which types appeared in which contexts. We say that the date of any given type is *independent* of the fact that a given context contains that type. Thus the first block of this form records which types were present in a given context, while the second block allows the ceramicists to record what *they* believe the date of each component of that assemblage to be, e.g. a date for the assemblage solely on the basis of the Roman material can be given.

It is important to realise two things about this estimated date. Firstly, the date range that the specialist supplies is a date in no way constrained by the computer and what *it* knows about the dates of the types that have been identified within a given context. Secondly these dates are for the components of the ceramic assemblage only, and are not and should not (for the purposes of the ceramicists work) be effected by the existence of other non-ceramic datable material.

What the computer does do is to generate a default date range for each period specific component of the ceramic assemblage on the basis of what it knows about the dates of each type. For an explanation of how these dates are generated see the section entitled *Generating default date ranges* in the discussion of the form **Context dating**. The purpose of these default ranges is to aid you in deciding on the final range for the assemblage, and it should be remembered that it is only the range that you type in that is recorded into the database.

Clearly, the final dating of the context as a whole must take account of all dated material. For this reason the form named **Context dating** has been created, in which all dating material is presented and final ranges for the whole assemblages can be recorded. The description and dates of all datable material for a context are displayed and from this data the computer again generates default dates for each period specific ceramic component of the context and a further one as generated by other finds e.g. coins, pipes etc.

It is in the **Context dating** form that the overall range of the entire context should be recorded since it is here that all the data can be displayed. However for reasons of expediency it is possible to record the context range within the **Pottery recording** form as discussed here. As will be explained, the second block of the **Pottery recording** form is based on the same table as the second block of the **Context dating** form. Therefore any overall range for the context inserted using the **Pottery recording** form may be updated by another researcher using the **Context dating** form and who is able to see the other datable material of which the pottery specialist may not be aware. For this reason it is imperative for all finds specialist to be familiar with the **Context dating** form as well as that in which they record their own material.

Description
The form consists of a two blocks spread over a two screens that place data into two tables.

Minimum to COMMIT
Block 1 <**Sitecode**>, <**Context**>, <**Period.**>, <**Fabric**>, <**ENV**>

Block 1
<Sitecode> char 8 NN
<Context> number 5 NN
<Period> char 2 NN
<Fabric> char 16 NN LOV
<?(Fabric certainty)> number 1
<Form> char 10 LOV
<?(Form certainty)> number 1
<Decor> char 4 LOV
<ENV> number 2 NN

\<Count: Shd > number 3
\< Count: S/Shd > number 3
\<State> char4
\<Draw> number 1
\<Comments> char 91

During an insertion session the first fields **\<Sitecode>** and **\<Context>** are automatically inserted when the down arrow is pressed to begin a new row so as to save retyping. The context number is naturally required, but in the case of stray finds, (i.e. finds not recovered during excavation of a context and therefore without a context number) then a zero should be entered.

The third field **\<Period>** requires one of the acceptable alphabetic period codes to be entered; PH=Prehistoric, R=Roman, S=Saxon, M=Medieval and PM=Post-Medieval. Like **\<Sitecode>** and **\<Context>** the **\<Period>** field is mirrored when the down arrow is pressed to begin a new row.

The same period codes are used in other finds tables, (such as that for recording registered finds) and help with the management, interrogation and presentation of data. Specifically, the entry in the period field is used by the Oracle form to validate entry into the fabric, form and decor fields, such that if a R for Roman is entered as the period, then only Roman fabric, forms and decoration will be acceptable in those fields. Similarly, the list of acceptable codes for each of those fields will be limited to those of Roman type. If a complete row of data is subsequently updated by changing the code in the **\<Period>** field, then all of the fields that are dependent on that period code, i.e. **\<Fabric>**, **\<Form>**, and **\<Dec>** are set to null with a message to say so.

