## Bonds

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Compatible Releases:

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## Bonds - 18484

## Overview

Enhancements related to Bonds in Strategy consist of adding information to support the bond structure, allowing for the setup and calculation of the associated fees, calculating and billing interest to the borrower, and remitting the principal, interest and fees as needed.

As Strategy processes the loans supported by Bonds, the various Credit Enhancers, Trustees, and third parties must be kept abreast of the status. Strategy is producing two files to allow for sending the Fannie Mae 4090A and the required Freddie Mac Multisuite information.

## Supporting the Bond Structure

Strategy needs to track Bond Deal information, the associated Bonds, the loan associated to the Bond, and the repayment terms and balances of the Principal Reserve Fund associated with the Bonds. This is in addition to reporting to the Investor (Credit Enhancer) and other third parties on the loan.

Bonds can also have multiple fees with varying parameters. These fees can be stripped from the interest paid by the Borrower or be in addition to the interest paid by the Borrower. Servicers must properly calculate, apply, invoice, and remit the Bond related fees to the appropriate party.

Floating rate Bonds have their own rate tracked by the CUSIP\# on the Bonds. Remarketers provide the new rate to the Servicer on a weekly basis. In some cases, servicers must estimate the interest due for the period between the creation of the bill and the due date based on requirements in the loan documents. The servicer then has to credit any overages charged to the next receivable or immediately invoice for any shortages.


## Setting up the Information

Add and maintain Bonds via the Portal using the Bonds component.
s Bonds


Widget is currently on your dashboard
Add to Dashboard
Add to Left Panel
Add to Top Panel

Figure 1-Bonds can be added to your Dashboard via the Add Widgets button
Bond Navigation Notes:

In the upper left of the page, the application displays Ok, Apply and Cancel buttons.
Ok saves and changes and closes the page.
Breadcrumbs
Deals» Deal:6» Bond:1

Apply saves and changes and remains on the page.
Cancel closes the current page, and returns to the prior page as displayed in the breadcrumbs above the buttons. Strategy prompts the user before exiting the screen without saving the changes.

Users may use the breadcrumbs to return to prior windows in the chain, but changes will not be saved and the user is not prompted prior to leaving the page.

## Bond Deals

Bond Deals are the highest level. They may consist of one or more Bonds.
Deal Search
The Bond application opens to the Bond Deal Search page. Users can search for a Bond Deal by any value in the grid: Deal ID, Deal Name/Description, Trustee ID, Credit Enhancer ID, Loan Number, Bond CUSIP number, and Bond Transaction ID. Leaving the Search Text blank will return all Bond Deals.
a

| Deal-Search |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| search text |  |  | Search | New | Bond Redemption |  |  |
| Search Results |  |  |  |  |  |  |  |
| Deal ID | $\wedge$ | Deal Name/Description | Trustee ID |  |  |  | Crealt Enhancer ID |
| 13 |  | NORTH SHore apartments phase I | federal national mortgage association |  |  | Fannie mae (00620) |  |
| 24 |  | covington arms apartments | federal national mortgage association |  |  | fannie mae (00620) |  |
| 26 |  | westside plaza | deutsche bank trust company americas |  |  | fredie mae (00840) |  |

## Bond Deal Information Page

Clicking a line in the Search Results opens the Bond Deal Information page. The page contains four (4) groupings: Deal Information, Bonds associated with the Deal, Principal Reserve Funds associated with the Deal, and any Validation Errors that occur based on settings entered or changed.


| Bonds New |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Bond Sea | $\wedge$ | Bond Name/Descripition | PrF Seq | CUSIP Number | Account |
| 1 |  |  | 0 |  | 20004 |
| 2 |  |  | 0 |  | 20004 |


| Last Redemplion Date | Total Bond Redem Amount to Date |  | Original Bond Balance |
| :--- | :--- | :--- | :--- | :--- |
|  |  | 0.00 |  |

0.00
0.00 0.00
**)
**)


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## Deal Information

The top section of the page contains two sections to define the characteristics of the Bond Deal.

- Descriptions and Parameters identifying
- the Bond Deal and determining how it is redeemed; and
- Dates and Balances section identifying
- the start and end dates for the Bond Deal
- Original and Current Balances for the Bond Deal
- Total Redemption, and
- Current Principal Reserve Balances-Cash Balance and Non-Cash Balance.
- Strategy updates the Current Bond Deal Balance, Total Redemption Amount, Total PRF Cash Balance, and Total PRF Non-Cash balance based on activity on the Bond Deal each day-end. They are protected fields.

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## Deal Information



## Bond Information on Deal Information

A Bond Deal can consist of multiple Bonds. The Bonds grouping on the Deal Information page displays summary information for each Bond associated with the Bond Deal. Selecting a record opens the Bond Information page.


Once the Bond Deal Information has been entered, users can set up the Bonds in the system by clicking the New button above the grid.

## Principal Reserve Funds on Deal Information

Strategy tracks the principal payments received from the borrower in a Principal Reserve Fund (a "PRF"). There can be one or more PRFs in a Bond Deal. If more than one Bond is associated with the Bond Deal, associate Bonds to a PRF assigned to the Bond Deal. Bonds on the same Bond Deal may share the same PRF.
Principal Reserve Funds New

| PRF Seq $\boldsymbol{\Delta}$ | Threshold Triggered | Date Last Redemption Occurred | Effective Date of Last Redemption | Cash Balance |
| :---: | :---: | :---: | :---: | :---: |
| 1 | YES $(Y)$ |  | $158,152.14$ |  |
| 2 |  |  | 0.00 |  |

## Summary information for each Principal Reserve Fund tied to a Bond Deal displays on the Deal Information page.

Clicking the New button in the section bar opens the Principal Reserve Fund summary window in entry mode to add a new PRF to the Bond Deal. Clicking a record in the Principal Reserve Fund summary grid opens the Principal Reserve Fund page for the selected record.

Validation Errors
Once Bonds and Principal Reserve Funds are tied to a deal, the system validates against Strategy data and display error messages should the information in the system become out of sync.

## Example Messages:

- The Bond Deal has no Bonds.
- The Bond is missing the Loan Reserve.
- The Bond is not associated to a Loan.
- This loan is part of an MCA and cannot be tied to a Bond.
- The Bond Loan is not production. This Bond will not be active until the Loan is in production.


## Entering a New Bond Deal



Click New from the Deal Search page.


The top two sections deal with the Deal parameters and contain identifying information and summary balances.

The Bond Deal information is in the new Bond Deal File PBDEAL.


The Location column shows where the field occurs on the screen by column [(L)eft, (C)enter, and (R)ight] and order top to bottom, within a particular section. C3 is the third field down in the Center column.

| Field/Description Fields are located in PBDEAL | Field Name/ Size | Required / Comments | Location |
| :---: | :---: | :---: | :---: |
| Descriptions and Parameters |  |  |  |
| Deal ID - Unique deal ID | $\begin{aligned} & \text { ZVBDEALID } \\ & \mathbf{9 , 0} \end{aligned}$ | System Assigned Will be display only for existing deals | L1 |
| Deal Name/Description - | ZVBDNAME <br> 50 CHAR |  | L2 |
| Trustee ID | $\begin{aligned} & \hline \text { ZVTRSTEE } \\ & \mathbf{5 , 0} \\ & \hline \end{aligned}$ | Required -select from Vendors System Info Table V1 | C1 |
| Credit Enhancer ID - 5 numeric | $\begin{aligned} & \hline \text { ZVCENHAN } \\ & \mathbf{5 , 0} \\ & \hline \end{aligned}$ | Required-select from Vendors System Info Table V1 | L3 |
| Credit Enhancement Type - | ZVCETYP <br> 2 CHAR | Required - Select from dropdown, Stand-by, or Direct Pay System Info Table CE | C2 |
| Amortizing Deal | ZVAMORTN | $\begin{aligned} & \hline \text { Required } \\ & \text { Y/N } \\ & \hline \end{aligned}$ | R1 |


| Field/Description <br> Fields are located in PBDEAL | Field Name/ Size | Required / Comments | Location |
| :---: | :---: | :---: | :---: |
| Repayment Type - Select from dropdown, available values are Concurrent or Sequential. | $\begin{aligned} & \text { ZVREPYCS } \\ & 1 \text { CHAR } \end{aligned}$ | Required - <br> System Info Table CQ <br> Sequential - requires the repayment of one bond before another. <br> Concurrent - repayment on a pro rata shared basis or on a prescribed schedule. <br> If Concurrent is entered, Repayment Method for Concurrent must be entered. | L4 |
| Repayment Method for Concurrent Required if Repayment Type is Concurrent. | ZVRCSCH | Conditionally Required <br> Field is Required and available for entry if the Repayment Type is ' C ' for Concurrent. System Info Table PH <br> Select Pro rata or Schedule from the drop down to indicate the appropriate repayment method for the Bonds associated with the Deal. | C3 |
| Servicer | $\begin{aligned} & \text { ZVSRVCR } \\ & 2 \text { CHAR } \end{aligned}$ | The drop down will be filtered to shown only values in System Info Table 55 and PUSERINFO/ XSERVICER. | R2 |
| Dates and Balances |  |  |  |
| Initial Date | ZVINITDT <br> DATE (10L) | Required | L1 |
| Maturity/Expiration Date | $\begin{aligned} & \hline \text { ZVMATEXP } \\ & \text { DATE (10L) } \end{aligned}$ | Required | C1 |
| Original Deal Balance | $\begin{aligned} & \hline \text { ZVOBDB } \\ & \mathbf{1 7 , 2} \end{aligned}$ | Required | L2 |
| Current Deal Balance | $\begin{aligned} & \text { ZVCBDB } \\ & 17,2 \end{aligned}$ | Display only - updated based on activity | C2 |
| Total Redemption Amount | $\begin{aligned} & \text { ZVTOTRA } \\ & 17,2 \end{aligned}$ | Display only - updated based on activity | R1 |
| Total PRF Cash Balance | $\begin{aligned} & \text { ZVPRFCB } \\ & 17,2 \end{aligned}$ | Display only - updated based on activity | L3 |
| Total PRF Non-Cash Balance | $\begin{aligned} & \text { ZVPRFNCB } \\ & 17,2 \end{aligned}$ | Display only - updated based on activity | C3 |
| Payment Bank | $\begin{aligned} & \hline \text { ZVPMTBNK } \\ & 3 \text { CHAR } \end{aligned}$ | Required | L4 |

$\left.\begin{array}{|llll|}\hline \text { Field/Description } & \text { Field Name/ } & \text { Required/Comments } & \text { Location } \\ \text { Fields are located in PBDEAL } & \text { Size } & \text { Required } & \text { C4 } \\ \hline \text { Payment DDA } & \begin{array}{l}\text { ZVPMTDDA } \\ \\ \end{array} & \text { 15 CHAR }\end{array}\right]$

## Entering Bond Information to a Deal

After entering the Deal Description and Parameters, Date and Balances, users are able to enter Bond Information for Bonds associated with the Deal.
From the Deal Information window, Users can select the New button from the Bonds header.


The Bond Information page carries four (4) sections: Description and Parameters, Balances, Bond Info for PRF/Redemption, and Bond Accrual and Billing Information.

Bond Information - Description and Parameters
The first section of the Bond Info screen - Description and Parameters associates the Loan to the Bond and provides identification and processing information for the Bond.


Description and Parameters Information is in the New Bond Info file - PBONDINFO

| Field/Description | Field Name/ Size | Required / Comments | Location |
| :---: | :---: | :---: | :---: |
| Bond Description and Param |  |  |  |
| Bond Seq | $\begin{aligned} & \text { Z6BONDSEQ } \\ & \mathbf{3 , 0} \end{aligned}$ | Auto generated by system Display only Key field | $\begin{aligned} & \hline \text { L1 } \\ & \text { Key } \\ & \text { field } \end{aligned}$ |
| Deal ID - Unique deal ID | $\begin{aligned} & \text { ZVBDEALID } \\ & \mathbf{9 , 0} \end{aligned}$ | System Assigned - <br> Will be display only, brought forward from associated Bond Deal | C1 <br> Key <br> field |
| Bond Description | $\begin{aligned} & \hline \text { Z6DESC } \\ & 50 \text { VARIABLE } \end{aligned}$ | Description is user entered | L2 |
| Account \# | $\begin{aligned} & \hline \text { Z6LOAN } \\ & \mathbf{9 , 0} \\ & \hline \end{aligned}$ | Required - See section on Loan Search | C2 |
| Transaction ID | Z6TRANSID <br> 15 CHAR | Transaction ID used by the Credit Enhancer | R2 |
| CUSIP Number | $\begin{aligned} & \hline \text { Z6CUSIP } \\ & \text { 9 CHAR } \end{aligned}$ | Required | L3 |
| Tax Exempt Indicator | Z6TAXMPT <br> 1 CHAR | Select Taxable or Exempt from dropdown PINFO Table EX | C3 |
| Rate Indicator - For A | Z6FIXARM <br> 1 CHAR | Required - PINFO Table FA <br> Fixed or Variable Rate Indicator | R3 |
| Principal Payment Schedule | $\begin{aligned} & \text { Z6PRINSCHD } \\ & 1 \text { CHAR } \end{aligned}$ | $\mathbf{Y}$ or $\mathbf{N}$ to indicate if a Payment Schedule applies. PINFO Table YN | L4 |
| Repayment Priority | $\begin{aligned} & \hline \text { Z6REPPI } \\ & 3,0 \end{aligned}$ | Repayment Priority is Conditionally Required. If Deal is set to a Repayment Type of Concurrent. Repayment Priority field will be protected and not available. | C4 |

## Loan Search

Entering Bond Information involves associating a Loan to this Bond. The Loan Search button, located next to the Account\# field, allows you to search for a loan by entering a value in the search text field. Clicking a record in the grid selects it as the associated loan.


## Principal Payment Schedule

Deals " Deal: 2" Bond:1
Bond Information


When the Bond Information field Principal Payment Schedule is 'Yes (Y)' (PBONDINFO/Z6PRINSCHD), enter a principal schedule using the Principal Payment Schedule feature from the Options button in the top left of the Bond Information page. The Principal Payment Schedule comes into play when the Bond Deal is a nonamortizing deal. The information in the Principal Payment Schedule can be entered manually or uploaded using the Mapping Tool..

Principal Payment Schedule


Deals » Deal:2" Bond:1" Payment Schedule List» Payment Schedule Edit
Principal Payment Schedule Detail


| Field/Description <br> PBPMTSCH | Field Name/ <br> Size | Required / Comments | Location |
| :--- | :--- | :--- | :--- |
| Bond Deal ID | Z7BDEALID |  | Breadcrumbs - Display <br> only - Fed from Bond Info |
| Bond Seq | Z7BONDSEQ |  | L1 - Display Only - Fed <br> from Bond Information |
| Payment Date | 3,0 | Z7PMTBDT | Required |
|  | 10L |  | L2 |
| Principal Payment | Z7PRINAMT | Required | R2 |
|  | $\mathbf{1 7 , 2}$ |  |  |

## Bond Information - Balances



Fields displayed in the Bond Information - Balances section are in the new file PBONDINFO. Strategy writes the balances out to the Bond Daily Balance and Rate file (PBDBNR) for Non-Amortizing Loans each day-end.

| Field/Description PBONDINFO | Field Name/ Size | Required / Comments | Location |
| :---: | :---: | :---: | :---: |
| Original Bond Balance | $\begin{aligned} & \text { Z6ORIGBAL } \\ & (\mathbf{( 1 7 , 2 )} \end{aligned}$ | REQUIRED | L1 |
| Current Bond Balance | $\begin{aligned} & \text { Z6CURRBAL } \\ & (17,2) \\ & \hline \end{aligned}$ | REQUIRED | C1 |
| Notional Balance Type | Z6NBTYPE <br> (1 CHAR) | Value describes the Notional Balance entered. Valid entries are O \& S System Info Table NO O - Orig Bond Bal - PRF to Date <br> S -Balance Schedule | R1 |
| Notional Balance | $\begin{aligned} & \hline \text { Z6NOTIONAL } \\ & (17,2) \\ & \hline \end{aligned}$ |  | L2 |
| LOC Balance | $\begin{aligned} & \text { Z6LOCBAL } \\ & (17,2) \\ & \hline \end{aligned}$ |  | C1 |
| Cash Collateral (17,2) | Z6CASHCOL |  | R2 |
| Other Amount to Correct Errors | $\begin{aligned} & \hline \text { Z6OTHER1 } \\ & (17,2) \\ & \hline \end{aligned}$ |  | L3 |

