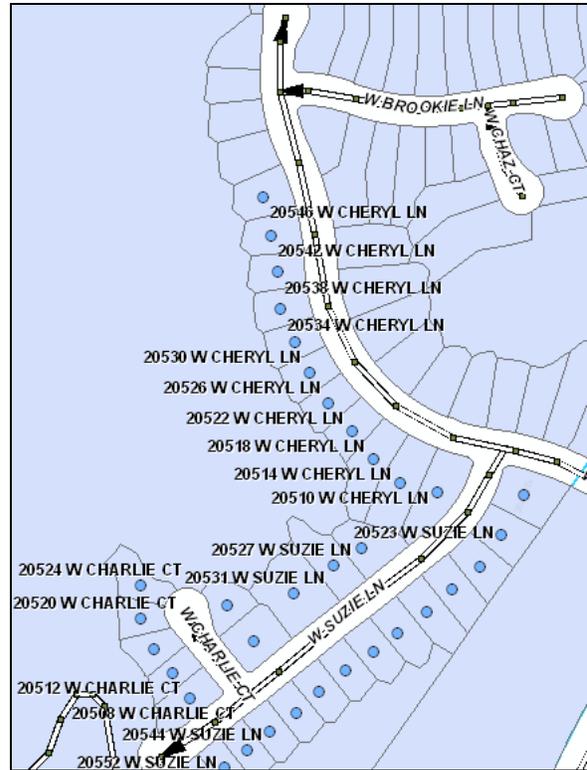
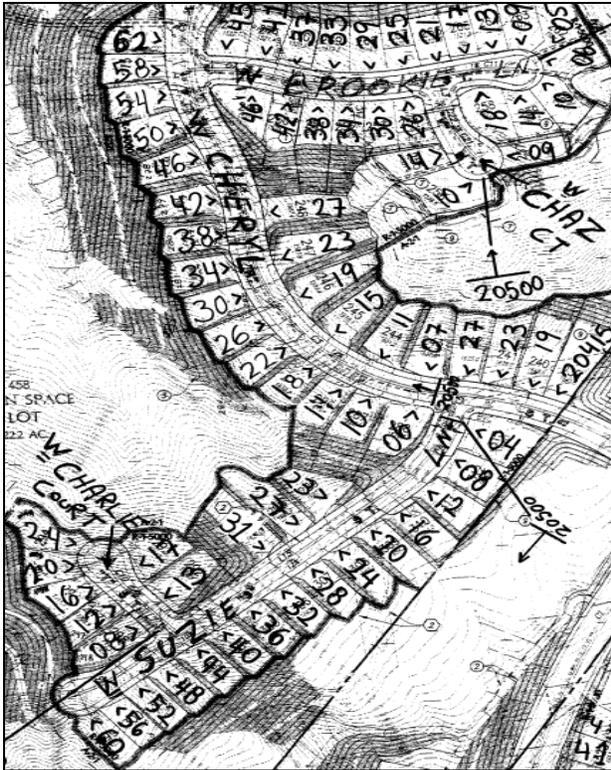


Countywide Address management System

CAMS

Editor's Guide

By **Hormoz Nikolay**



Mapping & GIS Services Section



September 09, 2013

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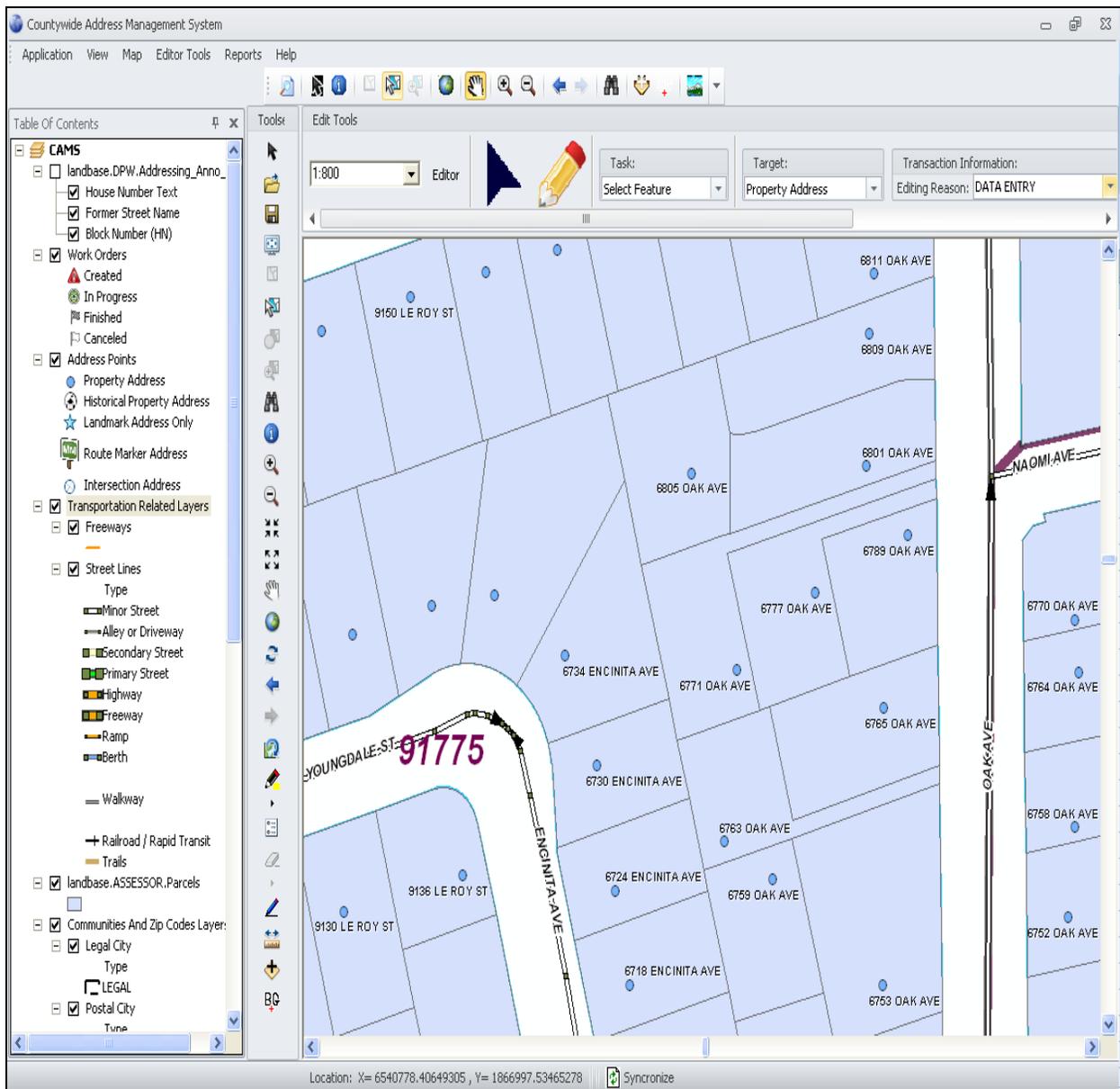
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Countywide Address Management System

CAMS Editing

Introduction:

The two primary functions of the County Wide Address Management System (CAMS) are to maintain Street Lines and to maintain Address Points. Many functions and capabilities have been implemented in the system, not only for editing the street lines and address points, but also many administrative functions such as adding users, setting privileges, modifying system parameters, and generating reports.

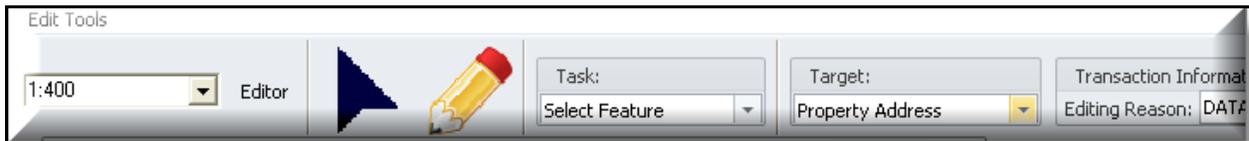


Countywide Address Management System

CAMS Editing

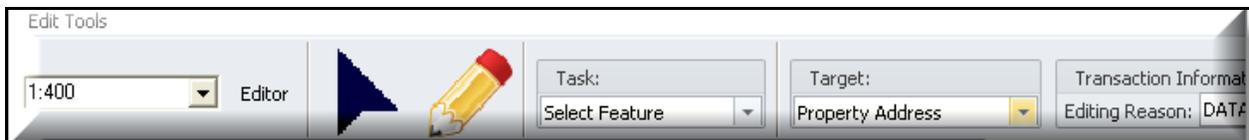
Editing Tools in CAMS

Edit Tool



This tool is used for selecting features on the map. The selected features can then be edited according to the editing task selected.

Sketch Tool



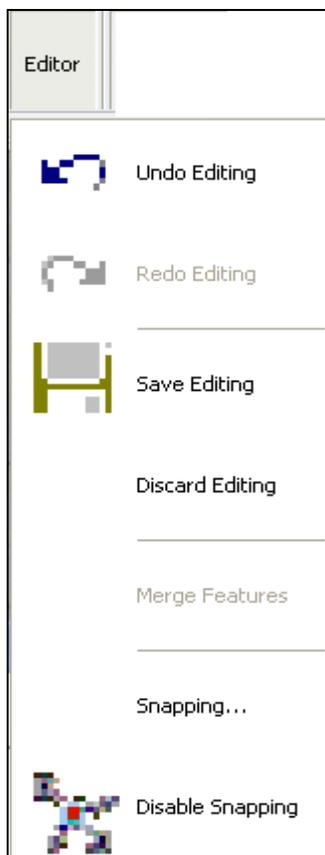
Use this tool to create new features on the map. To create a point feature, click once at the position on the map where you wish to place the point. To create a line feature, click once at the position where you wish to start the line, move the cursor to each position where you wish to add a vertex and double click at the position where you wish to end the line.

Countywide Address Management System

CAMS Editing

Dropdown Menus

1) Editor Dropdown Menu



Undo Editing

Restores the feature and/or its attributes back to their original values.

Redo Editing

Restores the edits that were undone by the Undo Editing option.

Countywide Address Management System

CAMS Editing

Save Editing

Saves the edits to the geodatabase. Initially the edits are saved on the local machine, use this option to save the edits back to the geodatabase and prevent loss of work due to disconnections or computer hangs.

Discard Editing

Deletes the current edits from the local machine before they are saved back to the geodatabase.

Merge Features

Joins two or more street lines into a single arc.