It is useful to consider the fields **\<Fabric>**, **\<Form>**, and **\<Dec>** together. These fields describe the type of ceramic present, with the required codes being typed in directly or by selecting them from the list of codes obtained by pressing F6. When the F6 list key is pressed the codes are presented along with their full name and the date range currently assigned to them., The minimum requirement is that a **\<Fabric>** is specified, while this may be accompanied by a **\<Form>** and **\<Dec>**. As the individual date ranges assigned to any given fabric, form or decoration are known, (where these are unknown the range is 0-0), the database is able to validate each component of a type on the basis of contemporaniety. Thus it will not allow a type to be made up of - for example - a form whose date range does not overlap with that of the fabric. (The date range of a component has to be greater than 0-0 to be considered in the comparison). Necessarily, there is a hierarchy operating from **\<Fabric>** to **\<Form>** to **\<Dec>**, to enable the comparison of date ranges to take place, this operates as follows.

In a new row the **\<Fabric>** field is the first to be entered, wherein a code must be placed to allow the cursor into the next field, or, if a **\<Fabric>** is the only identification, to Commit. When the cursor is in the **\<Form>** field a form can be entered that must be of both the correct period, and have a date range that overlaps with that of the fabric, (abutting dates are also acceptable). Failure on either count will result in an error message being returned when one attempts to leave the field, and the field itself being set to null. The error message indicates the cause. If the **\<Form>** field is then left blank and the **\<Dec>** field entered then the same applies; a decoration code is required that is both of the correct period and has a date that overlaps with that of the fabric. If the **\<Form>** field *were* filled out however, then the date of the **\<Dec>** must overlap with that range common to both the **\<Fabric>** and **\<Form>**.

In the scenario where the **\<Fabric>** field is re-entered either during an input session or following a query, and the existing fabric code is changed, the system will re-act by setting the **\<Form>** and **\<Decor>** fields to null. This is because the comparison of form and decoration date ranges to that of the fabric, actually takes place when the **\<Form>** and or **\<Dec>** fields are filled out as part of the validation of those fields. As the user could Commit after having changed the fabric in this manner incompatible date ranges may be created if this precaution were not taken. Similarly, if a record with either **\<Form>** and **\<Dec>**, or **\<Dec>**, alone specified, has the **\<Form>** field updated, the system will react by setting the **\<Dec>** field to null. This is because **\<Dec>** - in the design of the system - is further down the hierarchy of validation than **\<Form>**.

* It is to ensure sound comparison of date range in this manner that the up/down arrow keys are disabled when moving between the <**Fabric**>, <**Form**> and <**Dec**> fields.

Like <**Sitecode**>, <**Context**> and <**Period**> the <**Fabric**> value is mirrored when the down arrow key is pressed to begin a new row. (The two <**?**> fields accept a 1 which indicates that the identification of the fabric and or form is uncertain).

Note on recording Stamps, Graffiti and accession numbers

The details of a certain stamp or instance of graffiti, should be recorded in the comments field, the myriad possibilities rendering formal validation invalid. However, if an accession number has been assigned to such material, (or for any other reason) it is possible to record that number in the <**Dec**> field. It must be recorded in the standard manner, i.e. <**679**>. Any number up to 9999, between such angled brackets is acceptable, although clearly if the decoration itself was of note, this will have to be added to the comments as well.

Note on Roman and Post-Roman Fabrics and forms.

For a variety of historical reasons it is possible to assign a date range to Roman ceramic forms which are independent of the fabric in which they appear. The date range of the fabric in which a certain form appears will naturally effect the date of the type as a whole, but that date is a product of comparing two *distinct* known date ranges and taking the region of overlap as the date. In the post-Roman period where there is less central control of production and production spans a much greater period of time, this is not the case. Here the date of a form is dependent on the fabric in which it is realised, i.e. forms are not datable alone. For this reason the definition of a type in Roman ceramic terms, (i.e. as a combination of <**Fabric**>, <**Form**>, and <**Decor**> where the date ranges of each are in some part contemporary) does not apply to the later period. Rather the datable component of a Post-Roman type has to appear as an extended fabric code alone. The alternative of having independent dated forms, would be illogical since the date of any such form would always depend on the particular fabric concerned, and which would raise major problems for data validation in the form of increasingly complex IF...THEN loops, i.e.