## Bond Accruing and Billing Info

| Bond Accrual and Billing Info |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accrual Starting Date | 12/01/2014 |  | Accrued Through Date Balance to Accrue On Code | 01/11/2015 |  | Accrued Amount | 5,011,111.11 |  |
| Accrued Since Last Bill | 1,344,444.44 |  |  | BOND BALANCE (B) | $\checkmark$ |  | 800,000,000.00 |  |
| Current Rate | 5.5 |  | Effective Date of Current Rate | 12/11/2014 |  | Day of Week for Rate Change | WEDNESDAY (W) | $\checkmark$ |
| Margin | 0 |  | Interest Basis | 360 DAYS/30 DAY MOS (A60) | $\checkmark$ | Per Diem | 122,222.22 |  |
| Starting Date of Next Accrual Period | 02/01/2015 |  | Allow Estimated Bill | NO ( N ) | $\checkmark$ | Est Rate Percent Above Last Known Rate | 0 |  |
| Estimated Rate Specific Percentage | 0 |  | Paid Estim Interest Overages Deposit to | - | $\checkmark$ | Final Bill Required | -- | $\checkmark$ |
| Email Bills | -- | $\checkmark$ |  |  |  |  |  |  |

If the Bond Deal is Non-Amortizing, the information in the Bond Accruing and Billing Info section sets the parameters for accruing and billing the Bond (PBDEAL/ZVAMORTN='N'). Strategy accrues the Bond daily based on the parameters in the Bond Accrual and Billing Info section and writes the values out to the Bonds Daily Balance and Rate file.

| Field/Description <br> PBONDINFO | Field Name/ <br> Size | Required / Comments | Location |
| :--- | :--- | :--- | :--- |
| Accrual Start Date | Z6ACSYDY | Non-Amortizing Deal Only | L1 |
| Accrued Through Date | Z6LDA | Non-Amortizing Deal Only | C1 |
| Accrued Amount | Z6TOTACR | Non-Amortizing Deal Only | R1 |
| Accrued Since Last Bill | Z6ASLB | Non-Amortizing Deal Only | L2 |
| Balance to Accrue on Code | Z6TAOC | Non-Amortizing Deal Only | C2 |
| Balance to Accrue On | PINFO Table BO R2 <br>  Z6CURRBAL <br> OMASTR/CMP <br> BALNon-Amortizing Deal Only If PBDEAL/Z6TAOC = 'L' retrieve <br> Current Balance from PMASTR using <br> Z6Loan, else show Z6CURRBAL.  |  |  |


| Field/Description PBONDINFO | Field Name/ Size | Required / Comments | Location |
| :---: | :---: | :---: | :---: |
| Current Rate | Z6RATE | Non-Amortizing Deal Only | L3 |
| Effective Date of Current Rate | Z6DATEOCR | Non-Amortizing Deal Only | C3 |
| Day of Week for Rate Change | Z6DOWRC | Non-Amortizing Deal Only PINFO Table DW | R3 |
| Margin | Z6MARGIN | Non-Amortizing Deal Only | L4 |
| Interest Basis | Z6IBC | Non-Amortizing Deal Only PINFO Table PI | C4 |
| Per Diem | Z6PERDIEM | Non-Amortizing Deal Only | R4 |
| Starting Date of Next Accrual Period | Z6MAD | Non-Amortizing Deal Only | L5 |
| Allow Estimated Bill | Z6ALLOWEB | PINFO Table ID YN <br> Value defaults to ' No ' $\mathbf{N}$ ’ <br> Future functionality - can be used for informational purposes. | C5 |
| Est. Rate Percent Above Last Known Rate | Z6PCPALR | Conditionally Required <br> If Allow Estimated Bill = ' Y ' than this is a required field. Enter the \% or Enter 0 and complete the Est. Rate Specific Percentage. | R5 |
| Est. Rate Specific Percentage | Z6ADDPCT | Conditionally Required <br> If Allow Estimated Bill = ' Y ' than this is a required field. Enter the \% or Enter 0 | L6 |


| Field/Description <br> PBONDINFO | Field Name/ <br> Size | Required / Comments | Location |
| :--- | :--- | :--- | :--- |
|  |  | and complete the Est. Rate Percentage <br> Above Last Known Rate |  |
| Paid Est Interest Overage Deposit to | Z6EBOVER | PINFO Table ID OV | C6 |
| Final Bill Required | Z6FINALBR | PINFO Table ID YN | R6 |
|  |  | Future functionality - can be used for <br> informational purposes. |  |
| Email Bills | Z6EMAILB | PINFO Table ID YN | L7 |
|  |  | Future functionality - can be used for |  |
| informational purposes. |  |  |  |

Once you complete entering the Bond Information a Principal Reserve Fund can be associated with the Bond.

## Validation After Entering Bond Information

In addition to the validations noted above for Required and Conditionally Required fields above, when you leave the page after entering the Bond Information, the system will perform the following checks on the Account \# entered.

| Condition | Action |
| :--- | :--- |
| An Account \# entered must be found in the Loan <br> Master file for Production or Loan Entry and the <br> corresponding Master file must indicate that the <br> loan is tied to a Bond. | The Bond is not associated to a Loan\# |
| Account \# entered must be in PMASTR/CML\# <br> OR PSMASTR/CML\# AND identified as a Bond |  |
| PMASTR/CMDNU4 OR PSMASTR/CMDNU4 $=$ <br> 'B'. | Displays message "This loan is part of an MCA and <br> cannot be tied to a Bond. Please select another loan." |
| Loan is found, but is tied to an MCA | The Bond is not in production. This Bond will not be <br> active until the loan is in production. |
| Loan\# is found in New Loan Entry <br> (PSMASTR/CML\#) | Displays message "This loan number is not found in <br> Production or in Loan Entry. Please use a different loan <br> number or remove this loan number." |
| Account \# is not found in PMASTR or PSMASTR |  |

These messages will not prevent the User from saving the data and exiting the page. However, until an active loan is associated with the bond, there will be no activity for this bond. A message displays to alert the user of this situation and a report will generate nightly listing all active bonds that are not linked to a loan in production.

## Principal Reserve Funds

Strategy tracks the principal payments received from the borrower in a Principal Reserve Fund (a "PRF"). The Principal Reserve Fund represents a running total of the principal payments made less the redemptions made to Bonds associated to the PRF. If the Bond is set-up as an Amortizing Deal, the PRF will be tracking Non-Cash items but if the Deal is set up as a Non-Amortizing Deal then the PRF will be tracking Cash items.

There can be one or more PRFs in a Bond Deal; there can be multiple Bonds tied to the same PRF as long as the Bonds are part of the same Bond Deal. Strategy tracks the Principal Reserve Funds activity based on the parameters defined for the Principal Reserve Fund at the Deal level and the characteristics of the individual Bonds.


Users establish the Principal Reserve Funds and define the parameters at the Deal level. Once the user enters the associated Bond Information, users can associate the Bonds to a Principal Reserve Fund on the Bond Information page to track the Principal Redemption.

Summary information for each Principal Reserve Fund tied to a Bond Deal displays on the Deal Information page. Clicking the New button in the section bar or clicking a record in the Principal Reserve Fund summary grid opens the Principal Reserve Fund page.

Establishing and Monitoring PRF Thresholds for Bond Redemptions
Strategy establishes the parameters for monitoring the Principal Reserve Fund and PRF Threshold requirements in the Principal Reserve Fund page accessed from the Bond Deal Information page.
Deals * Deal:2 * PRF Edit - 1
Principal Reserve Fund


Strategy stores the information shown on Principal Reserve Fund in the new file PBPRFINFO.

| Field/Description PBPRFINFO | Field Name/ Size | Required / Comments | Location |
| :---: | :---: | :---: | :---: |
| PRF Seq | $\begin{aligned} & \text { ZOPRFSEQ } \\ & (3,0) \end{aligned}$ | Display only - System Generated | L1 |
| Cash Balance | $\begin{aligned} & \text { ZOCASHB } \\ & (17,2) \end{aligned}$ |  | L2 |
| Non-Cash Balance | $\begin{aligned} & \text { ZONCASHB } \\ & (17,2) \end{aligned}$ |  | C2 |
| Principal Received to Date | $\begin{aligned} & \text { Z0PRIRCVTD } \\ & (17,2) \end{aligned}$ |  | R2 |
| Total PRF Redemption Amount to Date | $\underset{\substack{\text { Z0TREDTD } \\(17,2)}}{ }$ |  | L3 |
| PRF Funds Held by Lender | Z0FDSHBL <br> 1 CHAR | PINFO Table YN | C3 |
| Threshold \% Original Bond Balance | $\begin{aligned} & \hline \text { ZOPCTPRI } \\ & (17,15) \\ & \hline \end{aligned}$ |  | R3 |
| \% of Original Balance \$ Amount | $\begin{aligned} & \hline \text { Z0POOBDA } \\ & (17,2) \end{aligned}$ |  | L4 |
| Scheduled Redemption Amount | $\begin{aligned} & \text { ZOSCHREDA } \\ & (17,2) \\ & \hline \end{aligned}$ |  | C4 |
| Threshold Dollar Amount | $\begin{aligned} & \hline \text { ZODOLAMT } \\ & (17,2) \end{aligned}$ |  | R4 |
| Threshold Period of Time in Months | $\underset{(5,0)}{\text { Z0PERTIME }}$ |  | L5 |
| Beginning Date for Period of Time | $\begin{aligned} & \hline \text { ZOPOTBEG } \\ & \text { DATE (10L) } \end{aligned}$ |  | C5 |
| Threshold Business Calendar | $\begin{aligned} & \hline \text { Z0BUSCAL } \\ & 3 \text { CHAR } \\ & \hline \end{aligned}$ | PINFO Table C5 | R5 |
| Threshold Move Forward/Backward | Z0FORBCK <br> 1 CHAR | PINFO Table BS | L6 |
| Date Last Redemption Occurred | $\begin{aligned} & \hline \text { Z0DLROCC } \\ & \text { DATE (10L) } \\ & \hline \end{aligned}$ |  | C6 |
| Effective Date of Last Redemption | Z0EFFDTLR <br> DATE (10L) |  | R6 |


| Field/Description <br> PBPRFINFO | Field Name/ <br> Size | Required / Comments | Location |
| :--- | :--- | :--- | :--- |
| Next Scheduled Redemption Date | Z0NXRTDMPT <br> DATE (10L) | L7 |  |
| Suspension Effective Date | Z0SUSPDDT <br> DATE (10L) | C7 |  |
| Resume Effective Date | Z0RSUMEDT <br> DATE (10L) |  | R7 |
| Threshold Triggered | Z0TRIGGERDS <br> 1 CHAR | Display Only <br> Calculated by the System | L8 |
| Percent Threshold Reached | Z0POTR <br> $(15,12)$ | Display Only <br> Calculated by the System | C8 |
| Days to Threshold Date |  Z0DYSTTD <br> $(5,0)$  | Display Only <br> Calculated by the System | R8 |

## Threshold Notification

When Strategy recognizes a triggered Threshold, Strategy sends an email to the email addresses noted in the Contact information defined for the Servicer or Trustee.

To be sure that notification goes to the appropriate party, create at least one E-MAIL contact type on the Investor Vendor record representing the Servicer and the Trustee.

Tools>Maintenance>Vendor Maintenance>Investors>Contact Information from the Right Mouse Option.

- Click the New icon to the right of the Summary Grid (Shiny Green Box)
- Select Email in the Type of Contact Information field
- Type 'Threshold Alert' in the Description field.
- Enter the e-mail address in the field provided.



## Bond Info - PRF/Bond Redemption

In the Bond Info for PRF/Redemption section of the Bond Information page, users associate the Principal Reserve Fund from those defined on the Bond Deal using the PRF Sequence number. For non-amortizing deals, use the Reserve Search button to associate the Reserve account to collect principal payments until ready for redemption. The PRF information at the Bond level, in conjunction with the PRF threshold parameters defined at the deal level, define how redemptions for the Bond are made.


| Field/Description <br> PBONDINFO | Field Name/ <br> Size | Required / Comments | Location |
| :--- | :--- | :--- | :--- |
| Reserve Search | Z6RSV <br> $(3,0)$ | Display only once selected from the <br> Reserve Search window <br> Required for Non-Amortizing Deals | L0 |
| PRF Seq | Z6PRFSEQ <br> $(3,0)$ | Display only - System Generated | L1 |
| Last Redemption Date | Z6DATELRDP <br> DATE (10L) | C1 |  |
| Total Bond Redem Amount to Date | Z6RDPAMT <br> DATE (10L) | R1 |  |
| Investor to Receive Principal | Z6RPRINTI <br> $(5,0)$ | L2 |  |
| Include Orig Bond Bal in Threshold Calc | Z6OBITC <br> 1 CHAR | R2 |  |

## Reserve Search Button - Non-Amortizing Loans

The Reserve account is required for Non-amortizing loans. The Reserve Search button on the Bond Info - PRF for Redemption section allows users to select the Reserve Account from the Loan Associated with the Bond. The button opens the Reserve Search window, it will display the Reserve \#, Type, Bank, DDA\# and Balance for all reserves on the loan recorded in the Account \# in the Description and Parameters section above (PBONDINFO/Z6LOAN). Once selected the reserve description, bank, and dda\# will display at the top of the Bond Info for PRF/Redemption section of the Bond Information page.

Clicking a row from the Search Results, selects the reserve account and displays the Reserve Account at the top of the PRF/Bond Redemption window.
Reserve Search

Reserve Search Results

| Reserve \# $\boldsymbol{A}$ | Reserve Type | Bank | D.D.A \# | Balance |
| :--- | :---: | :---: | :---: | :---: |
| 1 | PRINCIPAL RESERVE FUND (PR) | BOND BANK (889) | PRF dda loan 880091275 (88-880-91275) | $135,650.88$ |

## Bond Info for PRF/Redemption

Reserve Search
Reserve 1 - PR (PRINCIPAL RESERVE FUND) - 889 (Bond Bank PRF) - 88-880-91275

PRF Processing
When Borrower payments come in on an amortizing loan:

- Upon Payment:
- The cash stays in the P\&I Custodial account.
- The PRF Non-Cash Balance increases by the amount of the Principal Payment
- Strategy reduces the Loan Balance by the Principal Payment amount.
- Upon Remittance
- On the Remittance Date, Strategy remits the both principal and interest amount to the investor.
- Upon Redemption
- The Bond Balance is reduced.
- Upon redemption, the non-cash amount is reported

When Borrower payments come in on a non-amortizing loan:

- Upon Payment
- The cash moves to the associated Reserve Account on the loan.
- The PRF Balance increase by the amount of the Principal Payment
- Upon Remittance
- On the Remittance Date, Strategy remits the interest amount to the investor.
- Upon Redemption
- The cash moves from the Reserve Account to the Trustee or Credit Enhancer
- The Bond Balance is reduced
- The Loan Balance is reduced


## Other Bond Features

Daily Balance and Rates
The Daily Balance and Rates updates during the day end process. Its purpose is to keep track of the day to day accrual amounts and parameters used to arrive at the amounts point in time. This file (PBDBNR) is similar to the Daily Balance and Rates files used for the Loan (PDBNR).

Access the Bond Daily Balance and Rates page from the Bond Information page, using the Options button in the top left of the screen.

| Deals » Deal:1» Bond:1 |  |  |  | Bond Information | Options V |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Bond Daily Balance \& Rates |
|  |  |  |  |  | Bond Receivables |
|  |  |  |  |  | Principal Payment Schedule |
| Ok | Apply | Cancel | Options |  | Bond Rate Change |




The following fields are in the Bonds Daily Balance and Rates file (PBDBNR) and display in the Bond Daily Balance and Rates page. Values displayed on the page are for the Deal ID and Bond ID shown in the top left of the page.

| Field/Description <br> PBDBNR | Field Name/ <br> Size | Required / Comments |
| :--- | :--- | :--- |
| Accrual Date | ZSCYMD <br> DATE (10L) |  |
| Sequence No. | ZSSEQ\# <br> $(3,0)$ | Values on this page are display only and <br> are updated by the system. |
| Payment Date | ZSPDD |  |
|  | DATE (10L) |  |
| Balance to Accrue on Code | ZSBTAOC |  |
|  | 1 CHAR |  |
| Balance to Accrue On | ZSBTAO |  |
|  | $(17,2)$ |  |
| Rate | ZSRRATE |  |
|  | $(17,15)$ |  |
| Basis Code | ZSIBC |  |
|  | 3 CHAR |  |
| Per Diem | ZSRPD |  |
|  | $(19,06)$ |  |
| Per Diem \#2 | ZSRPD2 |  |
|  | $(19,06)$ |  |
| Per Diem \#3 | ZSRPD3 |  |
|  | $(19,06)$ |  |
| Deal Balance | ZSBDB |  |
|  | $(17,2)$ |  |
| Bond Balance | ZSBB |  |
|  | $(17,2)$ |  |
| Loan Balance | ZSLB |  |
|  | $(17,2)$ |  |
| PRF Balance | ZSPRFB |  |
| Notional Balance | $(17,2)$ |  |
| LOC Balance | ZSNB |  |
|  | $(17,2)$ |  |

## Bond Receivables

For Non-Amortizing Deals, each Bond will have a Bond Receivable created for each due date of the Loan associated with the Bond. If multiple bonds tie to one loan, Strategy totals the Principal due and Interest due for all corresponding Bonds and writes them out to the associated Loan's Receivable record in the Principal Due and Interest Due fields.