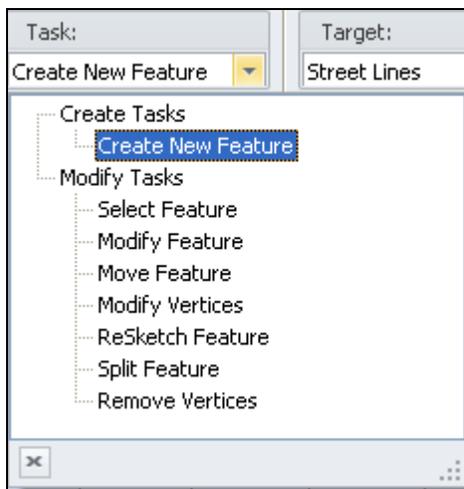
Snapping

Enables snapping and allows the user to set the snapping options.

Disable Snapping

Initially Snapping is enabled by default when the CAMS application starts. Click on this option to disable snapping.

2) Task Dropdown Menu



Countywide Address Management System

CAMS Editing

Create New Feature

This will create a new point or line feature on the map depending on the target layer selected. After selecting this option, use the Sketch Tool to place the new feature on the map.

Select Feature

Allows you to select a feature on the map from the selected target layer using the Edit Tool

Modify Feature

Allows you to modify the vertices of a selected street line using the Edit Tool.

Move Feature

Allows you to move an address point or a street line to a different position using the Edit Tool.

Modify Vertices

Select this option to move the vertices of a street line to different positions using the Edit Tool.

ReSketch Feature

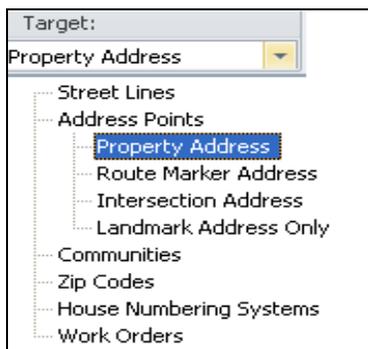
Deletes the shape and allows you to redraw the feature with the Sketch Tool while maintaining its attributes.

Split Feature

Select this option to split a street line into two separate

3) Target Dropdown Menu

Allows you to select the layer which you want to edit. For the Street Lines, Address Points, and Work Orders layers, you may add new features or modify existing ones. The Communities, Zip Codes, and House Numbering Systems layers are polygon layers which can only be edited by users with the corresponding privileges.

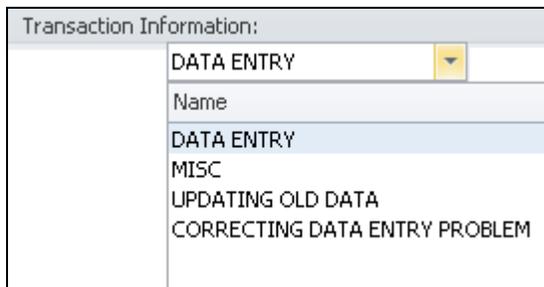


Countywide Address Management System

CAMS Editing

4) Transaction Dropdown Menu

This allows the user to select a reason why the feature is being edited. The list of entries in this dropdown menu may be modified by system administrators.



Add Layers Toolbar



Clicking on these icons allows the user to bring in local shapefiles and Feature Classes into the CAMS application.

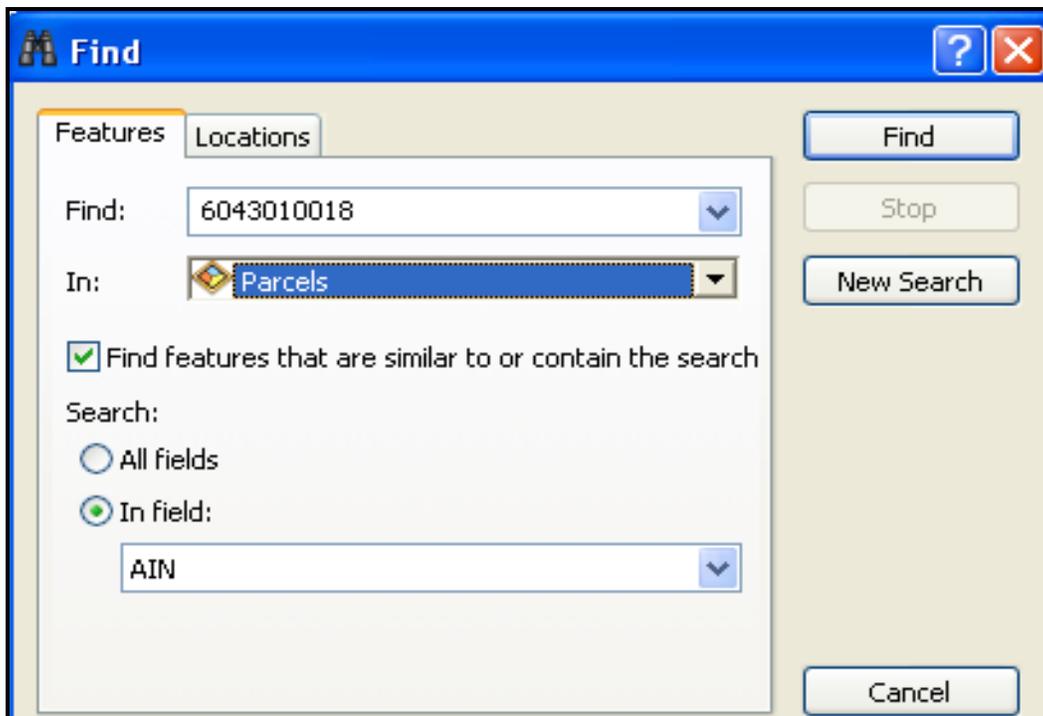
Countywide Address Management System

CAMS Editing

Find Tool



The Find tool allows you to search for locations using an address, name or number, to find features that match particular attribute values, and to find locations using linear referencing. For example, if you are trying to find AIN#6043010018 on a map, you can enter the AIN# in the Find tool; select the Parcel layer from layers in your map and search under AIN field.

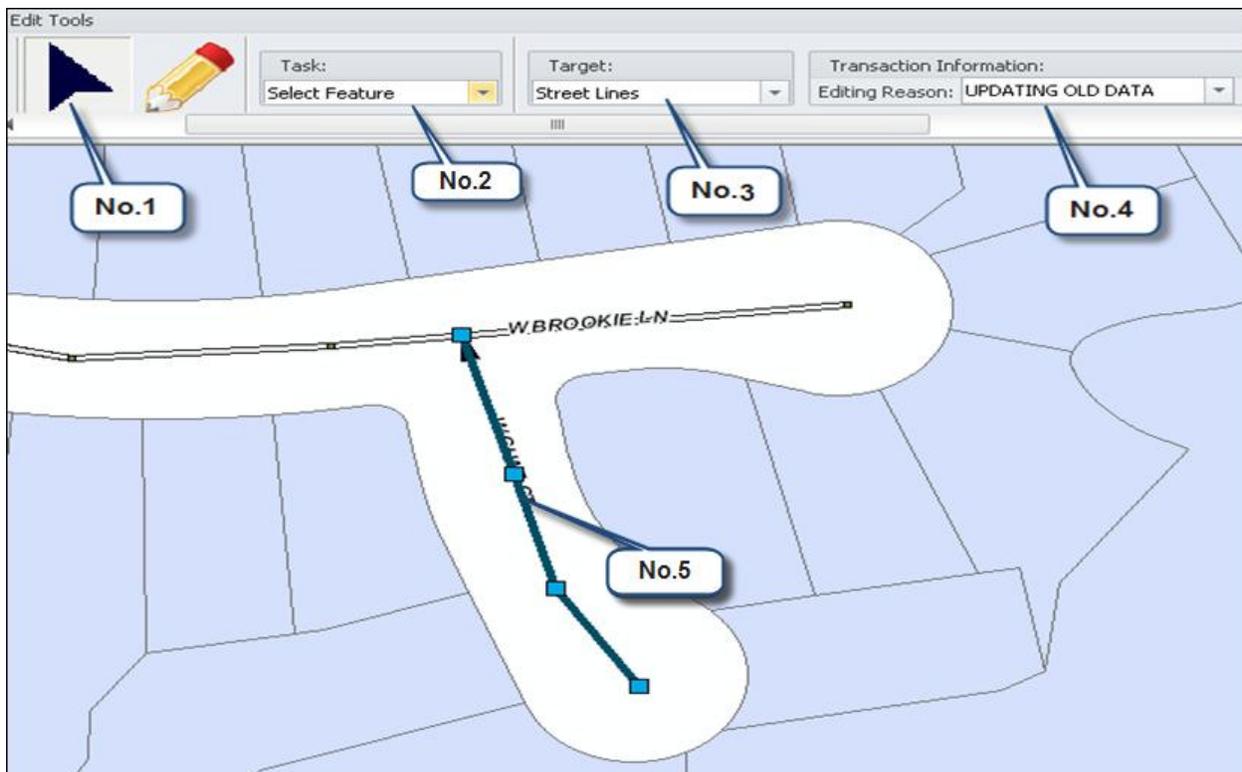


Countywide Address Management System

CAMS Editing

Modify the Attribute of an Existing Street Line in CAMS

- 1) Select the Edit Tool.
- 2) Select Select Feature from the “Task” dropdown menu.
- 3) Select Street Lines from the “Target” dropdown menu.
- 4) Select Updating Old Data from the “Transaction Information”.
- 5) On the map, click on the street line that you wish to edit to select it.