IF FORM=JUG AND FABRIC=KING THEN E_DATE=1200 AND L_DATE=1300
ELSE
IF FORM=JUG AND FABRIC =LCOAR THEN E_DATE=1250 AND L_DATE=1320
ELSE
IF FORM....ETC

Essentially the specification of a dated type in the fabric field alone is more suited to the post-Roman ceramic industries. However, this does not stop any post-Roman forms that really are independently dated from being specified, nor does it exclude post-Roman form codes from being specified which simply further describe the type yet do not effect the date, (i.e. their range is 0 to 0).

The <**ENV**> requires that the Estimated Number of Vessels represented by the pieces of the type being recorded are specified. The two fields <**Count: Shd**> and <**Count:S/Shd**> are for recording the number of sherds recovered of that type altogether, and the number recovered of that type from environmental sieve residues respectively.

The <**State**> field accepts any of the following codes in any order, A=Abraded (i.e. post-depositional abrasion), B=Burnt, (i.e. post use burning), S=Soot, (i.e. in use burning), R=Residue, L=Lamination and W=Worn (i.e. in use abrasion e.g. worn out mortaria). The <**Type**> field on screen 2 simply mirrors the fabric and form fields of screen 1 for reference purposes, while the <**Draw**> field receives a 1 is the type contains pieces that are worthy of illustration. The <**Type comments**> field allows for comments relating to the type to be made, (assemblage comments are made in the second block) which can be up to 90 characters long.

Block 2

<Overall TPQ> number 4
<Overall TAQ> number 4
<Roman: Size> char 2
<Roman: IR> char 1
<Roman: Adj TPQ > number 4
<Roman: Adj TAQ > number 4
<Saxon: Size> char 2
<Saxon: IR> char 1
<Saxon: Adj TPQ > number 4
<Saxon: Adj TAQ > number 4
<Medieval: Size> char 2
<Medieval: IR> char 1
<Medieval: Adj TPQ > number 4
<Medieval: Adj TAQ > number 4
<Post-Medieval: Size> char 2
<Post-Medieval: IR> char 1
<Post-Medieval: Adj TPQ > number 4
<Post-Medieval: Adj TAQ > number 4
<Roman assemblage comment> char 50
<Saxon assemblage comment> char 50
<Medieval assemblage comment> char 50
<Post-medieval assemblage comment> char 50

In block 2, details about each period specific sub-assemblage that may exist within the whole ceramic assemblage are recorded. On screen 1 for the Roman, Saxon, Medieval and Post-Medieval sub-assemblages, the following can be recorded

<**Size**> Size of the sub-assemblage, (S, M, L, VL),
<**IR**> The intrusive or residual nature, (I or R) of the sub-assemblage within the whole assemblage.
<**Adj TPQ**> Your estimate of the TPQ of the sub-assemblage.
<**Adj TAQ**> Your estimate of the TAQ of the sub-assemblage.

Note on the population of the DF (default) date range fields.
The fields <DF TPQ> and <DF TAQ> are automatically filled out by the form when the F3 key is pressed to leave block 1 There are two important factors to note here.

1) As default ranges are calculated by querying a view that looks at existing,(i.e. COMMITTED) data, the DF dates returned are *generated solely on the basis of committed pottery*.

2) The data that is shown in block two when querying and browsing using the form relates to the row in which the cursor is in block 1. For example if you have ran a query to find all occurrences of a certain fabric and form, the results displayed in block 1 may well show that that fabric and form have occurred in a number of different context and sites. The position of the cursor in block 1, specifically the row that it is on, will determine which data is presented in block 2 since the two blocks are linked on the basis of sitecode and context. Thus if you scroll down through the different contexts that your query returned in block 1, the data for each context will be simultaneously displayed in block 2.