Access the Bond Receivable window from the Bond Information page, using the Options button in the top left of the screen.

## Deals " Deal:1" Bond:1

Ok Apply Cancel Options $\mathbf{V}$

Options V
Bond Daily Balance \& Rates Bond Receivables
Principal Payment Schedule Bond Rate Change

The Bond Receivable information is for the non-amortizing Bond active in the Bond Information window (Deal ID, and Bond ID are displayed in the upper left of the Bond Receivables window). The new file PBRCVBL stores the receivable values in the new file PBRCVBL.

```
Deals " Deal:1» Bond:1» Receivables List
```



The following fields are in the Bonds Receivable file (PBRCVBL) and display in the Bond Receivables page. Each row in the table represents a Receivable for the Bond represented by the Deal and Bond IDs shown at the top left of the Bond Receivable page.

| Field/Description <br> PRRCVBL | Field Name/ <br> Size | Required / Comments |
| :--- | :--- | :--- |
| Payment Date | Z8PMTDT <br> DATE (10L) | Values on this page are display only and <br> are updated by the system. |
| Payment Date Base Date | Z8BASEDT <br> DATE (10L) |  |
| Principal Due | Z8PRINDUE <br> (17,2) |  |
| Interest Due | Z8INTDUE <br> (17,2) |  |
| Interest From Date | Z8FROM <br> DATE (10L) |  |
| Interest To Date | Z8TO <br> DATE (10L) |  |
| Interest Adjustment Last Period | Z8ADJFLP <br> (17,2) |  |
| Interest Adjustment Next Period | Z8ADJTNP <br> (17,2) |  |
| Interest Calculated | Z8CALCTP <br> (17,2) |  |
| User Interest Adjustment | Z8USERIADJ <br> $(17,2)$ |  |

## Bond Rate Change

On a Variable Rate Bond, enter rate changes from the Bond Rate Change window.
Access the Bond Rate Change window from the Bond Information page using the Options button in the top left of the page.


The window displays the Current Rate and the Effective Date of the Bond. The fields Rate and Effective Date are available for update on a Variable Rate Bond. The Rate field defaults to the current rate and the Effective Date defaults to the System Date. The user updates the new Rate and Effective Date and hits Ok to save.

When the Bond Rate Change window closes, the Rate and Effective Date update in the Bond Information file (PBONDINFO). If the new effective date is earlier than the current date then the system will process the backdated rate change.

## Bond Fees

A number of fees, using different parameters can be associated with a bond deal. Payment of Fees may be in addition to interest due from the borrower or the fee is stripped from interest paid by the borrower. Remittance may be to the Trustee/Bondholder, the investor, or even a third party.

Enter all fees on the loan associated with a Bond using the Fees functionality in Loan Administration. Users access Fee Information from the left panel of the Master Info tab in Loan Administration. The following Fee options include new drop down values for the following Fee Information fields on a Bond Loan ( $\mathrm{PMASTR} / \mathrm{CMDNU} 4=$ ' B ) :


Fee Charge Method: In addition to One-Time and Recurring (in addition to borrower's payment) when the loan is tied to a Bond the additional option Stripped from Interest (recurring fee) ia available.

Balance for Calculation: The following options were added to the drop down to select from the various Bond balances to calculate the payment type when the loan is tied to a Bond (PMASTR/CMDNU4='B').

- Bond Deal Original Balance
- Bond Deal Current Balance
- Bond Deal Original Balance minus PRF Collected to Date
- Bond Original Balance
- Bond Current Balance
- Notational Balance
- LOC balance


## New Fields

The following new fields appear when the Loan is tied to a Bond. (PMASTR/CMDNU4 = 'B')
Advance: Field added to indicate whether the fee should be advanced (Yes or No), in the event the payment is not paid when due.

Remit To: This is an new option on the Loan Administration $=$ Fee Information screen. This allows the user to select who to remit the fee, a $3^{\text {rd }}$ Party or an Investor. Selecting a value will provide an ellipsis button next to the field. Clicking the ellipsis opens a Remit to window to select the appropriate $3^{\text {rd }}$ Party or Investor to remit the fee.

Note: Third Parties can be associated with the Investors on the Loan at the Investor Vendor level. Associate Third Parties to your Investors in much the same manner as adding Names to the Loan. Assign roles to the Names to help identify the related parties.


Combined Fee Category: This field will be used for future functionality.

## Bond Redemption

Bond Redemption functionality is available from the Bonds widget. The widget opens to the Deal Search page. The Bond Redemption button on the top of the Search page opens the Redemption List.


The default view of the Redemption List displays all Principal Reserve Fund Redemptions that have reached a Threshold Trigger defined for the Principal Reserve Fund. Removing the check from Threshold Triggered checkbox to the left of the Search button allows an expanded search for loans/bonds with non-triggered PRFs. Entering search criteria in the Search box returns PRF records that contain the string entered. The search text works in conjunction with the Threshold Triggered checkbox: if the Threshold Triggered check box is checked the results returned will be PRFs that have the string entered and have reached the defined Threshold.

The Bond Deal determines the Repayment Type (Sequential or Concurrent) and if the Repayment Type is Concurrent, the Method of Repayment: Pro Rata or on a defined Principal Repayment Schedule.

The Bond Information tracks the Principal Reserve Info at the Bond Level, the date of last redemption for the Bond, and for Bond Deals that are Sequential Repayment Types, the Repayment Priority for the Bond.

The Principal Reserve Fund tracks the funds Cash Balance or Non-Cash Balances, and the Redemption Threshold parameters: the Threshold Dollar Amount, \% of Threshold Reached, Threshold Date, and \# days to Threshold Date.

Clicking a row in the Redemption List opens the Bond Redemption window. The window displays the combination of information from the Bond Deal, the Principal Reserve Fund or Funds associated with the Bond Deal, and the Bonds associated with the Bond Deal.


The bottom of the Bond Redemption window allows users with appropriate security to enter the Redemption Amount and Effective Date. Users must select the appropriate Principal Reserve Fund from the top PRF grid and the Bond that the Redemption applies to from the bottom Bond grid. The Bond Seq(uence) and Bond Name at the bottom of the window populate from the selected information.

The Amount entered cannot exceed the current PRF Balance: for Non-amortizing Deals that is the PRF Balance Cash, on an Amortizing deal, the PRF Balance Non-Cash. When entering a Redemption Amount an Effective Date is required. The Effective Date must be within the last 25 days prior to the current date, and cannot be greater than the current date.

When backdating a Redemption, (the Effective Date is less than the Current Date) Strategy re-accrues the Bond interest amount using the reduced bond/loan/PRF balances. Any fees calculated using the PRF or Bond Balances will recalculate using the reduced balance.

## Principal Reserve History

Users can review Redemption History from the Bond Deal, Principal Reserve History page. The user would select the Bond Deal they wish to work with, and select the Principal Reserve History from the Principal Reserve Fund section of the Bond Deal. The Principal Reserve Fund page displays the Fund Balances and threshold parameters. To the right of the OK, Apply, Cancel buttons in the upper left of the page, there is a History button. Clicking the button opens the Principal Reserve Fund history window.


Deals » Deal:1" PRF Edit - 1

## Principal Reserve Fund



The Principal Reserve History page displays a grid of all prior redemptions processed for the PRF.


If a redemption was made in the current or prior month, and it is the last redemption made, a Reversal Button will appear. Users with appropriate authority can process a reversal.

## Redemption Thresholds

Strategy tests the Redemption Thresholds parameters defined in the Principal Redemption Fund for the Bond Deal every day-end. Redemption Thresholds test either review the PRF balance, or monitor the PRF Threshold Period to trigger Redemption.

## PRF Balance

The threshold test for PRF balance uses the Scheduled Redemption Amount, the Threshold \% Original Bond Balance, and \% of Original Balance Dollar Balance to determine the Minimum PRF Balance, and

If the Threshold \% Original Bond Balance is populated, Strategy checks all Bonds tied to the PRF. If the Bond / PRF option Include Original Bond Balance in Threshold Calc is Yes, Strategy includes the original bond balance in the calculation. When the total is calculated, Strategy applies the Threshold \% Original Balance to the total. That result populates the \% of Original Balance \$ Amount. The Scheduled Redemption, if populated, gets added to the \% of Original Balance \$ Amount, that amount is compared to the PRF Cash Balance. The Cash Balance must exceed the \% of Original Balance \$ Amount, by the amount of the Scheduled Redemption Amount to meet the minimum Redemption Amount.


The Beginning Bond Balance $\$ 5,550,000.00$
Threshold Dollar Amount is $\$ 1,210,000.00$. (1)
The Redemptions occur in $\$ 100,000.00$ increments and the minimum redemption amount is $\$ 100,000.00$ (2)
\% Original Balance \$ Amount (this is the $\$ 5,500,000.00 \times 20 \%$ or $\$ 1,110,000.00$ ) and the Minimum PRF Balance Requirement (3)
The Cash Balance must exceed the Minimum PRF Balance Requirement ( $\$ 1,110,000.00$ ) by the Scheduled or Minimum Redemption Amount (\$100,000.00) (4), the Threshold Dollar Amount.

After application of the last payment the Cash Balance was $\$ 1,213,289.36$. This exceeds the Threshold Dollar Amount of $\$ 1,110,000.00$ (Minimum PRF Balance Requirement plus the Scheduled Redemption Amount), so the Threshold is Triggered.

## PRF Dates Threshold

Strategy uses the Threshold Period of Time in Months, and Date Last Redemption Occurred fields, if populated, to determine the Next Scheduled Redemption Date.

Using Date Last Redemption Occurred, Strategy adds the months found in the Threshold Period of Time in Months to determine the Next Scheduled Redemption Date. When the Next Scheduled Redemption Date is reached, the Threshold is Triggered and the PRF will appear in the Redemption List.

## Behind the Scenes

## Accruals and Receivables

Non-Amortizing Bonds

## Interest Due for Non-Amortizing Bonds

Assuming complete and correct Bond Deal and Bond Information setup and that the Accrual Start Date has been reached for the associated Loan, each Bond in a Non-Amortizing Bond Deal begins to accrue interest and creates and stores a per diem each day based on the Bond Accrual and Billing Info parameters.

- If the loan already exists in production, Strategy creates the first bond receivable along with the next loan receivable on the next payment anniversary date.
- If the loan already exists in Loan Entry, Strategy creates the first bond receivable record along with the first loan receivable at the passing of the loan into production.

Strategy will total the per diems for the date range of the loan receivable's 'Interest From' and 'Interest To' dates to arrive at the Interest Due in the Bond Receivable. The resulting interest due amount in the Bond Receivable is rolled up into the Loan Receivable. If more than one Bond exists on a Loan, Strategy totals the Interest Due in all of the associated Bond Receivables . The resulting total becomes the Interest Due in the Loan Receivable for the same period.

## Principal Repayment Schedule

Principal Due in the Bond receivable reflects the Principal Repayment Schedule for Non-Amortizing loans. The schedule designates a principal amount due for each payment period.

The principal due in the bond receivable rolls up to the reserve account designated during Bond/PRF setup. The Reserve due reflects in the loan receivable record for the period.

## Rate Changes

Interest Rates on Non-Amortizing Bond Deals may change every week. Strategy checks for a new rate entered via the Bond Rate Change option and adds the margin found in the Bonds Information/Bond Accrual and Billing Info section to reach the final rate to calculate the per diem. Strategy will begin to use the new rate on the Effective Date of the rate. Like the loan receivable, Strategy's Bond Receivable will be a forecast of the total Interest Due for the period between the "Interest From' and "Interest To' dates. Each time the Interest Rate is updated via the Bond Rate Change Option, the per diem change, the Bond Receivable changes, and the Loan Receivable changes.

## Back Dated Rates

If an Interest Rate is entered in the Bond Rate Change option with an Effective Date less than the Current Date, Strategy updates and stores a new per diem for each date between the Effective Date and the process through date (or next Interest Effective Date).

- If the payment for the period has not been applied, Strategy adjusts the accruals and receivables (both Bond and Loan) in accordance with the new rate.
- If the payment has been applied, Strategy updates:
- the current Bond Receivable with an adjustment for next period equal to the interest difference
- the next period Bond Receivable is updated with an adjustment from last period equal to the interest difference
- The next period interest adjustment rolls up to the Loan Receivable.


## Amortizing Bond Deals

Amortizing Bond Deals are supported by amortizing loans and Strategy follows all normal processing for loan accruals and receivables.

## Payment Processing

When a payment comes in for a loan associated with a Bond:

- Strategy processes the payment normally using the loan receivable record.
- Principal Reserve Fund activity is tracked
- Amortizing Loans
- Cash is remitted to the Investor
- Principal portion of the payment is tracked as a Non-Cash entry in the Principal Reserve Fund.
- Bond balance remains the same until Redemption
- Non-Amortizing Loans
- Principal portion of payment moves directly to the designated Reserve Account (Bank/DDA\#) designated during Bond setup.
- Reserve History tracks the deposit at the loan level
- Principal Reserve Fund tracks all debits and credits which may reflect multiple loans/bonds.
- If multiple bonds are associated to the loan, and each bond has its own PRF, the user may have designated multiple reserve accounts during Bond setup.


## Fees

Set up all fees through Strategy's Fee Information option in Loan Administration on the Master Info tab. When a loan is associated with a Bond (PMASTR/CMDNU4=' B ') the following will apply:

## Fee Charge Method:

Fee Charge Method will contain an additional value for selection: Stripped from Interest.
Stripped from Interest reduces the net interest going to the investor by the fee amount. The fee amount goes to the servicer or remits to a different investor or third party. More than one fee may be stripped from interest, multiple fees may exceed the interest collected causing negative excess yield, therefore vendors setup with Stripped from Interest fees, must allow Excess Yield.

## Balance for Calculation

The Balance for Calculation drop down values includes Bond balances when the loan is attached to a loan. (Bond Deal Balance, Bond Balance, Loan Balance, PRF Balance, Notional Balance, LOC Balance, or the Original Deal Balance less PRF Received to Date.

## Remit To

The Remit To field appears when the loan is associated with a Bond. Allows fes to be remitted to a third party or an investor.

Advance Fee:
The Advance Fee field indicates whether the fee pays on its due date, even if the borrower has not paid. Fee remittance is charged to Corporate Cash. The Fee is deposited into Corporate Cash when the Borrower makes the payment.

## Fee Payments

Collection of fees not stripped from interest can occur with the borrower's payment or separately from the borrower's payment.

The following fees follow the normal Strategy Fee processing to satisfy the miscellaneous amount

- Fee is collected before the due date
- Fee is collected on the due date
- Fee is collected after the due date and is not designated to advance.

If the fee will advance on the due date, and is not collected,

- Fee is remitted to third party or investor
- Fee marked as being advanced.

If the payment is reversed

- Miscellaneous Amounts are reversed
- If remitted prior to the payment reversal, Fee is marked as advanced.


## Fees Stripped from Interest

Fees configured as 'Stripped from Interest' are collected as part of the periodic interest payments. When the payment is received

- the associated miscellaneous receivable record is updated as paid.
- Interest remitted to the Investor is less by the total of fees.
- Fee amount will stay in P\&I Custodial
- Payment of fee is made on the due date


## Fee Remittance on the Fee Due Date

A Fee payment is designated as 'Stripped From Interest' and is collected on the due date

- Fee retained by Servicer moves from the Interest Investors P\&I Custodial to Corp. Cash
- Fee Remitted to $3^{\text {rd }}$ Party moves from the Interest Investors P\&I Custodial to Corp. Cash for remittance to Third Party.
- Fee Remitted to an Investor (not Interest Investor) - moves from Interest Investors P\&I Custodial to the receiving Investor's P\&I Custodial

Stripped from Interest Fees not collected on the due date, that do not require advancing, will process as noted above at time of payment

## Billing

Strategy will create a Bill within the day-end according to Strategy's billing guidelines using the standard billing program (MB471U). In addition to creating the bill for the Amortizing Bond Deals at the Loan level, Strategy creates four files to include all the information needed to create a Bond Bill. Query and download the files below to retrieve the current billing period's information tp create your bills.

- PBFHO1BB - Billing header contains the key information to tie together all the information for a bond bill. (PBFHO1BBH)
- PBBILLBOND - Billing details related to a Non-Amortizing Bond. Contains Principal Amounts and Interest amounts for the bill. Includes the beginning and ending date of the different interest periods, the bond balance and interest rate used to arrive at each amount. (PBBILLBONDH)
- PBBILLLOAN - Billing details maintained at loan level, contains escrow information, reserve balances. Applicable for both Amortizing and Non-Amortizing Bonds.(PBBILLLOAH)
- PBBILLFEE - Contains the parameters and amounts for fees charged on the loan. This file applies to both Amortizing and Non-Amortizing Bonds. (PBBILLFEEH)

Strategy maintains a historical file for each of the above files to track billing details for the life of the Bond Deal. (Parenthetical at end of the above file description notes the associated historical file).