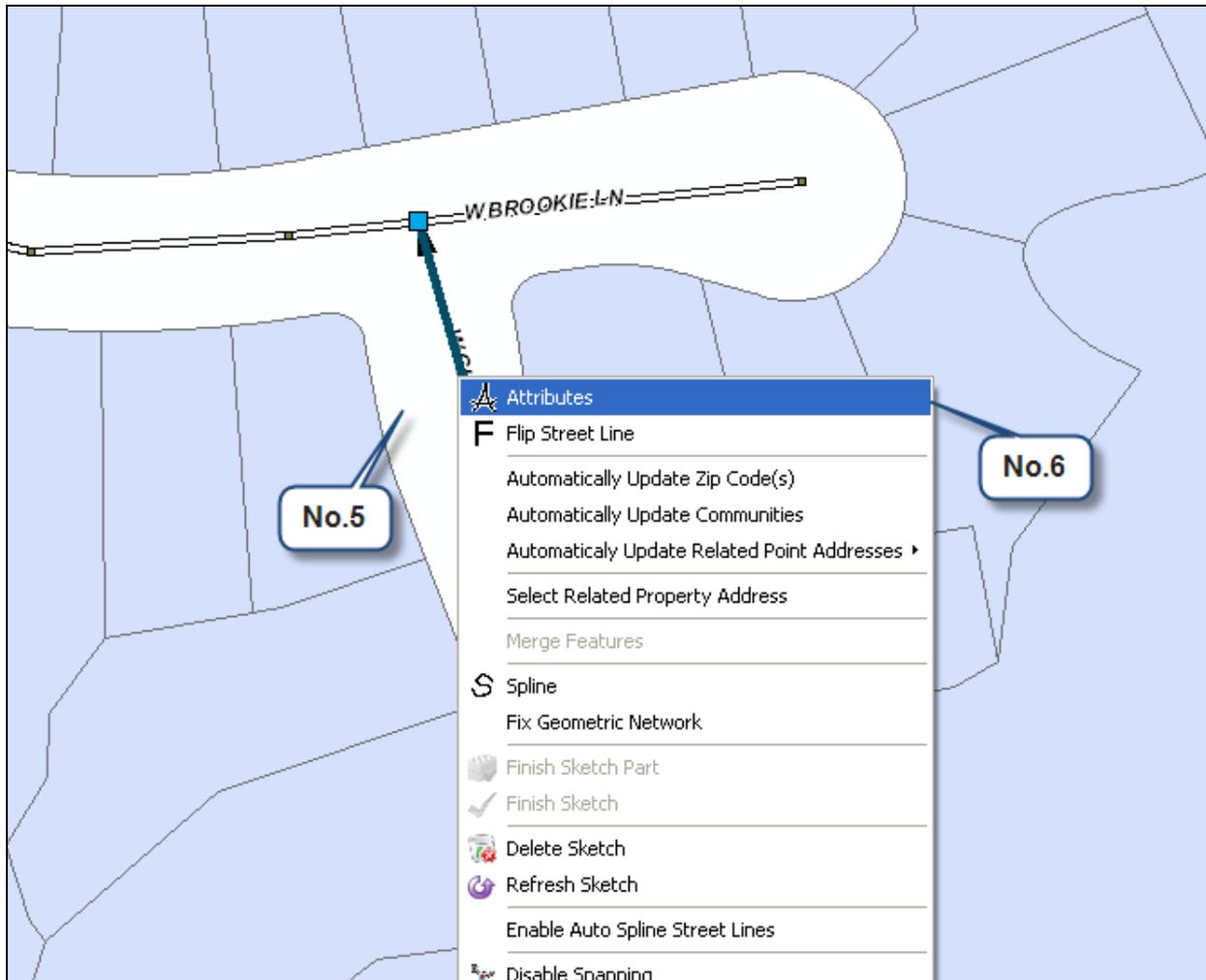


Countywide Address Management System

CAMS Editing

5) Once it is highlighted, right click anywhere on the map and you will be presented with a context menu.

6) Click on Attributes.



Countywide Address Management System

CAMS Editing

7) A window will open up containing the Street Line Properties form with three tabs. Each tab has different fields for all the attributes of the Street Line. (Typically we would only update in the Address Range tab). Make all the necessary changes in the specific fields that you want to modify in all tabs.

8) Once you update the attribute, the old data is stored, and available to see by clicking the History link at the very bottom of the Street Line Properties window.

9) Click on OK.

10) To save the changes to the database, click on Save Editing from the “Editor” dropdown menu.

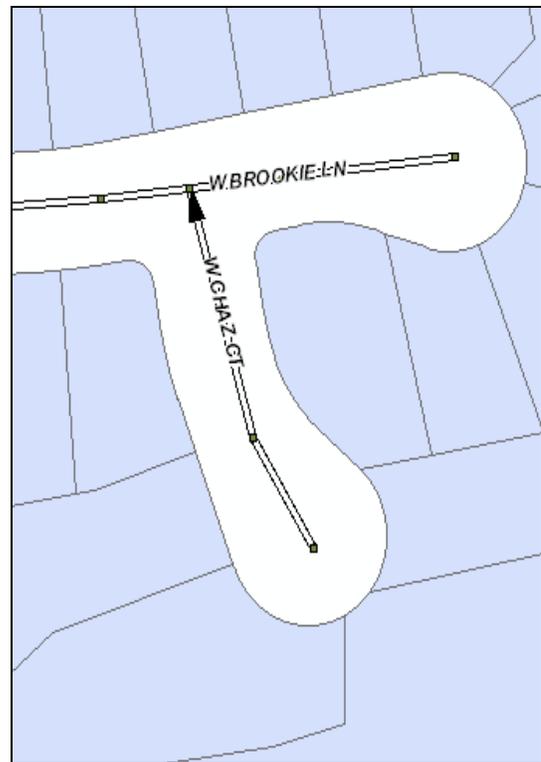
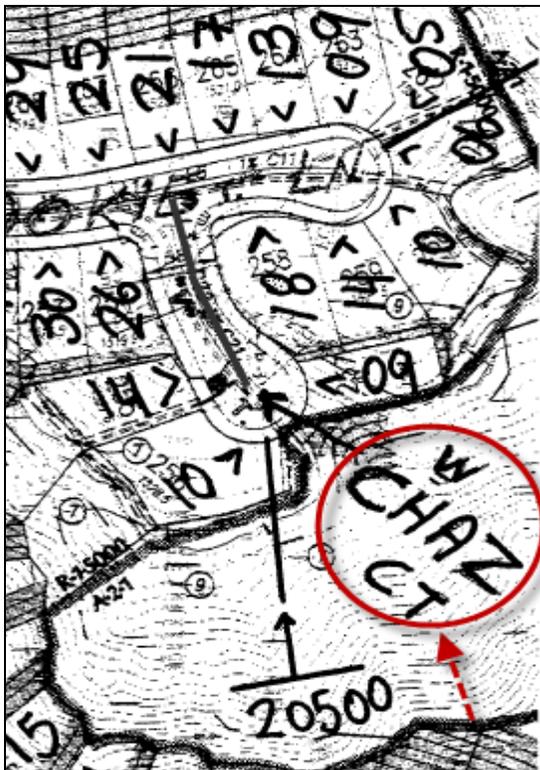
The screenshot shows the 'Street Line Properties' window with three tabs: 'General', 'Address Ranges', and 'Communities'. The 'Address Ranges' tab is active, displaying a table of address ranges for 'W CHAZ CT'. The table has columns for 'From', 'To', 'Category', 'Pre Modifier', 'Pre Direction', 'Pre Type', 'Street Article', 'Side', 'Parity', 'Post Type', 'Post Direction', 'Post Modifier', and 'House Numbering System'. The first range is from 20501 to 20599, categorized as 'PRIMARY', with 'WEST' as the pre-direction and 'Right' as the side. The second range is from 20500 to 20600, categorized as 'PRIMARY', with 'WEST' as the pre-direction and 'Left' as the side. Below the table is a map showing the street layout with callouts for various addresses like '20542 W CHERYL LN' and '20538 W CHERYL LN'. At the bottom of the window, there is a 'History' link (No. 8), a 'More' button, and 'Cancel', 'OK', and 'Apply' buttons (No. 9). A callout 'No. 7' points to the 'Post Type' field in the table.

From	To	Category	Pre Modifier	Pre Direction	Pre Type	Street Article	Side	Parity	Post Type	Post Direction	Post Modifier	House Numbering System
20501	20599	PRIMARY		WEST			Right	ODD	X			
[20501 , 20599] W CHAZ CT												
20500	20600	PRIMARY		WEST			Left	EVEN				
[20500 , 20600] W CHAZ CT												

Countywide Address Management System

CAMS Editing

Creating New Street Lines in CAMS



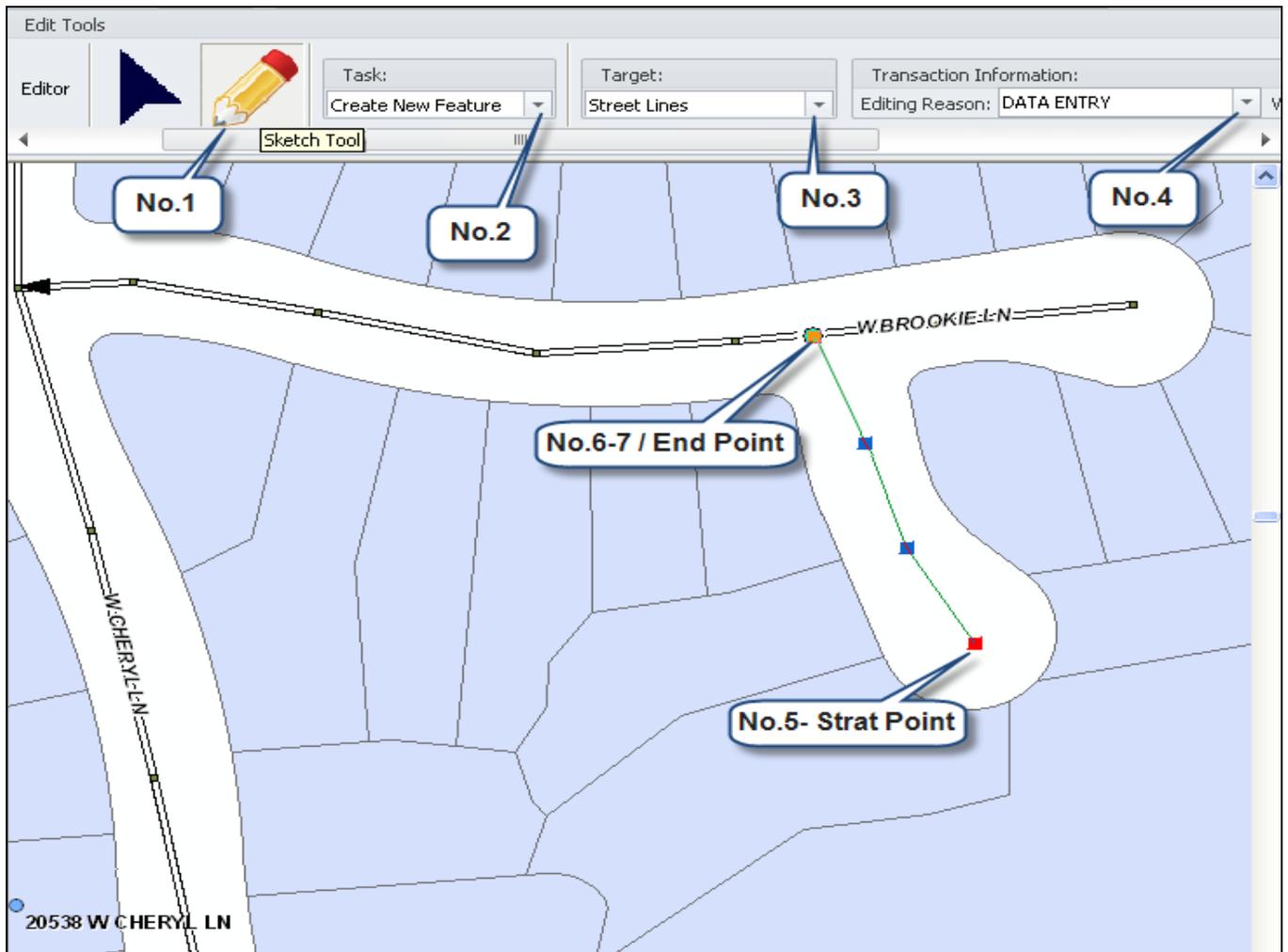
Please follow the below steps:

- 1) Click the Sketch Tool  on the “Editor” toolbar.
- 2) Select Create new Feature command on the “Task” toolbar.
- 3) Select Street Lines command on the “Target” toolbar.