Similarly, the default ranges that are shown in the second block relate to the context, (i.e. the row) that the cursor was on in block 1 when the F3 key was pressed. Thus if there is pottery from more than one context displayed in block one, care should be taken when pressing the F3 key to ensure the correct data is returned to block 2.

On screen 2 a comment relating to each of the sub-assemblages that may be present can be made.

6 Context dating
Figure

Screen 1
Screen 1

Screen 2

Purpose

To present all the datable material for a context and to record the considered date of the whole context, and components of it.

Description

The form consists of two blocks spread

```
+---------------------------------------------------------------+
|                    Context Dating Form Screen 1               |
|                                                               |
|   Sitecode  Context  Type     ID1      ID2     ID3     E    L |
|   ____   ____    Context dating form  Screen 2  ___  ___  ___|
|   ____   ____                                   ___  ___  ___|
|   ____   ____          Context  __               ___  ___  ___|
|   ____   ____     Roman assemblage comment       ___  ___  ___|
|   ____   ____                                                 |
|   ____   ____     Saxon assemblage comment       ___  ___  ___|
|   ____   ____                                                 |
| ------------------------------------------------------------- |
|   Overall TPQ ___ Medieval assemblage comment Overall TAQ ___ |
|          Roman pot   Saxon pot    Medieval pot   Post-Med pot |
| Size/IR                                              Other finds|
|          TPQ  TAQ Post-Medieval assemblage comment TPQ  TAQ  TPQ TAQ|
|   Adj                                                         |
|   DF                                                          |
| ------------------------------------------------------------- |
| Press <TAB> to move between fields. Assemblages comments on next screen.|
|  Press F3 to COMMIT all your entries and deletions. to switch blocks|
|        Press F5 to COMMIT all your entries, deletions and updates.|
| Count: *0                                          <Replace>  |
|      Count: *1                          <Replace>             |
+---------------------------------------------------------------+
```

over two screens that place data into a *single* table. It is designed to function by the user first requesting the details of datable artefacts for a given context in the first block, and then going to the second block. In the second block the computer generates a default date range for each component of the context concerned, i.e. Roman ceramics, Saxon ceramics, Medieval ceramics, Post-Medieval ceramics and Other finds. The latter includes coins and pipes. These default ranges are for reference only and are not recorded into the underlying table, thus *the computer does not date the context or its components, it merely makes suggestion*, (see below for further discussion of the process). The date range that is recorded into the database from the second block, is the Adjusted one which can only be provided by you. Thus the purpose of the first block is simply to present rather than record details of datable objects, so that the final date for the context and its components can be recorded in block 2 with all the relevant material available for comparison in block 1.

Minimum to COMMIT

See discussion of block 1 * and note at end of block 2 discussion.

Block 1

This block is not for data input, rather it is used solely for display. When this form opens the cursor begins in the <**Sitecode**> field of the block and the form is in ENTER QUERY mode, (i.e. it is waiting to receive criteria) , as indicated at the bottom of the screen. The normal procedure is as follows. The sitecode and context are provided by the user and the EXECUTE QUERY (F12) key pressed which retrieves the details of all the datable material recorded as belonging to that context. One then transfers to the next block to recorded the dates and details about that context and its components.

Criteria can also be entered into the <**Type**> field, (RPOT, SPOT, MPOT, PMPOT, GLASS, COIN, and PIPE) and even in the individual ID fields should one wish to generally browse the datable material. Three ID fields display the identity of each datable artefact, thus for glass objects <**ID1**>= form and <**ID2**>= colour, for pottery <**ID1**>=fabric, <**ID2**>=form and <**ID3**> decoration, for clay pipes <**ID1**>=form while for coins <**ID1**>=type, <**ID2**>=material.