Note: If you use a bill other than MB471U or MB471DC and plan to have Strategy create the Bond Billing Information files above, contact Customer Support to request a custom change to your billing program to create the Billing Information files according to your current Strategy billing process.

Note that the standard loan level Strategy Bill will only be valid for Amortizing Bonds that do not have fees stripped from interest. Users will have to use the data available in the Bond Billing Information files to create your bills.

Including Notes in the Loan Level Bond Billing File
The Loan Level Billing file (PBBILLLOAN) contains 25 fields to include notes on the bill. To mark Notes to be included in the bill, use the Reference field in the Notes in Strategy CS. Use the following text in the Notes Reference field to include the Note text up to 600 characters per field.
"BILL\#FEE\#LINE"
"BILL\#BAL\#LINE"
"BILL\#TOTAL\#LINE"


## Bonds Security



Security for the Bonds Application is under Web Portal.

## Fannie Mae and Freddie Mac Bond Reporting Files

Strategy creates files for reporting Bond activity in the format for Fannie Mae 4090A and Freddie Mac Multisuite Reporting at cutoff. In addition to the monthly file, a History file is also created for each format (PFM4090HST \& PFMMSUITEH).

Bond File Layouts

| PFMMSUITE - Freddie Mac Multi suite history file for Bond reporting |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| File | Field | Type | Length | Field Description |
| PFMMSUITE | YXFMLN | P | 11,0 | FM LOAN NBR |
| PFMMSUITE | YXSRVLN | P | 9,0 | SERVICER LOAN NBR |
| PFMMSUITE | YXCYCLE | P | 6,0 | CUTOFF DATE MMYYYY |
| PFMMSUITE | YXTRANSDT | DATE | 10L | TRANSACTION DATE |
| PFMMSUITE | YXEOCDDLP | DATE | 10L | EOC DUE DATE |
| PFMMSUITE | YXEXCPTN | A | 2 | EXCEPTION REP CODE |
| PFMMSUITE | YXTRANSN | A | 1 | TRANS_NUM |
| PFMMSUITE | YXBEGUPB | P | 17,2 | BEGIN_UPB |
| PFMMSUITE | YXMTHPRI | P | 17,2 | LOAN_PRINCIPAL |
| PFMMSUITE | YXMTHPPTT | P | 17,2 | TRUSTEE_PRINCIPAL |
| PFMMSUITE | YXMTHPPFM | P | 17,2 | FM_PRINCIPAL |
| PFMMSUITE | YXMTHPRDA | P | 17,2 | LOAN_PRIN_RESERVE_DEPOSIT |
| PFMMSUITE | YXMTHPSDA | P | 17,2 | LOAN_PRIN_SINKING_RECEIPT |
| PFMMSUITE | YXMTHPSRA | P | 17,2 | LOAN_PRIN_SINKING_APPLIED |
| PFMMSUITE | YXMTHPSATT | A | 1 | TRUSTEE_PRIN_SINKING_APPLIED |
| PFMMSUITE | YXMTHPSAFM | A | 1 | FM_PRIN_SINKING_APPLIED |
| PFMMSUITE | YXLBINT | P | 17,2 | LOAN_BOND_INT |
| PFMMSUITE | YXMTHEIRA | P | 17,2 | LOAN_EARLY_INTEREST_RECEIPT |
| PFMMSUITE | YXMTHEIAA | P | 17,2 | LOAN_EARLY_INTEREST_APPLIED |
| PFMMSUITE | YXMTHEIAAT | P | 17,2 | TRUSTEE_EARLY_INTEREST_APPLIED |
| PFMMSUITE | YXMTHEIAAF | P | 17,2 | FM_EARLY_INTEREST_APPLIED |
| PFMMSUITE | YXMTHOBFA | P | 17,2 | LOAN_OTHER_BOND_FEES |
| PFMMSUITE | YXMTHOBFET | P | 17,2 | TRUSTEE_OTHER_BOND_FEES |
| PFMMSUITE | YXMTHOBFEF | P | 17,2 | FM_OTHER_BOND_FEES |
| PFMMSUITE | YXMTHLFEE | P | 17,2 | LOAN_LATE_FEE |
| PFMMSUITE | YXMTHLFEEF | P | 17,2 | FM_LATE_FEE |
| PFMMSUITE | YXMTHDIA | P | 17,2 | LOAN_DEFAULT_INTEREST |


| PFMMSUITE - Freddie Mac Multi suite history file for Bond reporting |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| File | Field | Type | Length | Field Description |
| PFMMSUITE | YXMTHDIAF | P | 17,2 | FM_DEFAULT_INTEREST |
| PFMMSUITE | YXMTHIOA | P | 17,2 | LOAN_INTEREST_ON_ARREARS |
| PFMMSUITE | YXMTHIOAF | P | 17,2 | FM_INTEREST_ON_ARREARS |
| PFMMSUITE | YXMTHAPA | P | 17,2 | LOAN_ADDITIONAL_PRINCIPAL |
| PFMMSUITE | YXMTHAPAT | P | 17,2 | TRUSTEE_ADDITIONAL_PRINCIPAL |
| PFMMSUITE | YXMTHAPAF | P | 17,2 | FM_ADDITIONAL_PRINCIPAL |
| PFMMSUITE | YXMTHPPPA | P | 17,2 | LOAN_PREPAYMENT_PREMIUM |
| PFMMSUITE | YXMTHPPPAT | P | 17,2 | TRUSTEE_PREPAYMENT_PREMIUM |
| PFMMSUITE | YXMTHPPPAF | P | 17,2 | FM_PREPAYMENT_PREMIUM |
| PFMMSUITE | YXENDUPB | P | 17,2 | ENDING UPB |
| PFMMSUITE | YXMTHRRDA | P | 17,2 | REPLACEMENT_RESERVES_DISBURSEMENTS |
| PFMMSUITE | YXMTHRRBA | P | 17,2 | REPLACEMENT_RESERVES_BALANCE |
| PFMMSUITE | YXMTHPRDAD | P | 17,2 | PRINCIPAL_RESERVES_DISBURSEMENTS |
| PFMMSUITE | YXMTHSBAL | P | 17,2 | OTHER_BALANCES_SUSPENSE |
| PFMMSUITE | YXMTHCFFA | P | 17,2 | CREDIT_FACILITY_REPORTED_FEE |
| PFMMSUITE | YXMTHEOFA | P | 17,2 | EARN_OUT_REPORTED_FEE |
| PFMMSUITE | YXMTHLFFA | P | 17,2 | LIQUIDITY_FACILITY_REPORTED_FEE |
| PFMMSUITE | YXMTHSWAPA | P | 17,2 | SWAP_REPORTED_FEE |
| PFMMSUITE | YXMTHCFABA | P | 17,2 | CREDIT_FACILITY_ALT_BAL_AMOUNT |
| PFMMSUITE | YXMTHEOABA | P | 17,2 | EARN_OUT_ALT_BAL_AMOUNT |
| PFMMSUITE | YXMTHLFABA | P | 17,2 | LIQUIDITY_FACILITY_ALT_BAL_AMOUNT |
| PFMMSUITE | YXMTHSABA | P | 17,2 | SWAP_ALT_BAL_AMOUNT |
| PFMMSUITE | YXCOMMENT | A | 255 | COMMENTS |
|  |  |  |  |  |
| PFM4090A - Fannie Mae 4090 Reporting file for Bond reporting. |  |  |  |  |
| File | Field | Field Type | Length | Field Description |
| PFM4090A | YALN | A | 11 | FNMA LOAN NBR |
| PFM4090A | YANCD | P | 8,0 | CUTOFF DATE MMDDYYYY |
| PFM4090A | YARPTMM | P | 8,0 | REPORTING MONTH MMDDYYYY |
| PFM4090A | YALENDNA | A | 30 | LeNDER NAME |

PFM4090A - Fannie Mae 4090 Reporting file for Bond reporting.

| File | Field | Field Type | Length | Field Description |
| :---: | :---: | :---: | :---: | :---: |
| PFM4090A | YALENDA1 | A | 30 | LENDER ADDRESS 1 |
| PFM4090A | YALENDA2 | A | 30 | LENDER ADDRESS 2 |
| PFM4090A | YALENDA3 | A | 30 | LENDER ADDRESS 3 |
| PFM4090A | YALENDA4 | A | 30 | LENDER ADDRESS 4 |
| PFM4090A | YALENDNO | P | 9,0 | LENDER NUMBER |
| PFM4090A | YARATE | P | 15,13 | NOTE RATE |
| PFM4090A | YAWAIR | P | 15,13 | BOND FLOATING RATE |
| PFM4090A | YAPNI | P | 17,2 | MONTHLY PNI |
| PFM4090A | YAPBAL | P | 17,2 | LOAN PRINCIPAL BALANCE |
| PFM4090A | YAI\$C | P | 17,2 | INTEREST COLLECTED |
| PFM4090A | YAP\$C | P | 17,2 | LOAN PRINCIPAL COLL |
| PFM4090A | YAAP\$C | P | 17,2 | ADDITION PRINC COLL |
| PFM4090A | YAPO\$ | P | 17,2 | LIQUIDATION IN FULL |
| PFM4090A | YAOTHR | P | 17,2 | OTHER |
| PFM4090A | YALPI | P | 8,0 | LAST PAID INSTALLMENT DATE |
| PFM4090A | YAEPBL | P | 17,2 | ENDING BALANCE - LOAN PRINCIPAL |
| PFM4090A | YATDLQ | P | 5,0 | TOTAL NUMBER DELINQUENT |
| PFM4090A | YAIDLQ | P | 17,2 | INSTALLMENTS DELINQUENT |
| PFM4090A | YA\$DLQ | P | 17,2 | AMOUNT DELINQUENT |
| PFM4090A | YAPDLQA | P | 17,2 | DELINQUENT ADVANCES |
| PFM4090A | YAODLQA | P | 17,2 | OTHER DELINQUENT ADVANCES |
| PFM4090A | YABBAL | P | 17,2 | BEGINNING BOND BALANCE |
| PFM4090A | YABRDPT | P | 17,2 | BOND REDEMPTION |
| PFM4090A | YAEBAL | P | 17,2 | ENDING BOND BALANCE |
| PFM4090A | YABCR | P | 17,2 | BEGINNING CASH RESERVE |
| PFM4090A | YAOCC | P | 17,2 | OTHER |
| PFM4090A | YAECR | P | 17,2 | ENDING CASH RESERVE BALANCE |
| PFM4090A | YABPRF | P | 17,2 | BEGINNING PRINCIPAL RESERVE/SINKING FUND |
| PFM4090A | YAPCRM | P | 17,2 | PRINCIPAL APPLICATION |
| PFM4090A | YABRDP\$ | P | 17,2 | BOND REDEMPTION |

PFM4090A - Fannie Mae 4090 Reporting file for Bond reporting.

| File | Field | Field Type | Length | Field Description |
| :---: | :---: | :---: | :---: | :---: |
| PFM4090A | YAEPRF | P | 17,2 | ENDING PRINCIPAL RESERVE/SINKING FUND |
| PFM4090A | YACRFPER | P | 15,13 | CASH RESERVE FEE \% |
| PFM4090A | YACRF\$ | P | 17,2 | CASH RESERVE FEE \$ |
| PFM4090A | YACEFPER | P | 15,13 | CREDIT ENHANCEMENT FEE \% |
| PFM4090A | YACEF\$ | P | 17,2 | CREDIT ENHANCEMENT FEE \$ |
| PFM4090A | YALQIDPER | P | 15,13 | LIQUIDITY FEE \% |
| PFM4090A | YALQID\$ | P | 17,2 | LIQUIDITY FEE \% |
| PFM4090A | YAORMT | P | 17,2 | MISCELLANEOUS REMITTANCES |
| PFM4090A | YATFEE | P | 17,2 | TOTAL REMITTANCES |
| PFM4090A | YATRSTN | A | 30 | TRUSTEE NAME |
| PFM4090A | YATRSTA1 | A | 30 | TRUSTEE ADDRESS 1 |
| PFM4090A | YATRSTA2 | A | 30 | TRUSTEE ADDRESS 2 |
| PFM4090A | YATRSTA3 | A | 30 | TRUSTEE ADDRESS 3 |
| PFM4090A | YATRSTA4 | A | 30 | TRUSTEE ADDRESS 4 |
| PFM4090A | YATRSTC | A | 30 | TRUSTEE CONTACT |
| PFM4090A | YATRSTP | A | 10 | TRUSTEE PHONE \# |

PBBFHO1BB - Bond Billing Header Record - the Information in this file identifies the Bond Loans and is used to tie the Bond Billing Records together.

| File |  | Field | Type | Length |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | Field Description |
| PBFH01BB | BBHLN\# | S | 9,0 | LOAN \# |
| PBFH01BB | BBHPDT | L | $10 L$ | PAYMENT DATE |
| PBFH01BB | BBHBCY | A | 1 | BILL CYCLE |
| PBFH01BB | BBHSEQ | S | 3,0 | SEQ\# |
| PBFH01BB | BBHBR\# | S | 9,0 | BORROWER \# |
| PBFH01BB | BBBNAM | A | 60 | BORROWER NAME |


| PBBILLBOND - Billing information for Non-Amortizing Loans, Includes Principal and Interest Component Information |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| File | Field | Field Type | Length | Field Description |
| PBBILLBOND | BBBDEALID | P | 9,0 | BOND DEAL ID |
| PBBILLBOND | BBBONDSEQ | P | 3,0 | BOND SEQ\# |
| PBBILLBOND | BBCML\# | P | 9,0 | LOAN NUMBER |
| PBBILLBOND | BBDESC | A | 50 | BOND DESCRIPTION |
| PBBILLBOND | BBCUSIP | A | 50 | CUSIP NUMBER |
| PBBILLBOND | BBCURRBAL | P | 17,2 | PRINCIPAL BALANCE |
| PBBILLBOND | BBTAXEMPT | A | 1 | EXEMPT/TAXABLE |
| PBBILLBOND | BBIFROMDTE | L | 10 | INTEREST FROM DATE |
| PBBILLBOND | BBITODATE | L | 10 | INTEREST THROUGH DATE |
| PBBILLBOND | BBIBC | A | 3 | INTEREST RATE INTEREST BASIS |
| PBBILLBOND | BBICFRMDT1 | P | 8,0 | INTEREST COMPONENT BEGIN DATE \#1 |
| PBBILLBOND | BBICENDDT1 | P | 8,0 | INTEREST COMPONENT END DATE \#1 |
| PBBILLBOND | BBZSBB1 | P | 17,2 | INTEREST COMPONENT BOND BALANCE \#1 |
| PBBILLBOND | BBZSRRATE1 | P | 17,15 | INTEREST COMPONENT INTEREST RATE \#1 |
| PBBILLBOND | BBNODAYS1 | P | 7,0 | INTEREST COMPONENT \# DAYS \#1 |
| PBBILLBOND | BBINTAMT1 | P | 17,2 | INTEREST COMPONENT INTEREST AMOUNT \#1 |
| PBBILLBOND | BBICFRMDT2 | P | 8,0 | INTEREST COMPONENT BEGIN DATE \#2 |
| PBBILLBOND | BBICENDDT2 | P | 8,0 | INTEREST COMPONENT END DATE \#2 |
| PBBILLBOND | BBZSBB2 | P | 17,2 | INTEREST COMPONENT BOND BALANCE \#2 |
| PBBILLBOND | BBZSRRATE2 | P | 17,2 | INTEREST COMPONENT INTEREST RATE \#2 |
| PBBILLBOND | BBNODAYS2 | P | 7,0 | INTEREST COMPONENT \# DAYS \#2 |
| PBBILLBOND | BBINTAMT2 | P | 17,2 | INTEREST COMPONENT INTEREST AMOUNT \#2 |
| PBBILLBOND | BBICFRMDT3 | P | 8,0 | INTEREST COMPONENT BEGIN DATE \#3 |
| PBBILLBOND | BBICENDDT3 | P | 8,0 | INTEREST COMPONENT END DATE \#3 |
| PBBILLBOND | BBZSBB3 | P | 17,2 | INTEREST COMPONENT BOND BALANCE \#3 |
| PBBILLBOND | BBZSRRATE3 | P | 17,15 | INTEREST COMPONENT INTEREST RATE \#3 |
| PBBILLBOND | BBNODAYS3 | P | 7,0 | INTEREST COMPONENT \# DAYS \#3 |
| PBBILLBOND | BBINTAMT3 | P | 17,2 | INTEREST COMPONENT INTEREST AMOUNT \#3 |