Countywide Address Management System

CAMS Editing

- 4) Select Data Entry command on the “Transaction Information” toolbar.
- 5) On the map, select your starting point and click the left mouse button once.
- 6) Draw the line by single clicking the left mouse button at every position you wish to have a node. Snap to an existing Street Line (The direction of the line is indicated by arrows).
- 7) Double click at the position where you wish to end the line. Upon finishing the sketch, the Street Line Properties form will open up.

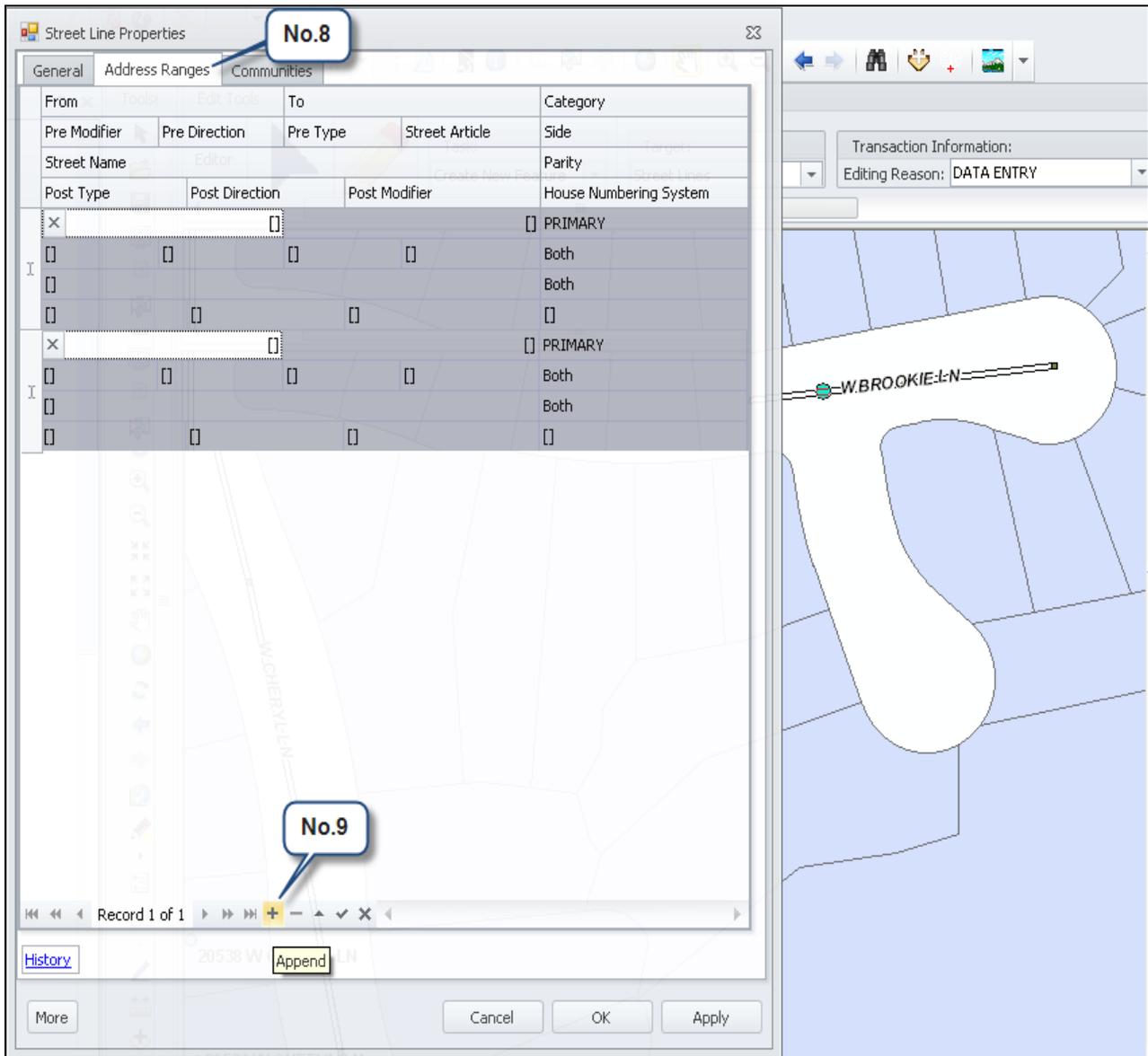


Countywide Address Management System

CAMS Editing

8) From Street Line properties window click on the Address Range tab.

9) At the very bottom click twice on the plus sign “+” in order to add input fields , then insert the Street line information for both left and right side of the street in the required fields.

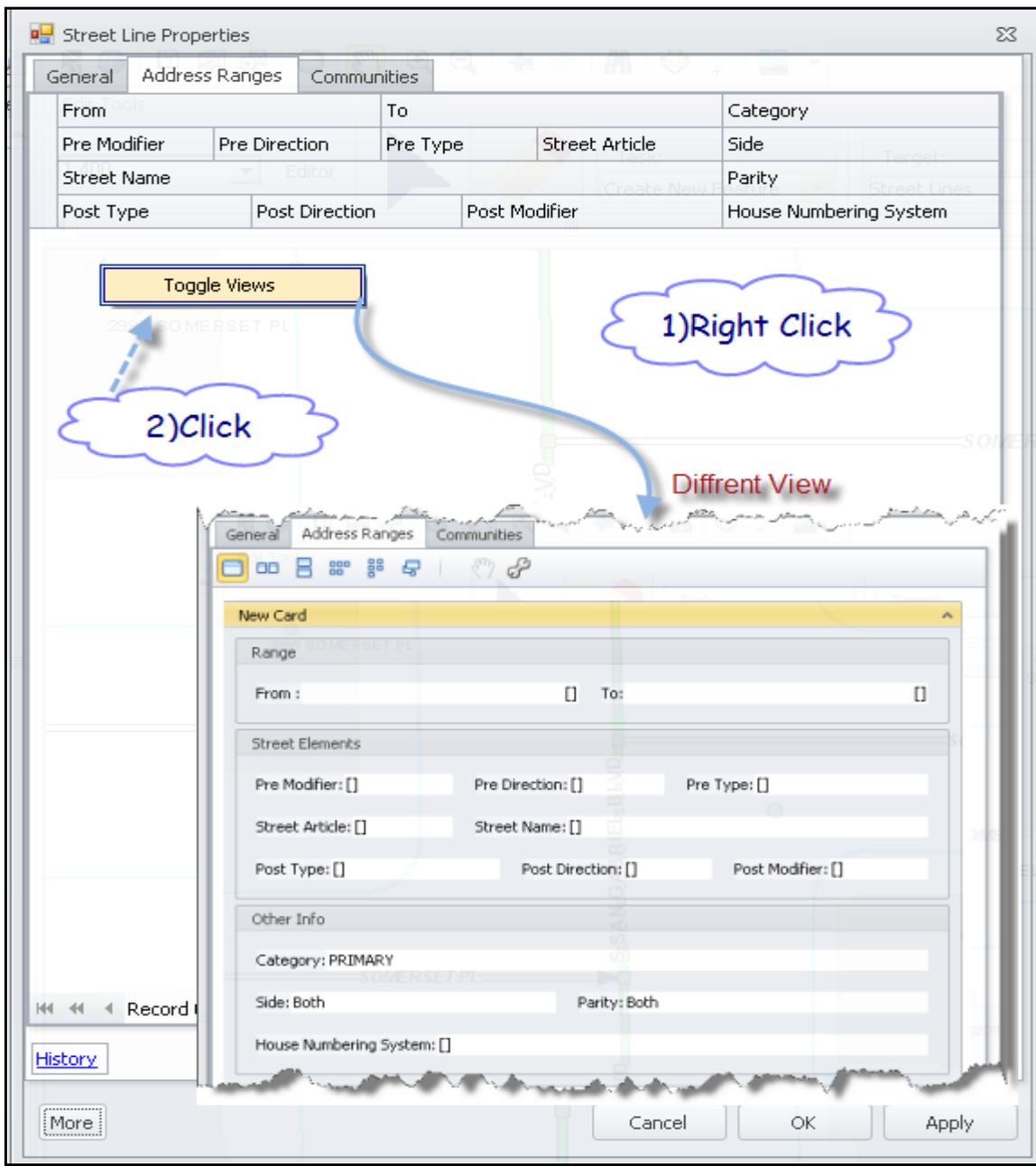


Countywide Address Management System

CAMS Editing

Note:

You can change the input window view to the way you want and insert the values for the addressing point and street line by right clicking in the blank area on the Property Address Properties or Street Line Properties and selecting the Toggle Views.



Countywide Address Management System

CAMS Editing

10). Fill out the required fields (From, To, Pre Direction, Category, Side, Street Name, Parity, Post Type and Post Direction).*

11) Click Apply then Ok.

12) To save the changes to the database, click on Save Editing from the “Editor” dropdown menu.