The actual early and late dates, (<**E**>, <**L**>) of the items that are returned to block 1 are derived from two sources. In the case of clay pipes and pottery the date is retrieved by comparing the type recorded in the data table with the date of that type held in the index table. For ceramic types this will frequently

require that three date ranges are compared, (i.e. that of the fabric, form and decoration) and the shortest one common to all is returned. In the case of coins, the date recorded by the numismatist is returned.

Once some data has been retrieved into block 1, then the next block (F3) key can be pressed. The act of pressing the F3 key, sets the system to calculate the default date ranges, (see next block for discussion).

* As data is not saved into block 1 in the conventional sense, none of the fields *require* values in the manner of a standard form. Rather some data has to be recalled into the first block, before you may navigate to the second block, and it is in the second block that data is recorded. The position of the cursor in block 1 when the next block key (F3) is pressed , (i.e. the row it is on) is crucial. This is because hitting F3 causes the system to calculate the default date ranges for block *2 for the sitecode and context shown in the row that the cursor was in when F3 was pressed*. Data subsequently entered into block 2 will be recorded into the underlying table with the sitecode and context thus derived.

Block 2
<Overall TPQ> number 4
<Overall TAQ> number 4
<Roman pot: Size> char 2
<Roman pot: I/R> char 1
<Roman pot: TPQ Adj> number 4
<Roman pot: TAQ Adj> number 4
<Saxon pot: Size> char 2
<Saxon pot: I/R> char 1
<Saxon pot: TPQ Adj> number 4
<Saxon pot: TAQ Adj> number 4
<Medieval pot: Size> char 2
<Medieval pot: I/R> char 1
<Medieval pot: TPQ Adj> number 4
<Medieval pot: TAQ Adj> number 4
<Post-Medieval pot: Size> char 2
<Post-Medieval pot: I/R> char 1
<Post-Med pot: TPQ Adj> number 4
<Post-Med pot: TAQ Adj> number 4
<Other finds: TPQ Adj> number 4
<Other finds: TAQ Adj> number 4
<Roman assemblage comment> char 50
<Saxon assemblage comment> char 50
<Medieval assemblage comment> char 50
<Post-medieval assemblage comment> char 50

This block is entered when

a) at least one record has been retrieved into block 1 and
b) the F3 next block key has been pressed.

For ceramicists, this block has already been encountered in the Pottery recording form, (block 2) wherein one could record the dates of an assemblage and the size of that assemblage. For example, a ceramicists had recorded in the Pottery Recording form, that the Roman assemblage of context 96 from site PDH65 produced a range of c.120-250AD, was of size M, and was residual within the whole context. Coming to the Context Dating form, the datable material from PDH65 context 96 is requested in block 1. Execution of this query, results in all the datable material from this context appearing in block 1 and in block 2, the values 120, 250, 'M' and 'R' appear in the fields **<Roman pot: TPQ Adj>**, **<Roman pot: TAQ Adj>** , **<Roman pot: Size>** and **<Roman pot: I/R>** respectively.

Once some data has been recalled into block 1, (regardless of the existence or otherwise of corresponding rows in block 2) and the F3 key is pressed to navigate to block 2, the computer also calculates default date ranges for each component of the context assemblage. It is important to understand what is occurring when F3 is pressed.

The F3 key navigates the cursor to the next block in sequence. In the case of this form, a set of commands have been written that are executed at the same time as this navigation. The product of these commands is that the bottom row of '**Default'** fields on screen 1 are populated by the system.(<**Roman pot: TPQ DF> ,<Roman pot: TAQ DF> ,<Saxon pot: TPQ DF> ,<Saxon pot: TAQ DF> ,<Medieval pot: TPQ DF> ,<Medieval pot: TAQ DF> ,<Post-med pot: TPQ DF> ,<Post-med pot: TAQ DF> ,<Other finds: TPQ DF> ,<Other finds: TAQ DF**>).