| PBBILLBOND | BBICFRMDT4 | P | 8,0 | INTEREST COMPONENT BEGIN DATE \#4 |
| :---: | :---: | :---: | :---: | :---: |
| PBBILLBOND | BBICENDDT4 | P | 8,0 | INTEREST COMPONENT END DATE \#4 |
| PBBILLBOND | BBZSBB4 | P | 17,2 | INTEREST COMPONENT BOND BALANCE \#4 |
| PBBILLBOND | BBZSRRATE4 | P | 17,15 | INTEREST COMPONENT INTEREST RATE \#4 |
| PBBILLBOND | BBNODAYS4 | P | 7,0 | INTEREST COMPONENT \# DAYS \#4 |
| PBBILLBOND | BBINTAMT4 | P | 17,2 | INTEREST COMPONENT INTEREST AMOUNT \#4 |
| PBBILLBOND | BBICFRMDT5 | P | 8,0 | INTEREST COMPONENT BEGIN DATE \#5 |
| PBBILLBOND | BBICENDDT5 | P | 8,0 | INTEREST COMPONENT END DATE \#5 |
| PBBILLBOND | BBZSBB5 | P | 17,2 | INTEREST COMPONENT BOND BALANCE \#5 |
| PBBILLBOND | BBZSRRATE5 | P | 17,15 | INTEREST COMPONENT INTEREST RATE \#5 |
| PBBILLBOND | BBNODAYS5 | P | 7,0 | INTEREST COMPONENT \# DAYS \#5 |
| PBBILLBOND | BBINTAMT5 | P | 17,2 | INTEREST COMPONENT INTEREST AMOUNT \#5 |
| PBBILLBOND | BBICFRMDT6 | P | 8,0 | INTEREST COMPONENT BEGIN DATE \#6 |
| PBBILLBOND | BBICENDDT6 | P | 8,0 | INTEREST COMPONENT END DATE \#6 |
| PBBILLBOND | BBZSBB6 | P | 17,2 | INTEREST COMPONENT BOND BALANCE \#6 |
| PBBILLBOND | BBZSRRATE6 | P | 17,15 | INTEREST COMPONENT INTEREST RATE \#6 |
| PBBILLBOND | BBNODAYS6 | P | 7,0 | INTEREST COMPONENT \# DAYS \#6 |
| PBBILLBOND | BBINTAMT6 | P | 17,2 | INTEREST COMPONENT INTEREST AMOUNT \#6 |
| PBBILLBOND | BBICFRMDT7 | P | 8,0 | INTEREST COMPONENT BEGIN DATE \#7 |
| PBBILLBOND | BBICENDDT7 | P | 8,0 | INTEREST COMPONENT END DATE \#7 |
| PBBILLBOND | BBZSBB7 | P | 17,2 | INTEREST COMPONENT BOND BALANCE \#7 |
| PBBILLBOND | BBZSRRATE7 | P | 17,15 | INTEREST COMPONENT INTEREST RATE \#7 |
| PBBILLBOND | BBNODAYS7 | P | 7,0 | INTEREST COMPONENT \# DAYS \#7 |
| PBBILLBOND | BBINTAMT7 | P | 17,2 | INTEREST COMPONENT INTEREST AMOUNT \#7 |
| PBBILLBOND | BBICFRMDT8 | P | 8,0 | INTEREST COMPONENT BEGIN DATE \#8 |
| PBBILLBOND | BBICENDDT8 | P | 8,0 | INTEREST COMPONENT END DATE \#8 |
| PBBILLBOND | BBZSBB8 | P | 17,2 | INTEREST COMPONENT BOND BALANCE \#8 |
| PBBILLBOND | BBZSRRATE8 | P | 17,15 | INTEREST COMPONENT INTEREST RATE \#8 |
| PBBILLBOND | BBNODAYS8 | P | 7,0 | INTEREST COMPONENT \# DAYS \#8 |
| PBBILLBOND | BBINTAMT8 | P | 17,2 | INTEREST COMPONENT INTEREST AMOUNT \#8 |
| PBBILLBOND | BBICFRMDT9 | P | 8,0 | INTEREST COMPONENT BEGIN DATE \#9 |
| PBBILLBOND | BBICENDDT9 | P | 8,0 | INTEREST COMPONENT END DATE \#9 |


|  |  |  |  |  |
| :--- | :--- | :--- | ---: | :--- |
| PBBILLBOND | BBZSBB9 | P | 17,2 | INTEREST COMPONENT BOND BALANCE \#9 |
| PBBILLBOND | BBZSRRATE9 | P | 17,15 | INTEREST COMPONENT INTEREST RATE \#9 |
| PBBILLBOND | BBNODAYS9 | P | 7,0 | INTEREST COMPONENT \# DAYS \#9 |
| PBBILLBOND | BBINTAMT9 | P | 17,2 | INTEREST COMPONENT INTEREST AMOUNT \#9 |
| PBBILLBOND | BBICFRMDTO | P | 8,0 | INTEREST COMPONENT BEGIN DATE \#O |
| PBBILLBOND | BBICENDDTO | P | 8,0 | INTEREST COMPONENT END DATE \#O |
| PBBILLBOND | BBZSBBO | P | 17,2 | INTEREST COMPONENT BOND BALANCE \#O |
| PBBILLBOND | BBZSRRATEO | P | 17,15 | INTEREST COMPONENT INTEREST RATE \#O |
| PBBILLBOND | BBNODAYSO | P | 7,0 | INTEREST COMPONENT \# DAYS \#O |
| PBBILLBOND | BBINTAMTO | P | 17,2 | INTEREST COMPONENT INTEREST AMOUNT \#O |
| PBBILLBOND | BBTOTDAYS | P | 7,0 | INTEREST COMPONENT TOTAL \# DAYS |
| PBBILLBOND | BBTOTINTS | P | 17,2 | INTEREST COMPONENT TOTAL INTEREST AMOUNT |
| PBBILLBOND | BBUSERIADJ | P | 17,2 | INTEREST COMPONENT USER ADJUSTMENT |
| PBBILLBOND | BBTOTINTD\$ | P | 17,2 | INTEREST COMPONENT TOTAL INTEREST DUE AMT |
| PBBILLBOND | BBIADJFLP | P | 17,2 | INTEREST COMPONENT CREDIT F/PREV MONTH |
| PBBILLBOND | BBWEIGHTAV | P | 17,2 | INTEREST COMPONENT WEIGHTED AVERAGE |
| PBBILLBOND | BBTOTLMINT | P | 17,2 | INTEREST COMPONENT TOTAL MONTHLY INTEREST |
| PBBILLBOND | BBNOTIONAL | P | 17,2 | NOTIONAL BALANCE AMOUNT |
| PBBILLBOND | BBPRFB | P | 17,2 | PRF BALANCE AMOUNT |
| PBBILLBOND | BBPRFB2 | P | 17,2 | PRF BALANCE AMOUNT |

## PBBILLFEE - Bond Billing Information related to Bond Fees

| File | Field | Field Type | Length | Field Description |
| :---: | :---: | :---: | :---: | :---: |
| PBBILLFEE | BFBDEALID | P | 9,0 | BOND DEAL ID |
| PBBILLFEE | BFCMLN | P | 9,0 | LOAN NUMBER |
| PBBILLFEE | BFBONDSEQ | P | 3,0 | BOND SEQ NUMBER |
| PBBILLFEE | BFFEENM | A | 30 | FEE NAME |
| PBBILLFEE | BFIBASCOD | A | 3 | INTEREST BASIS |
| PBBILLFEE | BFPMTFRQD | P | 3,0 | PAYMENT FREQUENCY |
| PBBILLFEE | BFRATE | P | 15,13 | FEE RATE |
| PBBILLFEE | BFCODE | P | 3,0 | CODE |
| PBBILLFEE | BFFAMT | P | 15,2 | AMOUNT DUE |
| PBBILLFEE | BFAMTC | P | 15,2 | AMOUNT COLLECTED |
| PBBILLFEE | BFDUEDT | L | 10L | FEE DUE DATE |
| PBBILLFEE | BFTFEE | P | 17,2 | FEE TOTAL |
| PBBILLFEE | BFCFEE | P | 15,2 | CREDIT FACILITY AMOUNT |
| PBBILLFEE | BFPRFUND | P | 15,2 | PRINCIPAL RESERVE FUND |
| PBBILLFEE | BFGTTLF | P | 17,2 | GRAND TOTAL PRE FEES |
| PBBILLFEE | BFLQFEE | P | 15,2 | LIQUIDITY FEE |
| PBBILLFEE | BFGTLQF | P | 17,2 | GRAND TOTAL LIQ FEES |
| PBBILLFEE | SYSCRT | Z | 26 | Date/Time created (system) |
| PBBILLFEE | SYSUPD | Z | 26 | Date/Time updated (system) |
| PBBILLFEE | SYSCRTBY | A | 10 | Created by user (system) |
| PBBILLFEE | SYSUPDBY | A | 10 | Updated by user (system) |
| PBBILLFEE | PGMCRTBY | A | 10 | Created by program |
| PBBILLFEE | PGMUPDBY | A | 10 | Updated by program |


|  |  |  |  |  |
| :--- | :--- | :--- | ---: | :--- |
| PBBILLLOAN | BBBDEALID | P | 9,0 | BOND DEAL ID |
| PBBILLLOAN | BBUDATE | L | 10 | DATE OF BILL |
| PBBILLLOAN | BBCMNBDE | L | 10 | DUE BY DATE |
| PBBILLLOAN | BBCML\# | 9,0 | LOAN NUMBER |  |
| PBBILLLOAN | BBCMSNAM | A | 13 | LOAN SHORT NAME |
| PBBILLLOAN | BBCMPBAL | P | 17,2 | MORTGAGE NOTE PRINCIPAL BAL |
| PBBILLLOAN | BBCME1B | P | 17,2 | TAX BALANCE |
| PBBILLLOAN | BBCME2B | 17,2 | INSURANCE BALANCE |  |
| PBBILLLOAN | BBS6NAME | A | 30 | WIRE INFO: BANK NAME |
| PBBILLLOAN | BBS6ADD1 | A | 9,030 | WIRE INFO: BANK ADDRESS |
| PBBILLLOAN | BBS6CITY | A | 9,025 | WIRE INFO: BANK ADDRESS CITY |
| PBBILLLOAN | BBS6STAT | A | 2 | WIRE INFO: BANK ADDR STATE |
| PBBILLLOAN | BBS6ZIP | P | 9,0 | WIRE INFO: BANK ADDR ZIP |
| PBBILLLOAN | BBS6CONTRY | A | 30 | WIRE INFO: BANK ADDR COUNTRY |
| PBBILLLOAN | BBZVPMTBNK | A | 3 | WIRE INFO: BANK ABA |
| PBBILLLOAN | BBZVPMTDDA | 15 | SERVICERS ACCOUNT \# AT BANK |  |
| PBBILLLOAN | BBIVNAME | A | 30 | CREDIT TO |
| PBBILLLOAN | BBNMFLNAME | A | 60 | CREDIT MANAGER |
| PBBILLLOAN | BBNMEMPL | A | 25 | CM COMPANY |
| PBBILLLOAN | BBNMDEPT | A | 30 | CM DEPARTMENT |
| PBBILLLOAN | BBADST\#NAM | A | 61 | CM ADDRESS 1 |
| PBBILLLOAN | BBADCTYSTZ | A | 87 | CM ADDRESS 2 |
| PBBILLLOAN | BBNMPHONE | A | 22 | CM PHONE |
| PBBILLLOAN | BBNMFAX | A | 22 | CM FAX |
| PBBILLLOAN | BBNMEMAIL1 | 50 | CM EMAIL 1 |  |
| PBBILLLOAN | BBNMEMAIL2 | 50 | CM EMAIL 2 |  |
| PBBILLLOAN | BBNMFLCOMP | A | BILL RECIPIENT \#1 NAME |  |
| PBBILLLOAN | BBNMPHONEB | A | A | BILL RECIPIENT \#1 PHONE |
| PBBILLLOAN | BBPQNAME | 100 | PROPERTY NAME |  |
|  |  |  |  |  |


| PBBILLLOAN | BBCHTDATE | L | 10L | PAYMENT RECEIVED DATE |
| :---: | :---: | :---: | :---: | :---: |
| PBBILLLOAN | BBCHTR\$ | P | 17,2 | AMOUNT RECEIVED |
| PBBILLLOAN | BBREMANDUE | P | 17,2 | REMAINING DUE AMOUNT |
| PBBILLLOAN | BBNONOTE01 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE02 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE03 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE04 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE05 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE06 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE07 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE08 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE09 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE10 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE11 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE12 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE13 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE14 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE15 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE16 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE17 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE18 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE19 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE20 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE21 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE22 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE23 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE24 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBNONOTE25 | A | 600 | NOTES(FEE, BAL \& TOTAL LINE) |
| PBBILLLOAN | BBSOPMT01 | P | 17,2 | RESERVE \#1 AMOUNT |


| PBBILLLOAN | BBSOPMT02 | P | 17,2 | RESERVE \#2 AMOUNT |
| :---: | :---: | :---: | :---: | :---: |
| PBBILLLOAN | BBSOPMT03 | P | 17,2 | RESERVE \#3 AMOUNT |
| PbBiLLLOAN | BBSOPMT04 | P | 17,2 | RESERVE \#4 AMOUNT |
| PBBILLLOAN | BBSOPMT05 | P | 17,2 | RESERVE \#5 AMOUNT |
| PBBILLLOAN | BBSOPMT06 | P | 17,2 | RESERVE \#6 AMOUNT |
| PBBILLLOAN | BBSOPMT07 | P | 17,2 | RESERVE \#7 AMOUNT |
| PBBILLLOAN | BBSOPMT08 | P | 17,2 | RESERVE \#8 AMOUNT |
| PBBILLLOAN | BBSOPMT09 | P | 17,2 | RESERVE \#9 AMOUNT |
| PBBILLLOAN | BBSOPMT10 | P | 17,2 | RESERVE \#10 AMOUNT |
| PbBillloan | BBSOPMT11 | P | 17,2 | RESERVE \#11 AMOUNT |
| PBBILLLOAN | BBSOPMT12 | P | 17,2 | RESERVE \#12 AMOUNT |
| PbBILLLOAN | BBSOPMT13 | P | 17,2 | RESERVE \#13 AMOUNT |
| PBBILLLOAN | BBSOPMT14 | P | 17,2 | RESERVE \#14 AMOUNT |
| PBBILLLOAN | BBSOPMT15 | P | 17,2 | RESERVE \#15 AMOUNT |
| PBBillloan | BBSOPMT16 | P | 17,2 | RESERVE \#16 AMOUNT |
| PBBILLLOAN | BBSOPMT17 | P | 17,2 | RESERVE \#17 AMOUNT |
| PbBILLLOAN | BBSOPMT18 | P | 17,2 | RESERVE \#18 AMOUNT |
| PBBILLLOAN | BBSOPMT19 | P | 17,2 | RESERVE \#19 AMOUNT |
| PBBILLLOAN | BBSOPMT20 | P | 17,2 | RESERVE \#20 AMOUNT |
| PbBiLLLOAN | BBSOPMT21 | P | 17,2 | RESERVE \#21 AMOUNT |
| PBBILLLOAN | BBSOPMT22 | P | 17,2 | RESERVE \#22 AMOUNT |
| PbBILLLOAN | BBSOPMT23 | P | 17,2 | RESERVE \#23 AMOUNT |
| PBBILLLOAN | BBSOPMT24 | P | 17,2 | RESERVE \#24 AMOUNT |
| PBBILLLOAN | BBSOPMT25 | P | 17,2 | RESERVE \#25 AMOUNT |
| PBBillloan | BBSOPMT26 | P | 17,2 | RESERVE \#26 AMOUNT |
| PBBILLLOAN | BBSOPMT27 | P | 17,2 | RESERVE \#27 AMOUNT |
| PbBillloan | BBSOPMT28 | P | 17,2 | RESERVE \#28 AMOUNT |
| PBBILLLOAN | BBSOPMT29 | P | 17,2 | RESERVE \#29 AMOUNT |
| PBBILLLOAN | BBSOPMT30 | P | 17,2 | RESERVE \#30 AMOUNT |