From	To	Pre Modifier	Pre Direction	Pre Type	Street Article	Side	Post Type	Post Direction	Post Modifier	House Numbering System
20500	20600		WEST		CHAZ	Left	PRIMARY			EVEN
20501	20599		WEST		CHAZ	Right	PRIMARY			ODD

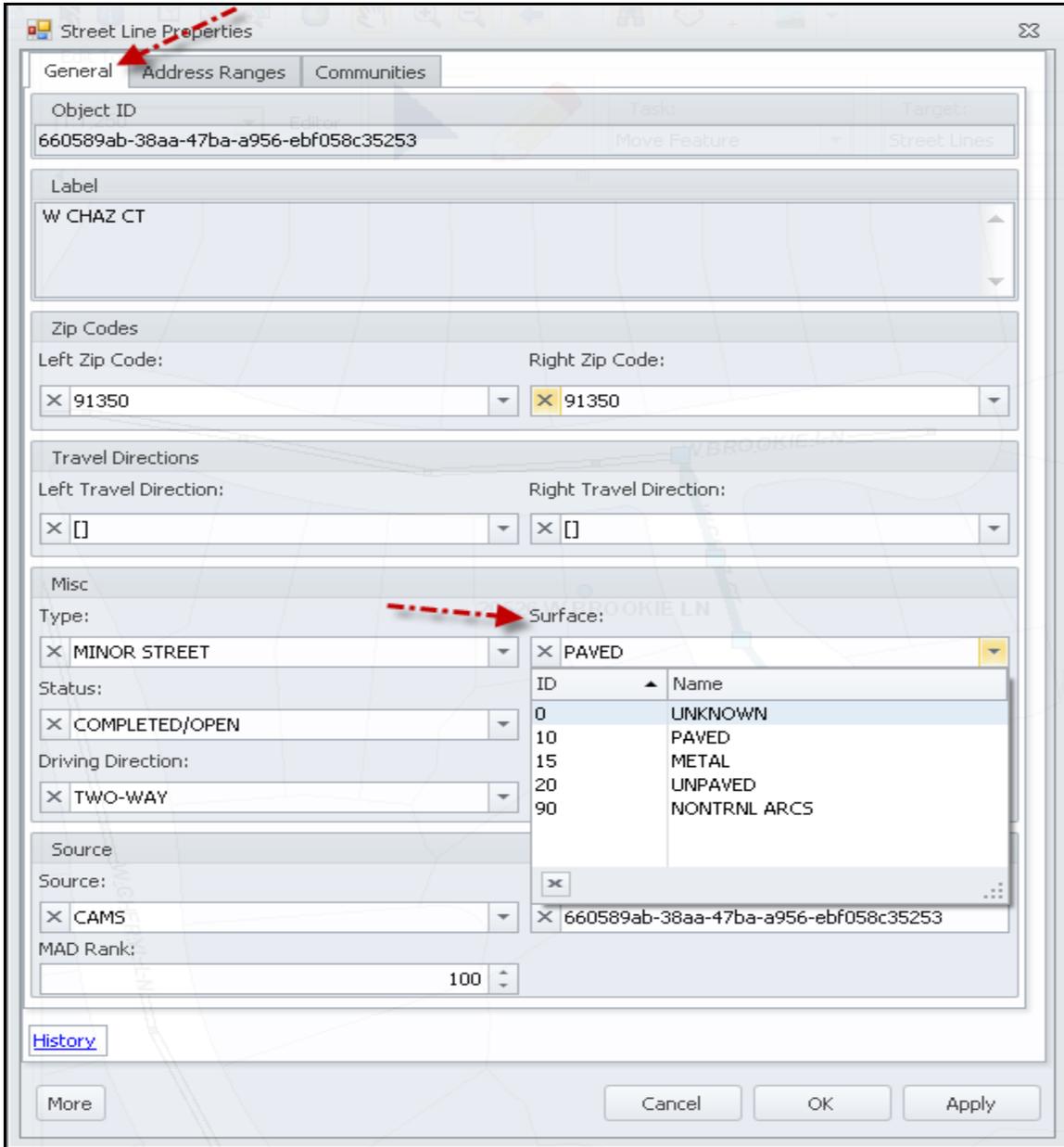
*Please Refer to Page No 16.

Countywide Address Management System

CAMS Editing

***Note:**

From Street Line properties window click on the General tab, from Surface dropdown menu, make sure to select the right surface type for the new Street Line.



Please note that fields which are grayed out are read only and can't be edited by the user

Countywide Address Management System

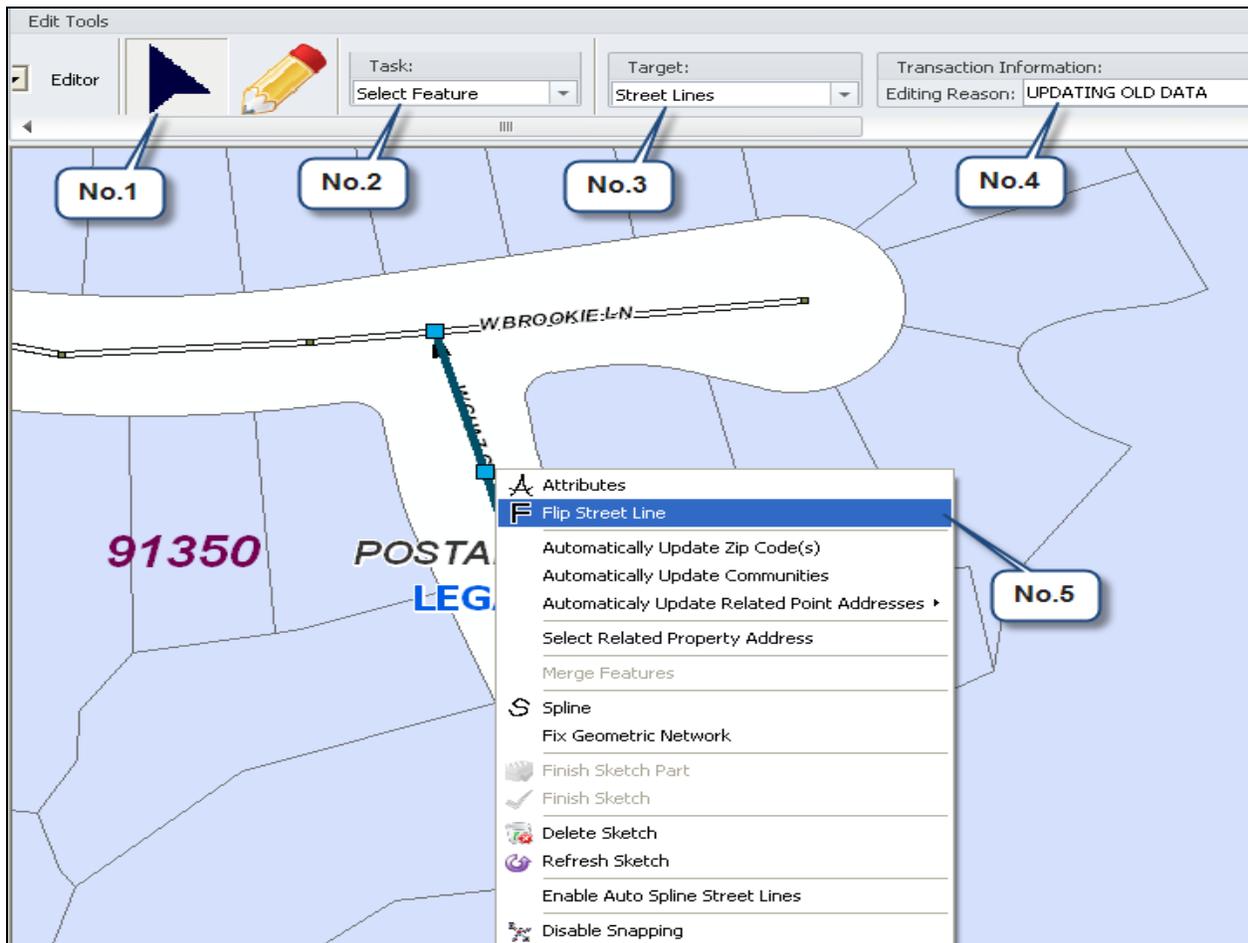
CAMS Editing

Flipping the direction of a line

Flip reverses the direction of a selected line so that the last vertex of the sketch becomes the first.

Please follow the below steps:

- 1) Click the Edit Tool  on the “Editor” toolbar.
- 2) Select Select Feature command on the “Task” toolbar.
- 3) Select Street Lines command on the “Target” toolbar.
- 4) Select Updating Old Data command on the “Transaction Information” toolbar
- 5) Right-click any part of the sketch and click Flip Street Line.



Countywide Address Management System

CAMS Editing

- 6) From Select Street Line Flip Option window, turn the “Address range Side to Side Flip” Option off.
- 7) Click ok. (Reverses the From-To direction of line features.)
- 8) To save the changes to the database, click on Save Editing from the “Editor” dropdown menu.