 The purpose of these automatically derived ranges is to aid you in deciding what the appropriate adjusted date range should be only; this data is NOT recorded into the underlying table. Each TPQ/TAQ default pair is calculated for a certain type of datable material, (i.e. Roman pot, Saxon pot etc.) with the mechanism involved being the same in each case. That mechanism operates as follows.

Generating default date ranges
The generation of default dates for Roman pottery is taken as an example.
The date ranges of all Roman pottery that have been listed for a context in block 1 are considered. The system then locates the *latest early date* from all the early dates present and this is returned as the default TPQ. It then locates the *earliest late date* that is later than this default TPQ, which is returned as the default TAQ. (See figure 1). The date range thus derived represents the shortest period that the Roman assemblage as a whole could represent, and thus makes implicit assumptions about the unity of the assemblage, (i.e. that it was not 2 assemblages conflated during excavation for example). It is generated on the basis of the logical rules that define the terminus post and ante quems of a closed group of datable types, and is no more and no less than this. As discussed below, *the character of a particular context may on occasion render the default range totally meaningless*, and it should be considered with this in mind.
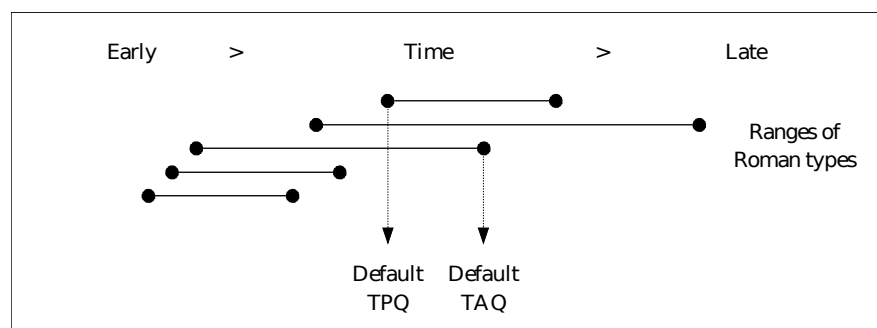

Figure 1

Thus, there are a number of comments that must be made about the default range thus derived.

1) In the case of a context with a single datable Roman type, the date range of that type will naturally become the default for the Roman 'assemblage'.

2) In the case of a single late intrusive example, the default date range will be that of the intrusive type, (and therefore misleading).

3) In general the value of the default range as a statement about the dated Roman ceramic material present in a context will be proportional to the number of types present. In the case of points 2 however it will be meaningless.

So when the F3 operation is complete all the fields of block 2 except those holding default values can be filled out, or if data already exists, updated and browsed., The Size and I/R fields for each *ceramic*

sub-assemblage are the same as those filled out in block 2 of the pottery recording form and accept a S, M, L, VL and I or R respectively. (refer to the pottery recording form for further details). The 'Adjusted' fields for each ceramic sub-assemblage, (<Roman pot: TPQ Adj>, <Roman pot: TAQ Adj>, <Saxon pot: TPQ Adj>, <Saxon pot: TAQ Adj>, <Medieval pot: TPQ Adj>, <Medieval pot: TAQ Adj>, <Post-med pot: TPQ Adj>, <Post-med pot: TAQ Adj>) require appropriate values. That is the TPQ must be less than the TAQ, and must also be in a certain range, which are currently as follows;

PERIOD	TPQ	TAQ
Roman	>=40	<=400
Saxon	>=400	<=1000
Medieval	>=800	<=1500
Post-Medieval	>=1480	<=1900

As other finds may come from any period, the only control on their TPQs and TAQs **<Other finds: TPQ Adj>, <Other finds: TAQ Adj>**) are that the latter must be greater than the former. The same applies to the overall TPQ and TAQ of the whole assemblage <**Overall TPQ>, <Overall TAQ**>.
The comments fields for each ceramic assemblage on screen 2 may be up to 50 characters in length, and are the same fields as shown in block 2, screen 2 of the pottery recording form..