| PBBILLLOAN | BBSOPMT31 | P | 17,2 | RESERVE \#31 AMOUNT |
| :---: | :---: | :---: | :---: | :---: |
| PBBILLLOAN | BBSOPMT32 | P | 17,2 | RESERVE \#32 AMOUNT |
| PBBILLLOAN | BBSOPMT33 | P | 17,2 | RESERVE \#33 AMOUNT |
| PBBILLLOAN | BBSOPMT34 | P | 17,2 | RESERVE \#34 AMOUNT |
| PBBILLLOAN | BBSOPMT35 | P | 17,2 | RESERVE \#35 AMOUNT |
| PBBILLLOAN | BBSOPMT36 | P | 17,2 | RESERVE \#36 AMOUNT |
| PBBILLLOAN | BBSOPMT37 | P | 17,2 | RESERVE \#37 AMOUNT |
| PBBILLLOAN | BBSOPMT38 | P | 17,2 | RESERVE \#38 AMOUNT |
| PBBILLLOAN | BBSOPMT39 | P | 17,2 | RESERVE \#39 AMOUNT |
| PBBILLLOAN | BBSOPMT40 | P | 17,2 | RESERVE \#40 AMOUNT |
| PBBILLLOAN | BBSOPMT41 | P | 17,2 | RESERVE \#41 AMOUNT |
| PBBILLLOAN | BBSOPMT42 | P | 17,2 | RESERVE \#42 AMOUNT |
| PBBILLLOAN | BBSOPMT43 | P | 17,2 | RESERVE \#43 AMOUNT |
| PBBILLLOAN | BBSOPMT44 | P | 17,2 | RESERVE \#44 AMOUNT |
| PBBILLLOAN | BBSOPMT45 | P | 17,2 | RESERVE \#45 AMOUNT |
| PBBILLLOAN | BBSOPMT46 | P | 17,2 | RESERVE \#46 AMOUNT |
| PBBILLLOAN | BBSOPMT47 | P | 17,2 | RESERVE \#47 AMOUNT |
| PBBILLLOAN | BBSOPMT48 | P | 17,2 | RESERVE \#48 AMOUNT |
| PBBILLLOAN | BBSOPMT49 | P | 17,2 | RESERVE \#49 AMOUNT |
| PBBILLLOAN | BBSOPMT50 | P | 17,2 | RESERVE \#50 AMOUNT |
| PBBILLLOAN | BBSOPMT51 | P | 17,2 | RESERVE \#51 AMOUNT |
| PBBILLLOAN | BBSOPMT52 | P | 17,2 | RESERVE \#52 AMOUNT |
| PBBILLLOAN | BBSOPMT53 | P | 17,2 | RESERVE \#53 AMOUNT |
| PBBILLLOAN | BBSOPMT54 | P | 17,2 | RESERVE \#54 AMOUNT |
| PBBILLLOAN | BBSOPMT55 | P | 17,2 | RESERVE \#55 AMOUNT |
| PBBILLLOAN | BBSOPMT56 | P | 17,2 | RESERVE \#56 AMOUNT |
| PBBILLLOAN | BBSOPMT57 | P | 17,2 | RESERVE \#57 AMOUNT |
| PBBILLLOAN | BBSOPMT58 | P | 17,2 | RESERVE \#58 AMOUNT |
| PBBILLLOAN | BBSOPMT59 | P | 17,2 | RESERVE \#59 AMOUNT |


| PBBILLLOAN | BBSOPMT60 | P | 17,2 | RESERVE \#60 AMOUNT |
| :---: | :---: | :---: | :---: | :---: |
| PBBILLLOAN | BBSOPMT61 | P | 17,2 | RESERVE \#61 AMOUNT |
| PBBILLLOAN | BBSOPMT62 | P | 17,2 | RESERVE \#62 AMOUNT |
| PBBILLLOAN | BBSOPMT63 | P | 17,2 | RESERVE \#63 AMOUNT |
| PBBILLLOAN | BBSOPMT64 | P | 17,2 | RESERVE \#64 AMOUNT |
| PBBILLLOAN | BBSOPMT65 | P | 17,2 | RESERVE \#65 AMOUNT |
| PBBILLLOAN | BBSOPMT66 | P | 17,2 | RESERVE \#66 AMOUNT |
| PBBILLLOAN | BBSOPMT67 | P | 17,2 | RESERVE \#67 AMOUNT |
| PBBILLLOAN | BBSOPMT68 | P | 17,2 | RESERVE \#68 AMOUNT |
| PBBILLLOAN | BBSOPMT69 | P | 17,2 | RESERVE \#69 AMOUNT |
| PBBILLLOAN | BBSOPMT70 | P | 17,2 | RESERVE \#70 AMOUNT |
| PBBILLLOAN | BBSOPMT71 | P | 17,2 | RESERVE \#71 AMOUNT |
| PBBILLLOAN | BBSOPMT72 | P | 17,2 | RESERVE \#72 AMOUNT |
| PBBILLLOAN | BBSOPMT73 | P | 17,2 | RESERVE \#73 AMOUNT |
| PBBILLLOAN | BBSOPMT74 | P | 17,2 | RESERVE \#74 AMOUNT |
| PBBILLLOAN | BBSOPMT75 | P | 17,2 | RESERVE \#75 AMOUNT |
| PBBILLLOAN | BBSOPMT76 | P | 17,2 | RESERVE \#76 AMOUNT |
| PBBILLLOAN | BBSOPMT77 | P | 17,2 | RESERVE \#77 AMOUNT |
| PBBILLLOAN | BBSOPMT78 | P | 17,2 | RESERVE \#78 AMOUNT |
| PBBILLLOAN | BBSOPMT79 | P | 17,2 | RESERVE \#79 AMOUNT |
| PBBILLLOAN | BBSOPMT80 | P | 17,2 | RESERVE \#80 AMOUNT |
| PBBILLLOAN | BBSOPMT81 | P | 17,2 | RESERVE \#81 AMOUNT |
| PBBILLLOAN | BBSOPMT82 | P | 17,2 | RESERVE \#82 AMOUNT |
| PBBILLLOAN | BBSOPMT83 | P | 17,2 | RESERVE \#83 AMOUNT |
| PBBILLLOAN | BBSOPMT84 | P | 17,2 | RESERVE \#84 AMOUNT |
| PBBILLLOAN | BBSOPMT85 | P | 17,2 | RESERVE \#85 AMOUNT |
| PBBILLLOAN | BBSOPMT86 | P | 17,2 | RESERVE \#86 AMOUNT |
| PBBILLLOAN | BBSOPMT87 | P | 17,2 | RESERVE \#87 AMOUNT |
| PBBILLLOAN | BBSOPMT88 | P | 17,2 | RESERVE \#88 AMOUNT |


| PBBILLLOAN | BBSOPMT89 | P | 17,2 | RESERVE \#89 AMOUNT |
| :---: | :---: | :---: | :---: | :---: |
| PBBILLLOAN | BBSOPMT90 | P | 17,2 | RESERVE \#90 AMOUNT |
| PBBILLLOAN | BBSOPMT91 | P | 17,2 | RESERVE \#91 AMOUNT |
| PBBILLLOAN | BBSOPMT92 | P | 17,2 | RESERVE \#92 AMOUNT |
| PBBILLLOAN | BBSOPMT93 | P | 17,2 | RESERVE \#93 AMOUNT |
| PBBILLLOAN | BBSOPMT94 | P | 17,2 | RESERVE \#94 AMOUNT |
| PBBILLLOAN | BBSOPMT95 | P | 17,2 | RESERVE \#95 AMOUNT |
| PBBILLLOAN | BBSOPMT96 | P | 17,2 | RESERVE \#96 AMOUNT |
| PBBILLLOAN | BBSOPMT97 | P | 17,2 | RESERVE \#97 AMOUNT |
| PBBILLLOAN | BBSOPMT98 | P | 17,2 | RESERVE \#98 AMOUNT |
| PBBILLLOAN | BBSOPMT99 | P | 17,2 | RESERVE \#99 AMOUNT |
| PBBILLLOAN | BBSOPMT100 | P | 17,2 | RESERVE \#100 AMOUNT |
| PBBILLLOAN | BBSIFFL01 | A | 30 | REPLACEMENT RESERVE NAME 1 |
| PBBILLLOAN | BBSIFFLO2 | A | 30 | REPLACEMENT RESERVE NAME 2 |
| PBBILLLOAN | BBSIFFLO3 | A | 30 | REPLACEMENT RESERVE NAME 3 |
| PBBILLLOAN | BBSIFFL04 | A | 30 | REPLACEMENT RESERVE NAME 4 |
| PBBILLLOAN | BBSIFFL05 | A | 30 | REPLACEMENT RESERVE NAME 5 |
| PBBILLLOAN | BBSIFFL06 | A | 30 | REPLACEMENT RESERVE NAME 6 |
| PBBILLLOAN | BBSIFFL07 | A | 30 | REPLACEMENT RESERVE NAME 7 |
| PBBILLLOAN | BBSIFFL08 | A | 30 | REPLACEMENT RESERVE NAME 8 |
| PBBILLLOAN | BBSIFFL09 | A | 30 | REPLACEMENT RESERVE NAME 9 |
| PBBILLLOAN | BBSIFFL10 | A | 30 | REPLACEMENT RESERVE NAME 10 |
| PBBILLLOAN | BBSIFFL11 | A | 30 | REPLACEMENT RESERVE NAME 11 |
| PBBILLLOAN | BBSIFFL12 | A | 30 | REPLACEMENT RESERVE NAME 12 |
| PBBILLLOAN | BBSIFFL13 | A | 30 | REPLACEMENT RESERVE NAME 13 |
| PBBILLLOAN | BBSIFFL14 | A | 30 | REPLACEMENT RESERVE NAME 14 |
| PBBILLLOAN | BBSIFFL15 | A | 30 | REPLACEMENT RESERVE NAME 15 |
| PBBILLLOAN | BBSIFFL16 | A | 30 | REPLACEMENT RESERVE NAME 16 |
| PBBILLLOAN | BBSIFFL17 | A | 30 | REPLACEMENT RESERVE NAME 17 |


| PBBILLLOAN | BBSIFFL18 | A | 30 | REPLACEMENT RESERVE NAME 18 |
| :---: | :---: | :---: | :---: | :---: |
| PBBILLLOAN | BBSIFFL19 | A | 30 | REPLACEMENT RESERVE NAME 19 |
| PBBILLLOAN | BBSIFFL20 | A | 30 | REPLACEMENT RESERVE NAME 20 |
| PBBILLLOAN | BBSIFFL21 | A | 30 | REPLACEMENT RESERVE NAME 21 |
| PBBILLLOAN | BBSIFFL22 | A | 30 | REPLACEMENT RESERVE NAME 22 |
| PBBILLLOAN | BBSIFFL23 | A | 30 | REPLACEMENT RESERVE NAME 23 |
| PBBILLLOAN | BBSIFFL24 | A | 30 | REPLACEMENT RESERVE NAME 24 |
| PBBILLLOAN | BBSIFFL25 | A | 30 | REPLACEMENT RESERVE NAME 25 |
| PBBILLLOAN | BBSIFFL26 | A | 30 | REPLACEMENT RESERVE NAME 26 |
| PBBILLLOAN | BBSIFFL27 | A | 30 | REPLACEMENT RESERVE NAME 27 |
| PBBILLLOAN | BBSIFFL28 | A | 30 | REPLACEMENT RESERVE NAME 28 |
| PBBILLLOAN | BBSIFFL29 | A | 30 | REPLACEMENT RESERVE NAME 29 |
| PBBILLLOAN | BBSIFFL30 | A | 30 | REPLACEMENT RESERVE NAME 30 |
| PBBILLLOAN | BBSIFFL31 | A | 30 | REPLACEMENT RESERVE NAME 31 |
| PBBILLLOAN | BBSIFFL32 | A | 30 | REPLACEMENT RESERVE NAME 32 |
| PBBILLLOAN | BBSIFFL33 | A | 30 | REPLACEMENT RESERVE NAME 33 |
| PBBILLLOAN | BBSIFFL34 | A | 30 | REPLACEMENT RESERVE NAME 34 |
| PBBILLLOAN | BBSIFFL35 | A | 30 | REPLACEMENT RESERVE NAME 35 |
| PBBILLLOAN | BBSIFFL36 | A | 30 | REPLACEMENT RESERVE NAME 36 |
| PBBILLLOAN | BBSIFFL37 | A | 30 | REPLACEMENT RESERVE NAME 37 |
| PBBILLLOAN | BBSIFFL38 | A | 30 | REPLACEMENT RESERVE NAME 38 |
| PBBILLLOAN | BBSIFFL39 | A | 30 | REPLACEMENT RESERVE NAME 39 |
| PBBILLLOAN | BBSIFFL40 | A | 30 | REPLACEMENT RESERVE NAME 40 |
| PBBILLLOAN | BBSIFFL41 | A | 30 | REPLACEMENT RESERVE NAME 41 |
| PBBILLLOAN | BBSIFFL42 | A | 30 | REPLACEMENT RESERVE NAME 42 |
| PBBILLLOAN | BBSIFFL43 | A | 30 | REPLACEMENT RESERVE NAME 43 |
| PBBILLLOAN | BBSIFFL44 | A | 30 | REPLACEMENT RESERVE NAME 44 |
| PBBILLLOAN | BBSIFFL45 | A | 30 | REPLACEMENT RESERVE NAME 45 |
| PBBILLLOAN | BBSIFFL46 | A | 30 | REPLACEMENT RESERVE NAME 46 |

PBBILLLOAN Bond Billing Information - Loan Level information Escrow/Reserves

| PBBILLLOAN | BBSIFFL47 | A | 30 | REPLACEMENT RESERVE NAME 47 |
| :---: | :---: | :---: | :---: | :---: |
| PBBILLLOAN | BBSIFFL48 | A | 30 | REPLACEMENT RESERVE NAME 48 |
| PBBILLLOAN | BBSIFFL49 | A | 30 | REPLACEMENT RESERVE NAME 49 |
| PBBILLLOAN | BBSIFFL50 | A | 30 | REPLACEMENT RESERVE NAME 50 |
| PBBILLLOAN | BBSIFFL51 | A | 30 | REPLACEMENT RESERVE NAME 51 |
| PBBILLLOAN | BBSIFFL52 | A | 30 | REPLACEMENT RESERVE NAME 52 |
| PBBILLLOAN | BBSIFFL53 | A | 30 | REPLACEMENT RESERVE NAME 53 |
| PBBILLLOAN | BBSIFFL54 | A | 30 | REPLACEMENT RESERVE NAME 54 |
| PBBILLLOAN | BBSIFFL55 | A | 30 | REPLACEMENT RESERVE NAME 55 |
| PBBILLLOAN | BBSIFFL56 | A | 30 | REPLACEMENT RESERVE NAME 56 |
| PBBILLLOAN | BBSIFFL57 | A | 30 | REPLACEMENT RESERVE NAME 57 |
| PBBILLLOAN | BBSIFFL58 | A | 30 | REPLACEMENT RESERVE NAME 58 |
| PBBILLLOAN | BBSIFFL59 | A | 30 | REPLACEMENT RESERVE NAME 59 |
| PBBILLLOAN | BBSIFFL60 | A | 30 | REPLACEMENT RESERVE NAME 60 |
| PBBILLLOAN | BBSIFFL61 | A | 30 | REPLACEMENT RESERVE NAME 61 |
| PBBILLLOAN | BBSIFFL62 | A | 30 | REPLACEMENT RESERVE NAME 62 |
| PBBILLLOAN | BBSIFFL63 | A | 30 | REPLACEMENT RESERVE NAME 63 |
| PBBILLLOAN | BBSIFFL64 | A | 30 | REPLACEMENT RESERVE NAME 64 |
| PBBILLLOAN | BBSIFFL65 | A | 30 | REPLACEMENT RESERVE NAME 65 |
| PBBILLLOAN | BBSIFFL66 | A | 30 | REPLACEMENT RESERVE NAME 66 |
| PBBILLLOAN | BBSIFFL67 | A | 30 | REPLACEMENT RESERVE NAME 67 |
| PBBILLLOAN | BBSIFFL68 | A | 30 | REPLACEMENT RESERVE NAME 68 |
| PBBILLLOAN | BBSIFFL69 | A | 30 | REPLACEMENT RESERVE NAME 69 |
| PBBILLLOAN | BBSIFFL70 | A | 30 | REPLACEMENT RESERVE NAME 70 |
| PBBILLLOAN | BBSIFFL71 | A | 30 | REPLACEMENT RESERVE NAME 71 |
| PBBILLLOAN | BBSIFFL72 | A | 30 | REPLACEMENT RESERVE NAME 72 |
| PBBILLLOAN | BBSIFFL73 | A | 30 | REPLACEMENT RESERVE NAME 73 |
| PBBILLLOAN | BBSIFFL74 | A | 30 | REPLACEMENT RESERVE NAME 74 |
| PBBILLLOAN | BBSIFFL75 | A | 30 | REPLACEMENT RESERVE NAME 75 |