Countywide Address Management System

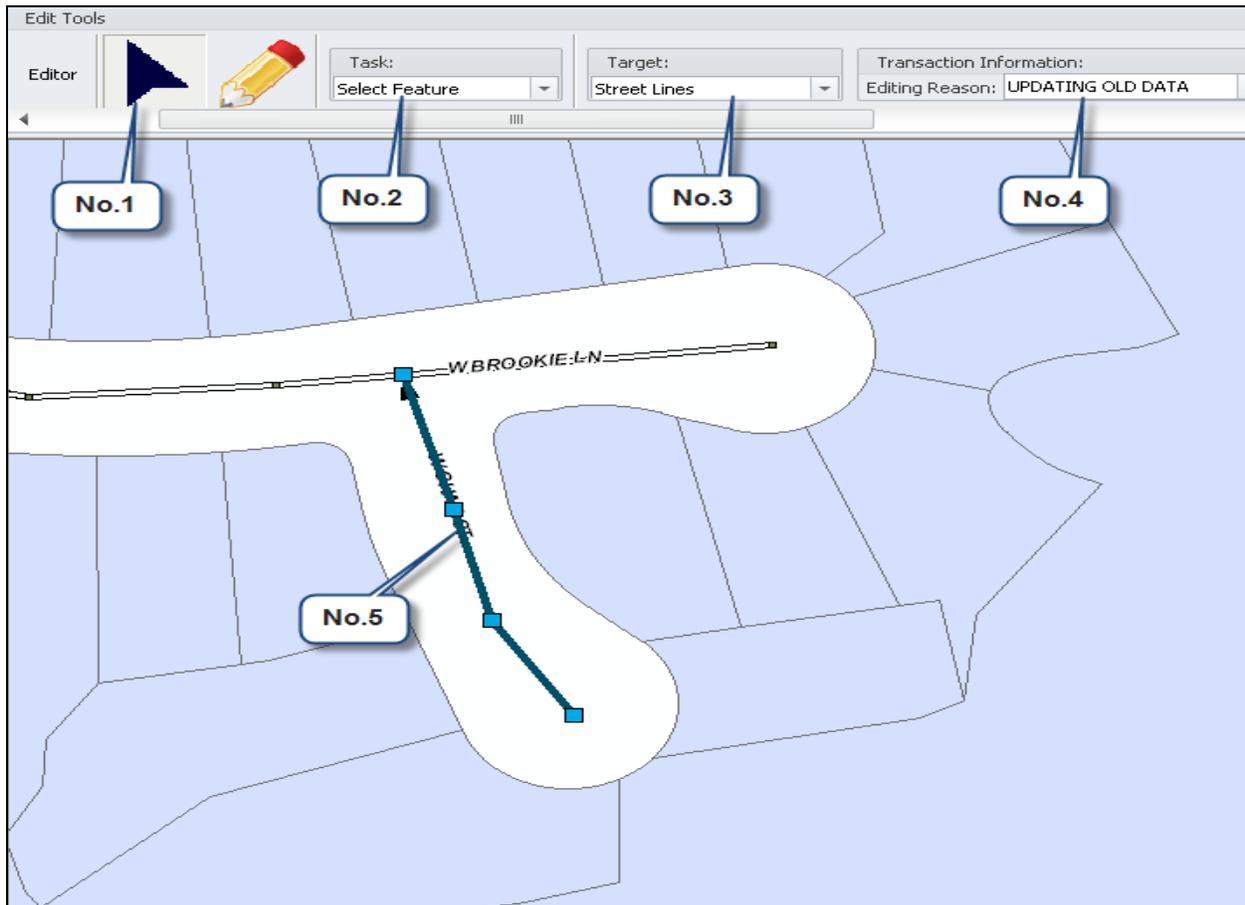
CAMS Editing

Splitting Lines in CAMS

You can easily split line features to break them into several line features in CAMS.

Please follow the below steps:

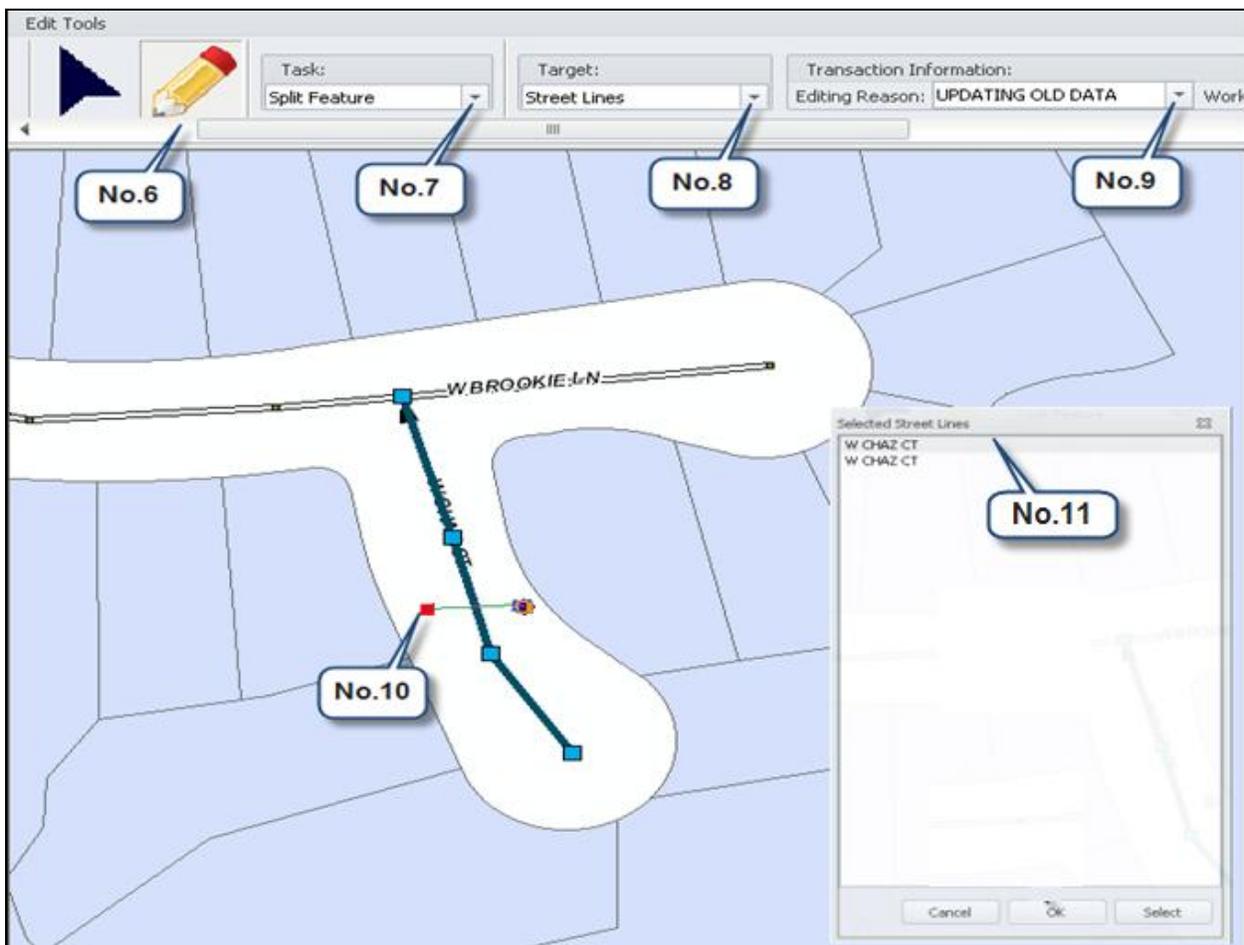
- 1) Click the Edit Tool  on the “Editor” toolbar
- 2) Select Select Feature command on the “Task” toolbar.
- 3) Select Street Lines command on the “Target” toolbar.
- 4) Select Updating Old Data command on the “Transaction Information” toolbar
- 5) Click and select the Street Line which you want to split.



Countywide Address Management System

CAMS Editing

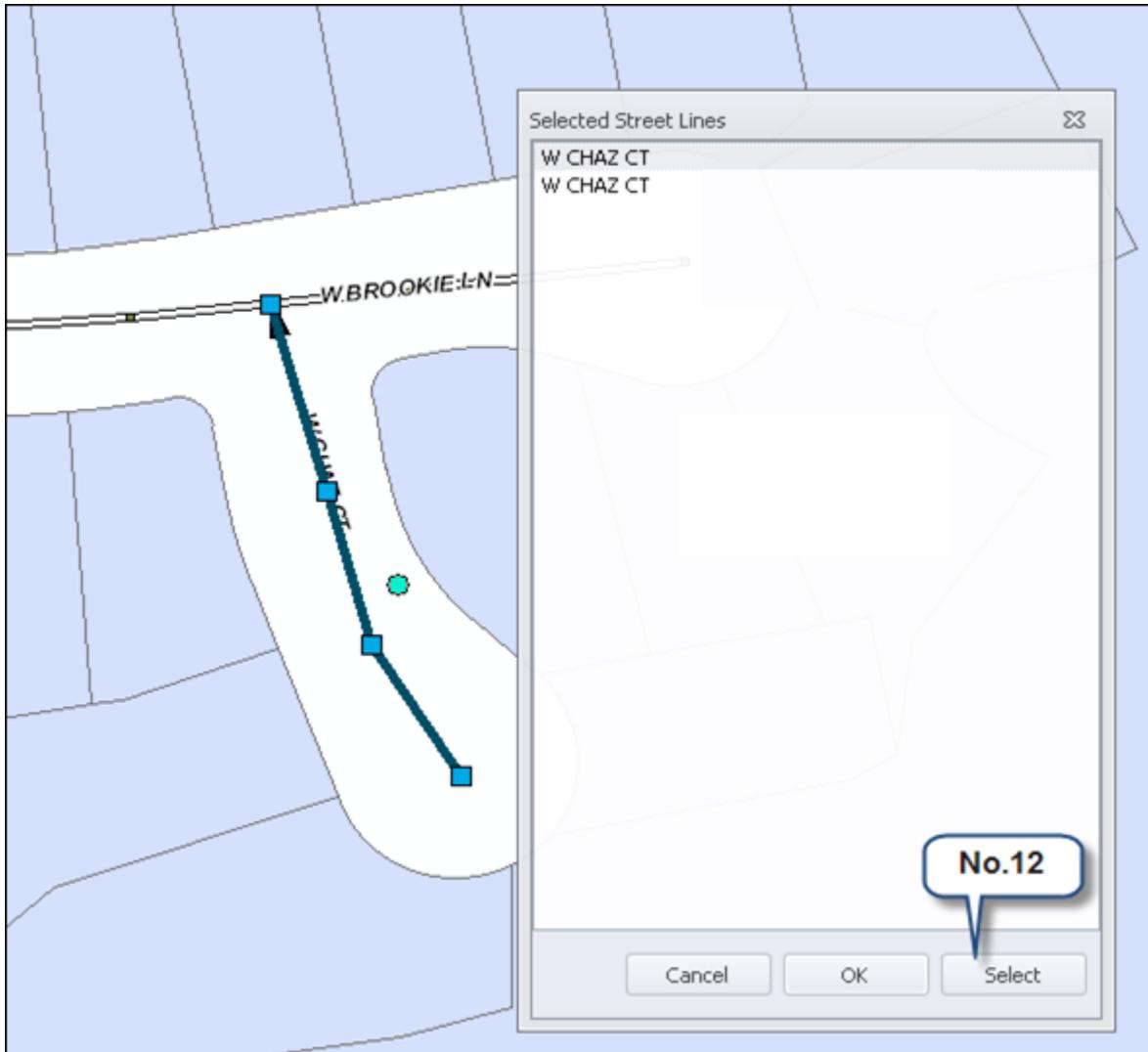
- 6) Click the Sketch Tool  on the “Editor” toolbar.
- 7) Select Split Feature command on the “Task” toolbar.
- 8) Select Street Lines command on the “Target” toolbar.
- 9) Select Updating Old Data command on the “Transaction Information” toolbar.
- 10) Click the map to create a line that cuts completely through the Street Line as desired then double click.
- 11) From Selected Street Lines window click on the first one. (Since the street line is split into two parts, street name appears twice in Selected Street Lines window)



Countywide Address Management System

CAMS Editing

12) Click on Select.



Countywide Address Management System

CAMS Editing

13) The Street Lines Properties form will open make all the necessary changes in the specific fields that you want to modify in all the tabs, and then close the Street Line Properties window.

The screenshot shows the 'Street Line Properties' window with the 'Communities' tab selected. The window displays a table of address ranges and their associated attributes. A callout bubble labeled 'No.13' points to the 'Update The Existing Attributes' text in a cloud shape.