Re: minimum to commit. Once the second block has been entered, three things can happen.

1) Existing data recorded previously is returned browsed and not updated.

2) That data is updated.

3) Completely new data is added.

Whenever data is added to a form, or existing data is updated a Commit must take place to store those changes. In the case of block 2, no one field is any more important than another, since one can never be certain what type of datable material may be present, or if an overall date range can be assigned. For this reason there are no Not Null fields in block 2 bar the hidden ones of sitecode and context, which are completed automatically, (see general Forms User Guide).

7 Clay pipes

Figure

```
                          Pipe Data  Screen 1

                        Acc                    Mouth-
          Sitecode  Context  No.  Bowls  Stems  Pieces  Form
          ____      ____     _____  __     __     __     ____
          ____      ____     _____  __     __     __     ____
          ____      ____     _____  __     __     __     ____
          ____      ____     _____  __     __     __     ____
          ____      ____     _____  __     __     __     ____
          ____      ____     _____  __     __     __     ____
          ____      ____     _____  __     __     __     ____
          ____      ____     _____  __     __     __     ____
          ____      ____     _____  __     __     __     ____
          ____      ____     _____  __     __     __     ____

             During an insertion session the previous sitecode and context
             number is inserted when a new row is started. Please check.
          ---------------------------------------------------------------------------------------
          Press <TAB> to move between fields and the arrow keys to move between rows.
          Press F5 to COMMIT all your entries

          Count: *0                                          <Replace>
```

Screen 1
Screen 2

Purpose
To record the details of clay pipes.

Description
The form consists of a single block spread over two screens that places data into a single table.

Minimum to COMMIT
Block   1

<Sitecode>, <Context>, <Form>

```
                          Pipe Data  Screen 2


          Marks                          Decor    Comment
          _____   _ _   _____
          _____   _ _   _____
          _____   _ _   _____
          _____   _ _   _____
          _____   _ _   _____
          _____   _ _   _____
          _____   _ _   _____
          _____   _ _   _____
          _____   _ _   _____
          _____   _ _   _____

          ---------------------------------------------------------------------------------------
          Press <TAB> to move between fields and the arrow keys to move between rows
          Press F5 to COMMIT all your entries, updates and deletions

          Count: *3                                          <Replace>
```

Block 1
<Sitecode>
char 8 NN
<Context>
number 5 NN
<Acc   No.>
number 5
<Bowl>
number 2
<Stem>
number 2

<Mouthpieces> number 2
<Form> char 4 LOV NN
<Marks> char 48
<Decor> number 1
<Comment> char 12

The first two fields, <**Sitecode**> and <**Context**> must be filled out and, when new rows are started, the <**Sitecode**> and **<Context>** from the previous row are automatically inserted to save retyping. The <**Acc No**.> field is not required since pipes may be recorded prior to receiving an accession number, and/or all pipes may not receive an accession number.

The following three fields, <**Bowls**>, <**Stems**> and <**Mouthpieces**> all accept whole numbers, that indicate the number of fragments of each pipe component that are present in a given form, from a given context.

The final field on screen one <**Form**>, requires a form code to be entered. These can be entered directly by the user or by pressing F6 and selecting from the list. A number of typologies are available; the AO=

Atkinson & Oswald, OS=Oswald AD= Atkinson's Dutch typology. All are viewable by are pressing F6 and are presented with their date range and expansions where available.

The first field on screen 2 is <**Marks**> and is a 48 character free text field in which observations about makers marks can be made. As it is generally observations about marks that were previously kept in the general comments fields, a separate field specifically for marks allows these important observations to be stored separately and thus accessed directly. It is for this reason that the general <**Comments**> field that is presented is relatively short.

The <**Decor**> field is simply a presence/absence field for pipe decoration, (i.e. Y or null).