PBBILLLOAN Bond Billing Information - Loan Level information Escrow/Reserves

| PBBILLLOAN | BBSIFFL76 | A | 30 | REPLACEMENT RESERVE NAME 76 |
| :---: | :---: | :---: | :---: | :---: |
| PBBILLLOAN | BBSIFFL77 | A | 30 | REPLACEMENT RESERVE NAME 77 |
| PBBILLLOAN | BBSIFFL78 | A | 30 | REPLACEMENT RESERVE NAME 78 |
| PBBILLLOAN | BBSIFFL79 | A | 30 | REPLACEMENT RESERVE NAME 79 |
| PBBILLLOAN | BBSIFFL80 | A | 30 | REPLACEMENT RESERVE NAME 80 |
| PBBILLLOAN | BBSIFFL81 | A | 30 | REPLACEMENT RESERVE NAME 81 |
| PBBILLLOAN | BBSIFFL82 | A | 30 | REPLACEMENT RESERVE NAME 82 |
| PBBILLLOAN | BBSIFFL83 | A | 30 | REPLACEMENT RESERVE NAME 83 |
| PBBILLLOAN | BBSIFFL84 | A | 30 | REPLACEMENT RESERVE NAME 84 |
| PBBILLLOAN | BBSIFFL85 | A | 30 | REPLACEMENT RESERVE NAME 85 |
| PBBILLLOAN | BBSIFFL86 | A | 30 | REPLACEMENT RESERVE NAME 86 |
| PBBILLLOAN | BBSIFFL87 | A | 30 | REPLACEMENT RESERVE NAME 87 |
| PBBILLLOAN | BBSIFFL88 | A | 30 | REPLACEMENT RESERVE NAME 88 |
| PBBILLLOAN | BBSIFFL89 | A | 30 | REPLACEMENT RESERVE NAME 89 |
| PBBILLLOAN | BBSIFFL90 | A | 30 | REPLACEMENT RESERVE NAME 90 |
| PBBILLLOAN | BBSIFFL91 | A | 30 | REPLACEMENT RESERVE NAME 91 |
| PBBILLLOAN | BBSIFFL92 | A | 30 | REPLACEMENT RESERVE NAME 92 |
| PBBILLLOAN | BBSIFFL93 | A | 30 | REPLACEMENT RESERVE NAME 93 |
| PBBILLLOAN | BBSIFFL94 | A | 30 | REPLACEMENT RESERVE NAME 94 |
| PBBILLLOAN | BBSIFFL95 | A | 30 | REPLACEMENT RESERVE NAME 95 |
| PBBILLLOAN | BBSIFFL96 | A | 30 | REPLACEMENT RESERVE NAME 96 |
| PBBILLLOAN | BBSIFFL97 | A | 30 | REPLACEMENT RESERVE NAME 97 |
| PBBILLLOAN | BBSIFFL98 | A | 30 | REPLACEMENT RESERVE NAME 98 |
| PBBILLLOAN | BBSIFFL99 | A | 30 | REPLACEMENT RESERVE NAME 99 |
| PBBILLLOAN | BBSIFFL100 | A | 30 | REPLACEMENT RESERVE NAME 100 |
| PBBILLLOAN | BBRBBAL01 | P | 17,2 | RESERVE \#1 BALANCE |
| PBBILLLOAN | BBRBBAL02 | P | 17,2 | RESERVE \#2 BALANCE |
| PBBILLLOAN | BBRBBAL03 | P | 17,2 | RESERVE \#3 BALANCE |
| PBBILLLOAN | BBRBBAL04 | P | 17,2 | RESERVE \#4 BALANCE |

PBBILLLOAN Bond Billing Information - Loan Level information Escrow/Reserves

| PBBILLLOAN | BBRBBAL05 | P | 17,2 | RESERVE \#5 BALANCE |
| :---: | :---: | :---: | :---: | :---: |
| PBBILLLOAN | BBRBBAL06 | P | 17,2 | RESERVE \#6 BALANCE |
| PBBILLLOAN | BBRBBAL07 | P | 17,2 | RESERVE \#7 BALANCE |
| PBBILLLOAN | BBRBBAL08 | P | 17,2 | RESERVE \#8 BALANCE |
| PBBILLLOAN | BBRBBAL09 | P | 17,2 | RESERVE \#9 BALANCE |
| PBBILLLOAN | BBRBBAL10 | P | 17,2 | RESERVE \#10 BALANCE |
| PBBILLLOAN | BBRBBAL11 | P | 17,2 | RESERVE \#11 BALANCE |
| PBBILLLOAN | BBRBBAL12 | P | 17,2 | RESERVE \#12 BALANCE |
| PBBILLLOAN | BBRBBAL13 | P | 17,2 | RESERVE \#13 BALANCE |
| PBBILLLOAN | BBRBBAL14 | P | 17,2 | RESERVE \#14 BALANCE |
| PBBILLLOAN | BBRBBAL15 | P | 17,2 | RESERVE \#15 BALANCE |
| PBBILLLOAN | BBRBBAL16 | P | 17,2 | RESERVE \#16 BALANCE |
| PBBILLLOAN | BBRBBAL17 | P | 17,2 | RESERVE \#17 BALANCE |
| PBBILLLOAN | BBRBBAL18 | P | 17,2 | RESERVE \#18 BALANCE |
| PBBILLLOAN | BBRBBAL19 | P | 17,2 | RESERVE \#19 BALANCE |
| PBBILLLOAN | BBRBBAL20 | P | 17,2 | RESERVE \#20 BALANCE |
| PBBILLLOAN | BBRBBAL21 | P | 17,2 | RESERVE \#21 BALANCE |
| PBBILLLOAN | BBRBBAL22 | P | 17,2 | RESERVE \#22 BALANCE |
| PBBILLLOAN | BBRBBAL23 | P | 17,2 | RESERVE \#23 BALANCE |
| PBBILLLOAN | BBRBBAL24 | P | 17,2 | RESERVE \#24 BALANCE |
| PBBILLLOAN | BBRBBAL25 | P | 17,2 | RESERVE \#25 BALANCE |
| PBBILLLOAN | BBRBBAL26 | P | 17,2 | RESERVE \#26 BALANCE |
| PBBILLLOAN | BBRBBAL27 | P | 17,2 | RESERVE \#27 BALANCE |
| PBBILLLOAN | BBRBBAL28 | P | 17,2 | RESERVE \#28 BALANCE |
| PBBILLLOAN | BBRBBAL29 | P | 17,2 | RESERVE \#29 BALANCE |
| PBBILLLOAN | BBRBBAL30 | P | 17,2 | RESERVE \#30 BALANCE |
| PBBILLLOAN | BBRBBAL31 | P | 17,2 | RESERVE \#31 BALANCE |
| PBBILLLOAN | BBRBBAL32 | P | 17,2 | RESERVE \#32 BALANCE |
| PBBILLLOAN | BBRBBAL33 | P | 17,2 | RESERVE \#33 BALANCE |


| PBBILLLOAN | BBRBBAL34 | P | 17,2 | RESERVE \#34 BALANCE |
| :---: | :---: | :---: | :---: | :---: |
| PBBILLLOAN | BBRBBAL35 | P | 17,2 | RESERVE \#35 BALANCE |
| PBBILLLOAN | BBRBBAL36 | P | 17,2 | RESERVE \#36 BALANCE |
| PBBILLLOAN | BBRBBAL37 | P | 17,2 | RESERVE \#37 BALANCE |
| PBBILLLOAN | BBRBBAL38 | P | 17,2 | RESERVE \#38 BALANCE |
| PBBILLLOAN | BBRBBAL39 | P | 17,2 | RESERVE \#39 BALANCE |
| PBBILLLOAN | BBRBBAL40 | P | 17,2 | RESERVE \#40 BALANCE |
| PBBILLLOAN | BBRBBAL41 | P | 17,2 | RESERVE \#41 BALANCE |
| PBBILLLOAN | BBRBBAL42 | P | 17,2 | RESERVE \#42 BALANCE |
| PBBILLLOAN | BBRBBAL43 | P | 17,2 | RESERVE \#43 BALANCE |
| PBBILLLOAN | BBRBBAL44 | P | 17,2 | RESERVE \#44 BALANCE |
| PBBILLLOAN | BBRBBAL45 | P | 17,2 | RESERVE \#45 BALANCE |
| PBBILLLOAN | BBRBBAL46 | P | 17,2 | RESERVE \#46 BALANCE |
| PBBILLLOAN | BBRBBAL47 | P | 17,2 | RESERVE \#47 BALANCE |
| PBBILLLOAN | BBRBBAL48 | P | 17,2 | RESERVE \#48 BALANCE |
| PBBILLLOAN | BBRBBAL49 | P | 17,2 | RESERVE \#49 BALANCE |
| PBBILLLOAN | BBRBBAL50 | P | 17,2 | RESERVE \#50 BALANCE |
| PBBILLLOAN | BBRBBAL51 | P | 17,2 | RESERVE \#51 BALANCE |
| PBBILLLOAN | BBRBBAL52 | P | 17,2 | RESERVE \#52 BALANCE |
| PBBILLLOAN | BBRBBAL53 | P | 17,2 | RESERVE \#53 BALANCE |
| PBBILLLOAN | BBRBBAL54 | P | 17,2 | RESERVE \#54 BALANCE |
| PBBILLLOAN | BBRBBAL55 | P | 17,2 | RESERVE \#55 BALANCE |
| PBBILLLOAN | BBRBBAL56 | P | 17,2 | RESERVE \#56 BALANCE |
| PBBILLLOAN | BBRBBAL57 | P | 17,2 | RESERVE \#57 BALANCE |
| PBBILLLOAN | BBRBBAL58 | P | 17,2 | RESERVE \#58 BALANCE |
| PBBILLLOAN | BBRBBAL59 | P | 17,2 | RESERVE \#59 BALANCE |
| PBBILLLOAN | BBRBBAL60 | P | 17,2 | RESERVE \#60 BALANCE |
| PBBILLLOAN | BBRBBAL61 | P | 17,2 | RESERVE \#61 BALANCE |
| PBBILLLOAN | BBRBBAL62 | P | 17,2 | RESERVE \#62 BALANCE |

PBBILLLOAN Bond Billing Information - Loan Level information Escrow/Reserves

| PBBILLLOAN | BBRBBAL63 | P | 17,2 | RESERVE \#63 BALANCE |
| :---: | :---: | :---: | :---: | :---: |
| PBBILLLOAN | BBRBBAL64 | P | 17,2 | RESERVE \#64 BALANCE |
| PBBILLLOAN | BBRBBAL65 | P | 17,2 | RESERVE \#65 BALANCE |
| PBBILLLOAN | BBRBBAL66 | P | 17,2 | RESERVE \#66 BALANCE |
| PBBILLLOAN | BBRBBAL67 | P | 17,2 | RESERVE \#67 BALANCE |
| PBBILLLOAN | BBRBBAL68 | P | 17,2 | RESERVE \#68 BALANCE |
| PBBILLLOAN | BBRBBAL69 | P | 17,2 | RESERVE \#69 BALANCE |
| PBBILLLOAN | BBRBBAL70 | P | 17,2 | RESERVE \#70 BALANCE |
| PBBILLLOAN | BBRBBAL71 | P | 17,2 | RESERVE \#71 BALANCE |
| PBBILLLOAN | BBRBBAL72 | P | 17,2 | RESERVE \#72 BALANCE |
| PBBILLLOAN | BBRBBAL73 | P | 17,2 | RESERVE \#73 BALANCE |
| PBBILLLOAN | BBRBBAL74 | P | 17,2 | RESERVE \#74 BALANCE |
| PBBILLLOAN | BBRBBAL75 | P | 17,2 | RESERVE \#75 BALANCE |
| PBBILLLOAN | BBRBBAL76 | P | 17,2 | RESERVE \#76 BALANCE |
| PBBILLLOAN | BBRBBAL77 | P | 17,2 | RESERVE \#77 BALANCE |
| PBBILLLOAN | BBRBBAL78 | P | 17,2 | RESERVE \#78 BALANCE |
| PBBILLLOAN | BBRBBAL79 | P | 17,2 | RESERVE \#79 BALANCE |
| PBBILLLOAN | BBRBBAL80 | P | 17,2 | RESERVE \#80 BALANCE |
| PBBILLLOAN | BBRBBAL81 | P | 17,2 | RESERVE \#81 BALANCE |
| PBBILLLOAN | BBRBBAL82 | P | 17,2 | RESERVE \#82 BALANCE |
| PBBILLLOAN | BBRBBAL83 | P | 17,2 | RESERVE \#83 BALANCE |
| PBBILLLOAN | BBRBBAL84 | P | 17,2 | RESERVE \#84 BALANCE |
| PBBILLLOAN | BBRBBAL85 | P | 17,2 | RESERVE \#85 BALANCE |
| PBBILLLOAN | BBRBBAL86 | P | 17,2 | RESERVE \#86 BALANCE |
| PBBILLLOAN | BBRBBAL87 | P | 17,2 | RESERVE \#87 BALANCE |
| PBBILLLOAN | BBRBBAL88 | P | 17,2 | RESERVE \#88 BALANCE |
| PBBILLLOAN | BBRBBAL89 | P | 17,2 | RESERVE \#89 BALANCE |
| PBBILLLOAN | BBRBBAL90 | P | 17,2 | RESERVE \#90 BALANCE |
| PBBILLLOAN | BBRBBAL91 | P | 17,2 | RESERVE \#91 BALANCE |

## PBBILLLOAN Bond Billing Information - Loan Level information Escrow/Reserves

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| PBBILLLOAN | BBRBBAL92 | P | 17,2 | RESERVE \#92 BALANCE |
| PBBILLLOAN | BBRBBAL93 | P | 17,2 | RESERVE \#93 BALANCE |
| PBBILLLOAN | BBRBBAL94 | P | 17,2 | RESERVE \#94 BALANCE |
| PBBILLLOAN | BBRBBAL95 | P | 17,2 | RESERVE \#95 BALANCE |
| PBBILLLOAN | BBRBBAL96 | P | 17,2 | RESERVE \#96 BALANCE |
| PBBILLLOAN | BBRBBAL97 | P | 17,2 | RESERVE \#97 BALANCE |
| PBBILLLOAN | BBRBBAL98 | P | 17,2 | RESERVE \#98 BALANCE |
| PBBILLLOAN | BBRBBAL99 | P | 17,2 | RESERVE \#99 BALANCE |
| PBBILLLOAN | BBRBBAL100 | P | 17,2 | RESERVE \#100 BALANCE |
| PBBILLLOAN | BBRCT\$D | P | 17,2 | TAX ESCROW DUE |
| PBBILLLOAN | BBRCF\$D | P | 17,2 | INSURANCE ESCROW DUE |
| PBBILLLOAN | BBOFEESPAY | P | 17,2 | OTHER FEES \& PAYMENTS |
| PBBILLLOAN | BBTOTESROW | P | 17,2 | TOTAL OF ALL ESCROWS |


| PBDBNR Bond Daily Balance and Rates File - Tracks daily balance and rate information for Non-Amortizing Loans |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| PBDBNR | ZSBDEALID | P | 9,0 | Bond Deal ID |
| PBDBNR | ZSBONDSEQ | P | 3,0 | Bond Seq |
| PBDBNR | ZSCYMD | L | 10 | Transaction Date |
| PBDBNR | ZSSEQ\# | P | 3,0 | Sequence Number |
| PBDBNR | ZSPDD | L | 10 | Payment Date |
| PBDBNR | ZSBTAOC | A | 1 | Balance to accrue on code |
| PBDBNR | ZSBTAO | P | 17,2 | Balance to accrue on |
| PBDBNR | ZSRRATE | P | 17,15 | Rate |
| PBDBNR | ZSIBC | A | 3 | Basis Code |
| PBDBNR | ZSRPD | P | 19,6 | Per Diem |
| PBDBNR | ZSRPD2 | P | 19,6 | Per Diem \#2 |
| PBDBNR | ZSRPD3 | P | 19,6 | Per Diem \#3 |
| PBDBNR | ZSUSED | A | 1 | Used Code |
| PBDBNR | ZSBDB | P | 17,2 | Bond Deal Balance |
| PBDBNR | ZSBB | P | 17,2 | Bond Balance |
| PBDBNR | ZSLB | P | 17,2 | Loan Balance |
| PBDBNR | ZSPRFB | P | 17,2 | PRF Balance |
| PBDBNR | ZSNB | P | 17,2 | Notional Balance |
| PBDBNR | ZSLOCB | P | 17,2 | LOC Balance |
| PBDBNR | SYSCRT | Z | 26 | Date/Time created (system) |
| PBDBNR | SYSUPD | z | 26 | Date/Time updated (system) |
| PBDBNR | SYSCRTBY | A | 10 | Created by user (system) |
| PBDBNR | SYSUPDBY | A | 10 | Updated by user (system) |
| PBDBNR | PGMCRTBY | A | 10 | Created by program |
| PBDBNR | PGMUPDBY | A | 10 | Updated by program |


| PBFEECHART - FEE TRANSLATION FILE - IDENTIFIES WHICH FEES CODES ARE ASSOCIATED WITH BONDS FEES |  |  |  |  |  |
| :--- | :--- | :--- | ---: | :--- | :---: |
| File |  | Field | Type | Length |  |
| PBFEECHART | YZDOCDESC | A | 25 | DESCRIPTION IN DOCUMENT |  |
| PBFEECHART | YZMADESCD | P | 3 | CORRESPONDING FEE CODE |  |
| PBFEECHART | SYSCRT | Z | 26 | Date/Time created (system) |  |
| PBFEECHART | SYSUPD | Z | 26 | Date/Time updated (system) |  |
| PBFEECHART | SYSCRTBY | A | 10 | Created by user (system) |  |
| PBFEECHART | SYSUPDBY | A | 10 | Updated by user (system) |  |
| PBFEECHART | PGMCRTBY | A | 10 | Created by program |  |
| PBFEECHART | PGMUPDBY | A | 10 | Updated by program |  |