From	To	Category
20501	20599	PRIMARY
WEST		Right
CHAZ		ODD
COURT		
[20501 , 20599] W CHAZ CT		
20500	20600	PRIMARY
WEST		Left
CHAZ		EVEN
COURT		
[20500 , 20600] W CHAZ CT		

Update The Existing Attributes

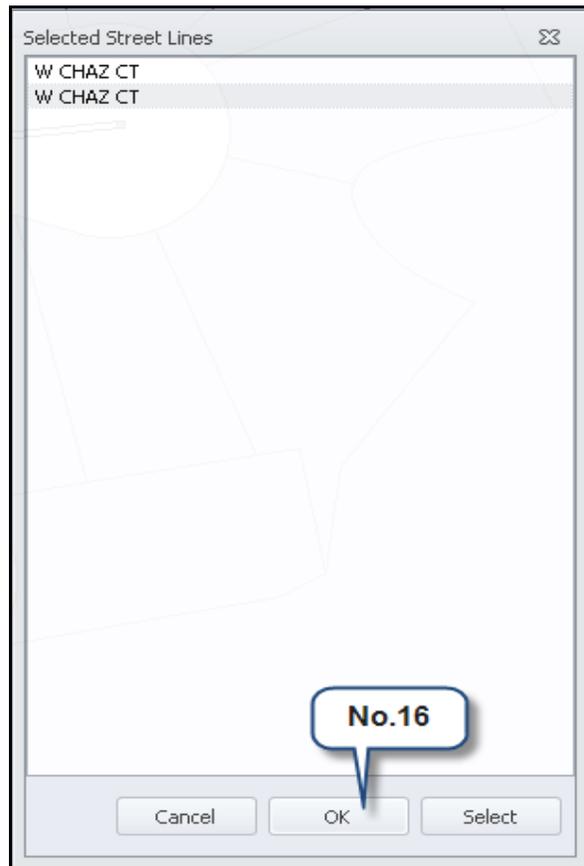
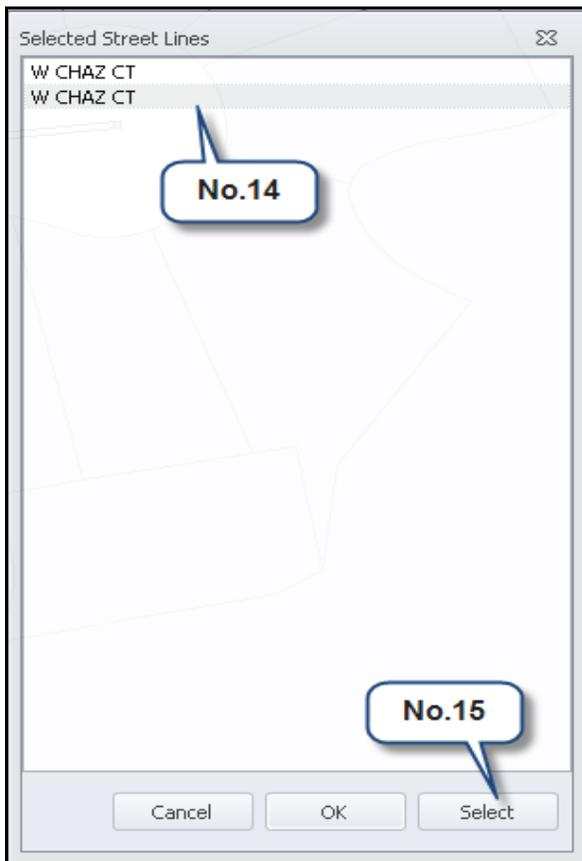
Countywide Address Management System

CAMS Editing

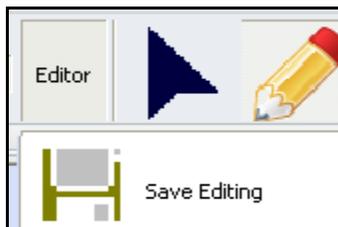
14) From Selected Street Line window select the second one.

15) Click on Select and repeat step 13.

16) Click OK.



17) To save the changes to the database, click on Save Editing from the "Editor" Dropdown Menu.



Countywide Address Management System

CAMS Editing

The split operation updates the shape of the existing feature and creates a new feature.

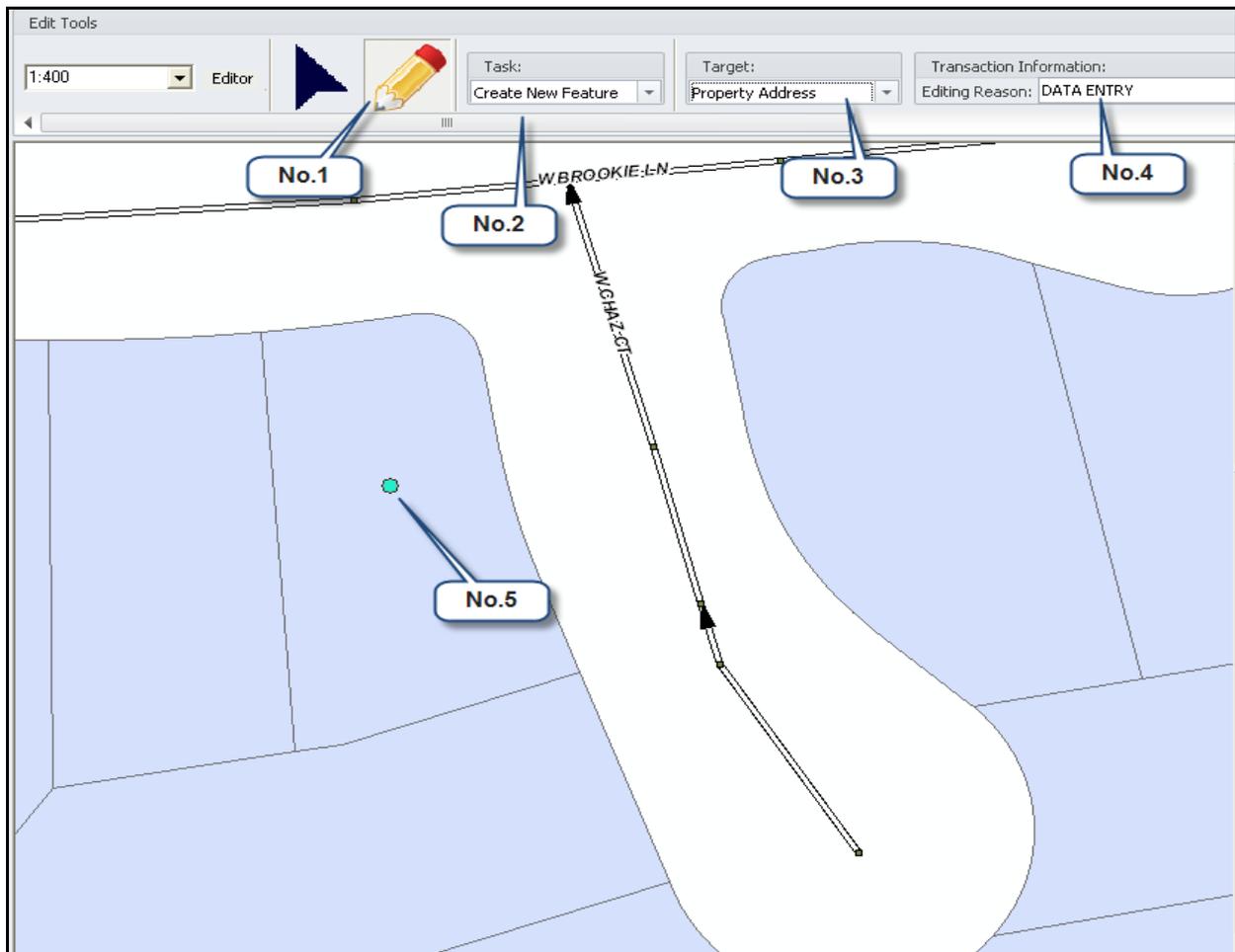


Countywide Address Management System

CAMS Editing

Add New Address Point

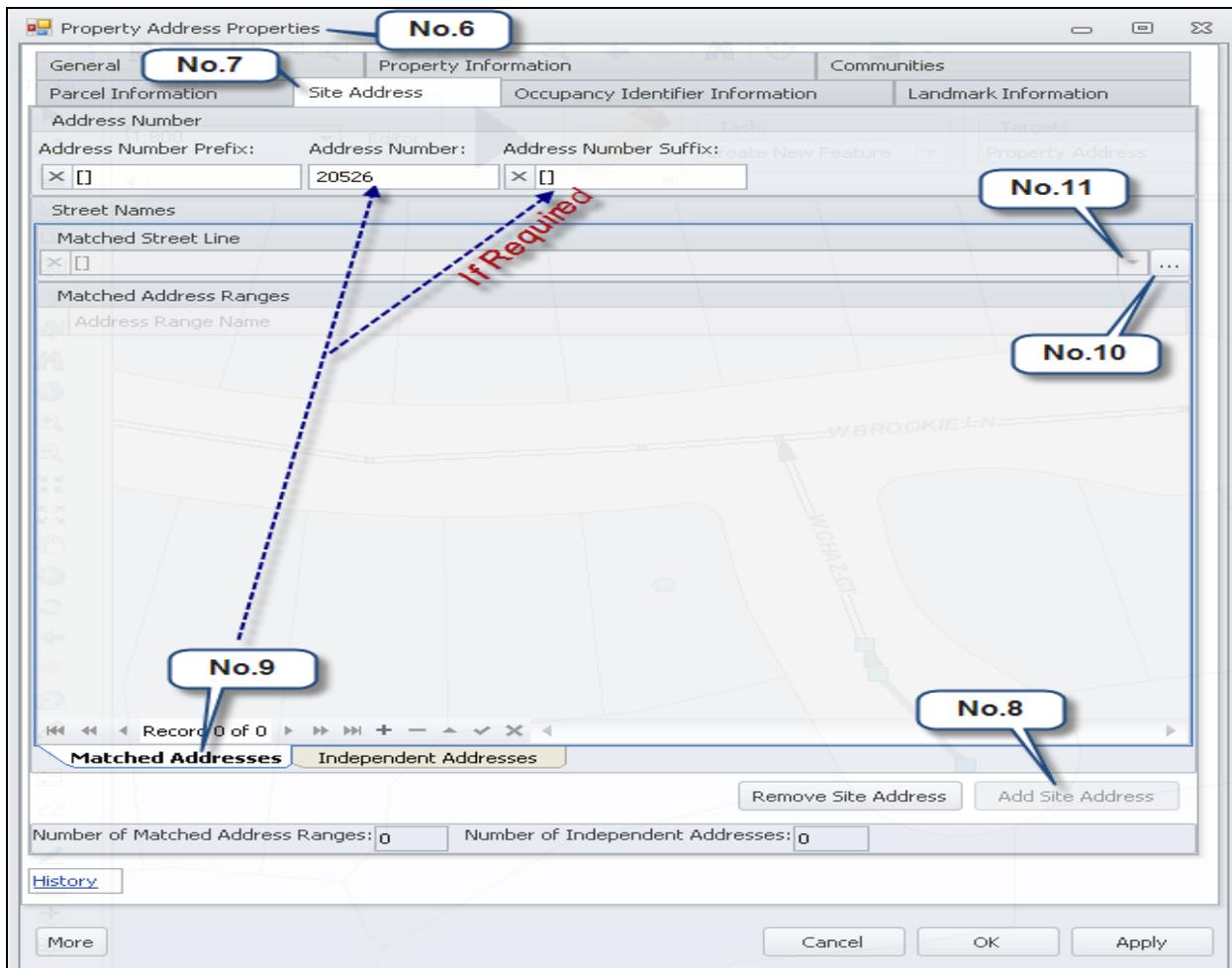
- 1) Click on the Sketch Tool  on the “Editor” toolbar.
- 2) Select Create new Feature command on the “Task” toolbar.
- 3) Select Property Address command on the “Target” toolbar.
- 4) Select Data Entry command on the “Transaction Information” toolbar.
- 5) On the map, click the left mouse button once at the position where you wish to place the new point.