PBDEAL - BOND DEAL INFORMATION - FIELDS FOUND IN THE PORTAL>BONDS>BOND DEAIL SCREEN

| File | Field | Type | Length |  |
| :--- | :--- | ---: | ---: | :--- |
| PBDEAL | ZVBDEALID | P | 9,0 | BOND DEAL ID |
| PBDEAL | ZVBDNAME | A | 52 | BOND NAME |
| PBDEAL | ZVOBDB | P | 17,2 | ORIGINAL DEAL BALANCE |
| PBDEAL | ZVCBDB | P | 17,2 | CURRENT DEAL BALANCE |
| PBDEAL | ZVTOTRA | P | 17,2 | TOTAL REDEMPTION AMOUNT |
| PBDEAL | ZVPRFCB | P | 17,2 | TOTAL PRF CASH BALANCE |
| PBDEAL | ZVPRFNCB | P | 17,2 | TOTAL PRF NON-CASH BALANCE |
| PBDEAL | ZVREPYCS | A | 1 | REPAYMENT TYPE |
| PBDEAL | ZVAMORTN | A | 1 | AMORTIZING LOAN INDICATOR |
| PBDEAL | ZVCETYP | A | 2 | CREDIT ENHANCEMENT TYPE |
| PBDEAL | ZVTRSTEE | P | 5,0 | TRUSTEE ID |
| PBDEAL | ZVSRVCR | A | 2 | SERVICER ID |
| PBDEAL | ZVCENHAN | A | 5,0 | CREDIT ENHANCER ID |
| PBDEAL | ZVRCSCH | 1 | CONCURRENT REPAYMENT METHOD |  |
| PBDEAL | ZVINITDT | L | $10 L$ | INITIAL DATE |
| PBDEAL | ZVMATEXP | L | $10 L$ | MATURITY EXPIRATION DATE |
| PBDEAL | ZVPMTBNK | 3 | PAYMENT BANK |  |


| PBDEAL - BOND DEAL INFORMATION - FIELDS FOUND IN THE PORTAL>BONDS>BOND DEAIL SCREEN |  |  |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :--- | :--- | :---: | :---: |
| File | Field | Type | Length |  |  |  |  |
| PBDEAL | ZVPMTDDA | A | 15 | PAYMENT DDA |  |  |  |
| PBDEAL | SYSCRT | Z | 26 | Date/Time created (system) |  |  |  |
| PBDEAL | SYSUPD | Z | 26 | Date/Time updated (system) |  |  |  |
| PBDEAL | SYSCRTBY | A | 10 | Created by user (system) |  |  |  |
| PBDEAL | SYSUPDBY | A | 10 | Updated by user (system) |  |  |  |
| PBDEAL | PGMCRTBY | A | 10 | Created by program |  |  |  |
| PBDEAL | PGMUPDBY | A | 10 | Updated by program |  |  |  |

PBONDINFO BOND INFORMATION - DESCRIPTON, CUSIP, LOAN \#, BOND/PRF INFO, ACCRUAL PARAMETERS FOR NONAMORTIZING BONDS

| File | Field | Type | Length | Field Description |
| :---: | :---: | :---: | :---: | :---: |
| PBONDINFO | Z6BDEALID | P | 9,0 | BOND DEAL ID |
| PBONDINFO | Z6BONDSEQ | P | 3,0 | BOND SEQ |
| PBONDINFO | Z6DESC | A | 52 | BOND DESCRIPTION |
| PBONDINFO | Z6LOAN | P | 9,0 | LOAN ID |
| PBONDINFO | Z6TRANSID | A | 15 | TRANSACTION ID |
| PBONDINFO | Z6CUSIP | A | 9 | CUSIP NUMBER |
| PBONDINFO | Z6REPPRI | P | 3,0 | REPAYMENT PRIORITY |
| PBONDINFO | Z6ORIGBAL | P | 17,2 | ORIGINAL BOND BALANCE |
| PBONDINFO | Z6CURRBAL | P | 17,2 | CURRENT BOND BALANCE |
| PBONDINFO | Z6TAXEMPT | A | 1 | TAX EXEMPT INDICATOR |
| PBONDINFO | Z6FIXARM | A | 1 | RATE INDICATOR |
| PBONDINFO | Z6RATE | P | 17,15 | CURRENT RATE |
| PBONDINFO | Z6DATEOCR | L | 10L | EFFECTIVE DATE OF CUR RATE |
| PBONDINFO | Z6IBC | A | 3 | INTEREST BASIS |
| PBONDINFO | Z6PRINSCHD | A | 1 | PRINCIPAL PAYMENT SCHEDULE |

PBONDINFO BOND INFORMATION - DESCRIPTON, CUSIP, LOAN \#, BOND/PRF INFO, ACCRUAL PARAMETERS FOR NONAMORTIZING BONDS

| File | Field | Type | Length | Field Description |
| :---: | :---: | :---: | :---: | :---: |
| PBONDINFO | Z6RSV | P | 3,0 | RESERVE NUMBER |
| PBONDINFO | Z6PRFSEQ | P | 3,0 | PRF SEQ |
| PBONDINFO | Z6RPRINTI | P | 5,0 | PRINCIPAL INV IF DIFFERENT |
| PBONDINFO | Z6BTAOC | A | 1 | BALANCE TO ACCRUE ON CODE |
| PBONDINFO | Z6DATELRDP | L | 10L | LAST REDEMPTION DATE |
| PBONDINFO | Z6RDPAMT | P | 17,2 | TOTAL BOND REDEM AM TO DATE |
| PBONDINFO | Z6DOWRC | A | 1 | DAY OF WEEK FOR RATE CHANGE |
| PBONDINFO | Z6PCTALR | P | 17,15 | EST RATE PERC ABV KNOWN RATE |
| PBONDINFO | Z6ADDPCT | P | 17,15 | EST RATE SPECIFIC PERCENT |
| PBONDINFO | Z6ALLOWEB | A | 1 | ALLOW ESTIMATED BILL |
| PBONDINFO | Z6EBOVER | A | 1 | PAID ESTIM INTEREST OVERAGES DEPOSIT TO |
| PBONDINFO | Z6FINALBR | A | 1 | FINAL BILL REQUIRED |
| PBONDINFO | Z6EMAILB | A | 1 | EMAIL BILLS |
| PBONDINFO | Z6NBTYPE | A | 1 | NOTIONAL BALANCE TYPE |
| PBONDINFO | Z6NOTIONAL | P | 17,2 | NOTIONAL BALANCE |
| PBONDINFO | Z6FIRSTRC | A | 1 | FIRST RECEIVABLE CREATED |
| PBONDINFO | Z6LOCBAL | P | 17,2 | LOC BALANCE |
| PBONDINFO | Z6ACSYDY | L | 10L | ACCRUAL STARTING DATE |
| PBONDINFO | Z6LDA | L | 10L | ACCRUED THRU DATE |
| PBONDINFO | Z6TOTACR | P | 21,6 | ACCRUED AMOUNT |
| PBONDINFO | Z6ASLB | P | 21,6 | ACCRUED SINCE LAST BILL |
| PBONDINFO | Z6PROJI | P | 21,6 | PROJECTED INTEREST THIS PERIOD |
| PBONDINFO | Z6PROJFT | P | 21,6 | PROJECTED INTEREST FROM TODAY |
| PBONDINFO | Z6PERDIEM | P | 19,6 | PER DIEM |
| PBONDINFO | Z6PDCHG | A | 1 | PER DIEM CHANGED TODAY |
| PBONDINFO | Z6CASHCOL | P | 17,2 | CASH COLLATERAL |
| PBONDINFO | Z6OTHER1 | P | 17,2 | OTHER AMOUNT |

PBONDINFO BOND INFORMATION - DESCRIPTON, CUSIP, LOAN \#, BOND/PRF INFO, ACCRUAL PARAMETERS FOR NONAMORTIZING BONDS

| File | Field | Type | Length |  |
| :--- | :--- | :---: | ---: | :--- | :--- |
| PBONDINFO | Z6MAD |  |  |  |
| PBONDINFO | Z6MARGIN | L | 10L | STARTING DATE OF NEXT ACCRUAL PERIOD |
| PBONDINFO | Z6UPLOADRT | P | 17,15 | MARGIN |
| PBONDINFO | Z6OBITC | A | 17,15 | UPLOADED RATE |
| PBONDINFO | SYSCRT | 1 | INCLUDE ORIG BOND BAL IN THRESHOLD CALC |  |
| PBONDINFO | SYSUPD | Z | 26 | Date/Time created (system) |
| PBONDINFO | SYSCRTBY | Z | 26 | Date/Time updated (system) |
| PBONDINFO | SYSUPDBY | A | 10 | Created by user (system) |
| PBONDINFO | PGMCRTBY | A | 10 | Updated by user (system) |
| PBONDINFO | PGMUPDBY | A | 10 | Created by program |

PBPMTSCH

|  |  | PBPMTSCH | Bond Principal Payment Schedule |  |  |
| :--- | :--- | :--- | ---: | :--- | :--- |
| File |  | Field | Type | Length |  |
| PBPMTSCH | Z7BDEALID |  |  | Field Description |  |
| PBPMTSCH | Z7BONDSEQ | P | 9,0 | Bond Deal ID |  |
| PBPMTSCH | Z7PMTBDT | P | 3,0 | Bond Seq |  |
| PBPMTSCH | Z7PRINAMT | L | 10 | Payment Date |  |
| PBPMTSCH | SYSCRT | P | 17,2 | Principal Payment |  |
| PBPMTSCH | SYSUPD | Z | 26 | Date/Time created (system) |  |
| PBPMTSCH | SYSCRTBY | Z | 26 | Date/Time updated (system) |  |
| PBPMTSCH | SYSUPDBY | A | 10 | Created by user | (system) |
| PBPMTSCH | PGMCRTBY | A | 10 | Updated by user | (system) |
| PBPMTSCH | PGMUPDBY | A | 10 | Created by program |  |

## PBPRFHSTRY History of all activity in Principal Reserve Fund

| File | Field | Type | End Pos | Field Description |
| :---: | :---: | :---: | :---: | :---: |
| PBPRFHSTRY | ZEBDEALID | P | 9,0 | BOND DEALID |
| PBPRFHSTRY | ZEPRFSEQ | P | 3,0 | PRF SEQ |
| PBPRFHSTRY | ZEDATE | L | 10L | Transaction Date |
| PBPRFHSTRY | ZEBONDSEQ | P | 3,0 | Bond Seq |
| PBPRFHSTRY | ZESEQ\# | P | 3,0 | Sequence Number |
| PBPRFHSTRY | ZEDORW | A | 1 | Deposit Withdrawal |
| PBPRFHSTRY | ZECASHB | P | 17,2 | Cash amount |
| PBPRFHSTRY | ZENCASHB | P | 17,2 | Non Cash amount |
| PBPRFHSTRY | ZEPAIDFD | L | 10L | Paid For Date |
| PBPRFHSTRY | ZETDESC | A | 25 | Transaction Description |
| PBPRFHSTRY | ZEUSERID | A | 10 | User ID |
| PBPRFHSTRY | ZEEFFDT | L | 10L | EFF DATE OF TRANSACTION |
| PBPRFHSTRY | ZERDR | L | 10L | DATE REDEMPTION REVERSED |
| PBPRFHSTRY | SYSCRT | z | 26 | Date/Time created (system) |
| PBPRFHSTRY | SYSUPD | Z | 26 | Date/Time updated (system) |
| PBPRFHSTRY | SYSCRTBY | A | 10 | Created by user (system) |
| PBPRFHSTRY | SYSUPDBY | A | 10 | Updated by user (system) |
| PBPRFHSTRY | PGMCRTBY | A | 10 | Created by program |
| PBPRFHSTRY | PGMUPDBY | A | 10 | Updated by program |

PBPRFINFO - Current Balance and Threshold Parameters for the Principal Reserve Fund

| File | Field | Type | Length | Field Description |
| :---: | :---: | :---: | :---: | :---: |
| PBPRFINFO | ZOBDEALID | P | 9,0 | Bond Deal ID |
| PBPRFINFO | ZOPRFSEQ | P | 3,0 | PRF Seq |
| PBPRFINFO | ZOCASHB | P | 17,2 | Cash Balance |
| PBPRFINFO | ZONCASHB | P | 17,2 | Non Cash Balance |
| PBPRFINFO | ZOPCTPRI | P | 17,15 | Threshold Pct Orig Bond Bal |
| PBPRFINFO | ZODOLAMT | P | 17,2 | Threshold Dollar Amount |
| PBPRFINFO | ZOPERTIME | P | 5,0 | Threshold Period Time Months |
| PBPRFINFO | ZOPOTBEG | L | 10L | Begin Date Period of Time |
| PBPRFINFO | ZOBUSCAL | A | 3 | Threshold Business Calendar |
| PBPRFINFO | ZOFORBCK | A | 1 | Threshold Move Direction |
| PBPRFINFO | ZODLROCC | L | 10L | Date Last Redemption Occur |
| PBPRFINFO | ZOSUSPDDT | L | 10L | Suspension Effective Date |
| PBPRFINFO | ZORSUMEDT | L | 10L | Resume Effective Date |
| PBPRFINFO | ZONXTRDMPT | L | 10L | Next Sched Redemption Date |
| PBPRFINFO | ZOPRIRCVTD | P | 17,2 | Principal Received to date |
| PBPRFINFO | ZOTREDTD | P | 17,2 | Total PRF Redemption to Date |
| PBPRFINFO | ZOFDSHBL | A | 1 | PRF Funds Held by Lender |
| PBPRFINFO | ZOEFFDTLR | L | 10L | Effect Date Last Redemption |
| PBPRFINFO | ZOTRIGGER | A | 1 | Threshold Triggered |
| PBPRFINFO | ZOPOOBDA | P | 17,2 | Original Bal. Amt * ZOPCTPRI |
| PBPRFINFO | ZOSCHREDA | P | 17,2 | Scheduled Redemption Amount |
| PBPRFINFO | ZOPOTR | P | 15,12 | Percent Threshold Reached |
| PBPRFINFO | ZODYSTTD | P | 5,0 | Number Days Threshold Date |
| PBPRFINFO | SYSCRT | Z | 26 | Date/Time created (system) |
| PBPRFINFO | SYSUPD | Z | 26 | Date/Time updated (system) |
| PBPRFINFO | SYSCRTBY | A | 10 | Created by user (system) |
| PBPRFINFO | SYSUPDBY | A | 10 | Updated by user (system) |


| PBPRFINFO | PGMCRTBY | A | 10 | Created by program |
| :--- | :--- | :--- | :--- | :--- |
| PBPRFINFO | PGMUPDBY | A | 10 | Updated by program |

PBRCVBL - RECEIVABLE FOR NON-AMORTIZING BONDS

| File | Field | Type | Length | Field Description |
| :---: | :---: | :---: | :---: | :---: |
| PBRCVBL | Z8BDEALID | P | 9,0 | Bond Deal ID |
| PBRCVBL | Z8BONDSEQ | P | 3,0 | Bond Seq |
| PBRCVBL | Z8PMTDT | L | 10L | Payment Date |
| PBRCVBL | Z8BASEDT | L | 10L | Payment Base Date |
| PBRCVBL | Z8PRINDUE | P | 17,2 | Principal Due |
| PBRCVBL | Z8INTDUE | P | 17,2 | Interest Due |
| PBRCVBL | Z8FROM | L | 10L | From date |
| PBRCVBL | Z8TO | L | 10L | To date |
| PBRCVBL | Z8IADJFLP | P | 17,2 | Interest adjust last period |
| PBRCVBL | Z8IADJTNP | P | 17,2 | Interest adjust next period |
| PBRCVBL | Z8ICALCTP | P | 17,2 | Interest Calc this period |
| PBRCVBL | Z8USERIADJ | P | 17,2 | User Adjustment |
| PBRCVBL | SYSCRT | Z | 26 | Date/Time created (system) |
| PBRCVBL | SYSUPD | Z | 26 | Date/Time updated (system) |
| PBRCVBL | SYSCRTBY | A | 10 | Created by user (system) |
| PBRCVBL | SYSUPDBY | A | 10 | Updated by user (system) |
| PBRCVBL | PGMCRTBY | A | 10 | Created by program |
| PBRCVBL | PGMUPDBY | A | 10 | Updated by program |