Countywide Address Management System

CAMS Editing

- 6) A window will open up containing the Property Address Properties form.
- 7) Click on Site Address tab.
- 8) Click on Add Site Address from Site Address tab.
- 9) From Matched Addresses tab fill out the required fields (Address Number, Address Number Prefix and Suffix*)-(e.g. 5026 W BROOKIE LN).
- 10) Click on “More” button to match Address Number with the corresponding Street Line.
- 11) Click on Match Address Ranges Dropdown arrow.



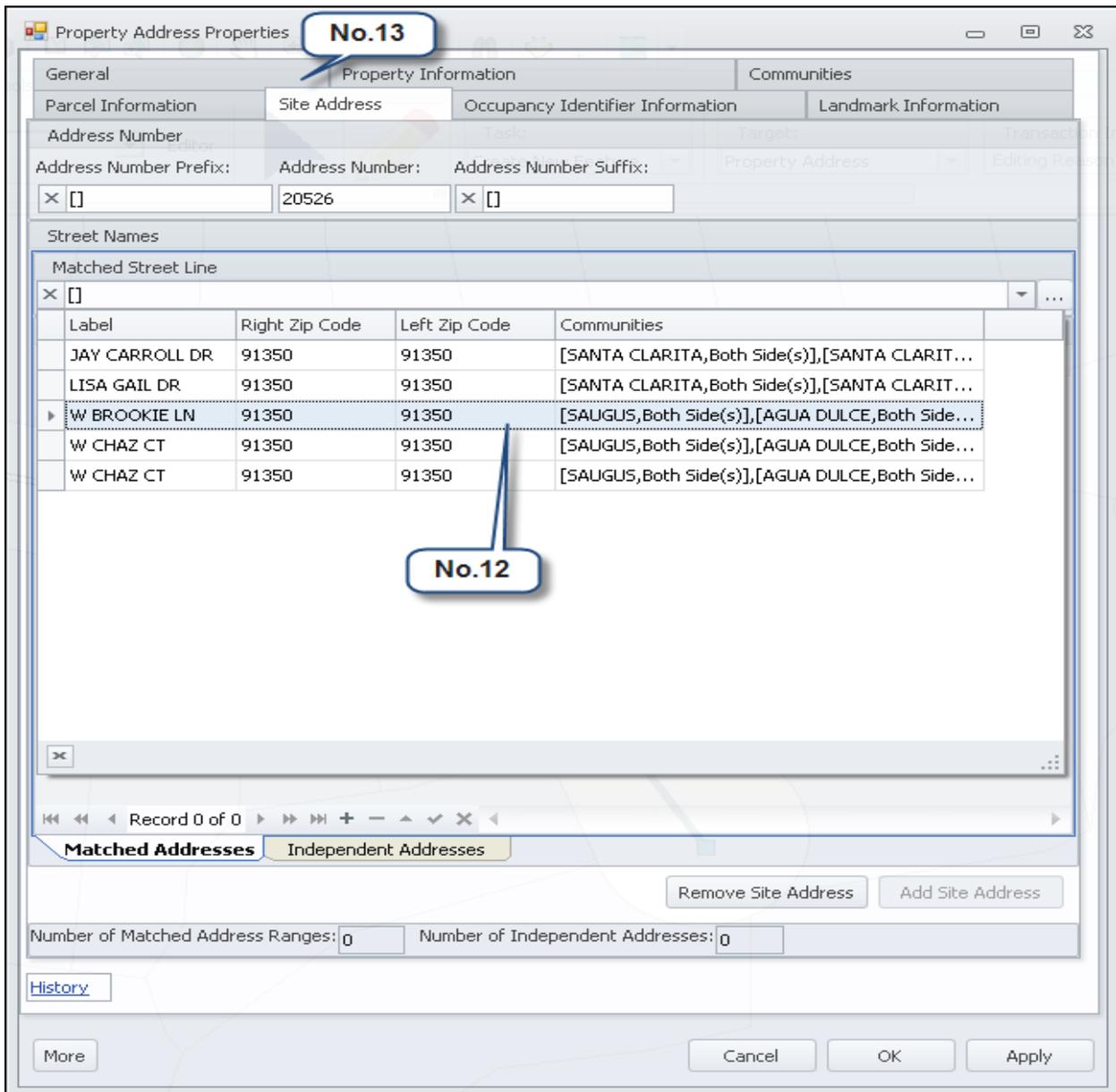
*Please Refer to Page No 31.

Countywide Address Management System

CAMS Editing

12) Select the Matched Street Line. (If Auto Match does not find the right match, go to add new Independent Addresses tab*)

13) Click on General tab.



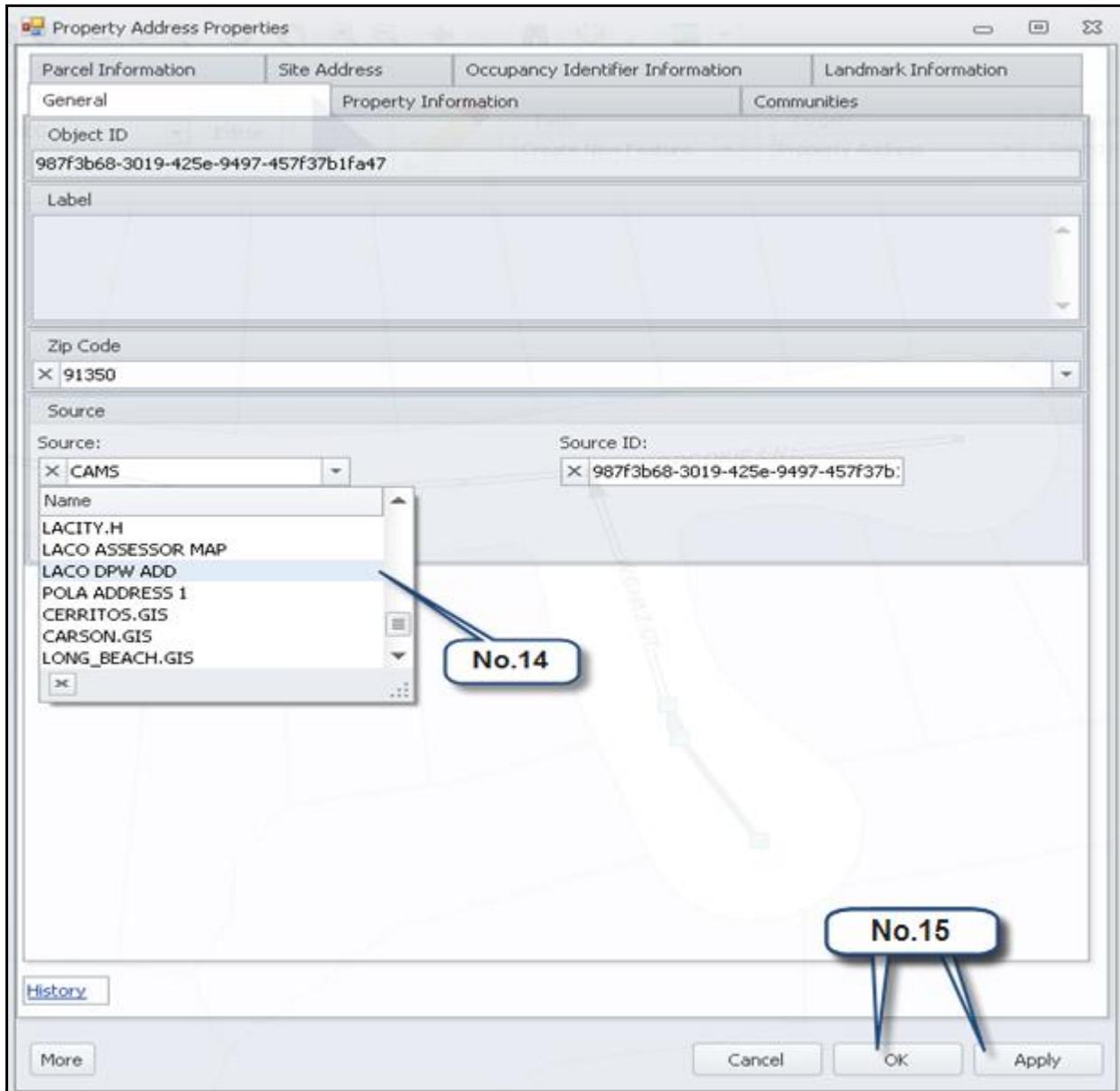
*Please Refer to Page No 29.

Countywide Address Management System

CAMS Editing

14) From Source dropdown arrow, select “LACO DPW ADD”.

15) Click Apply then OK.

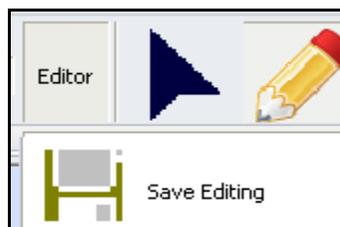


Countywide Address Management System

CAMS Editing



16) To save the changes to the database, click on Save Editing from the “Editor” dropdown menu.



Countywide Address Management System

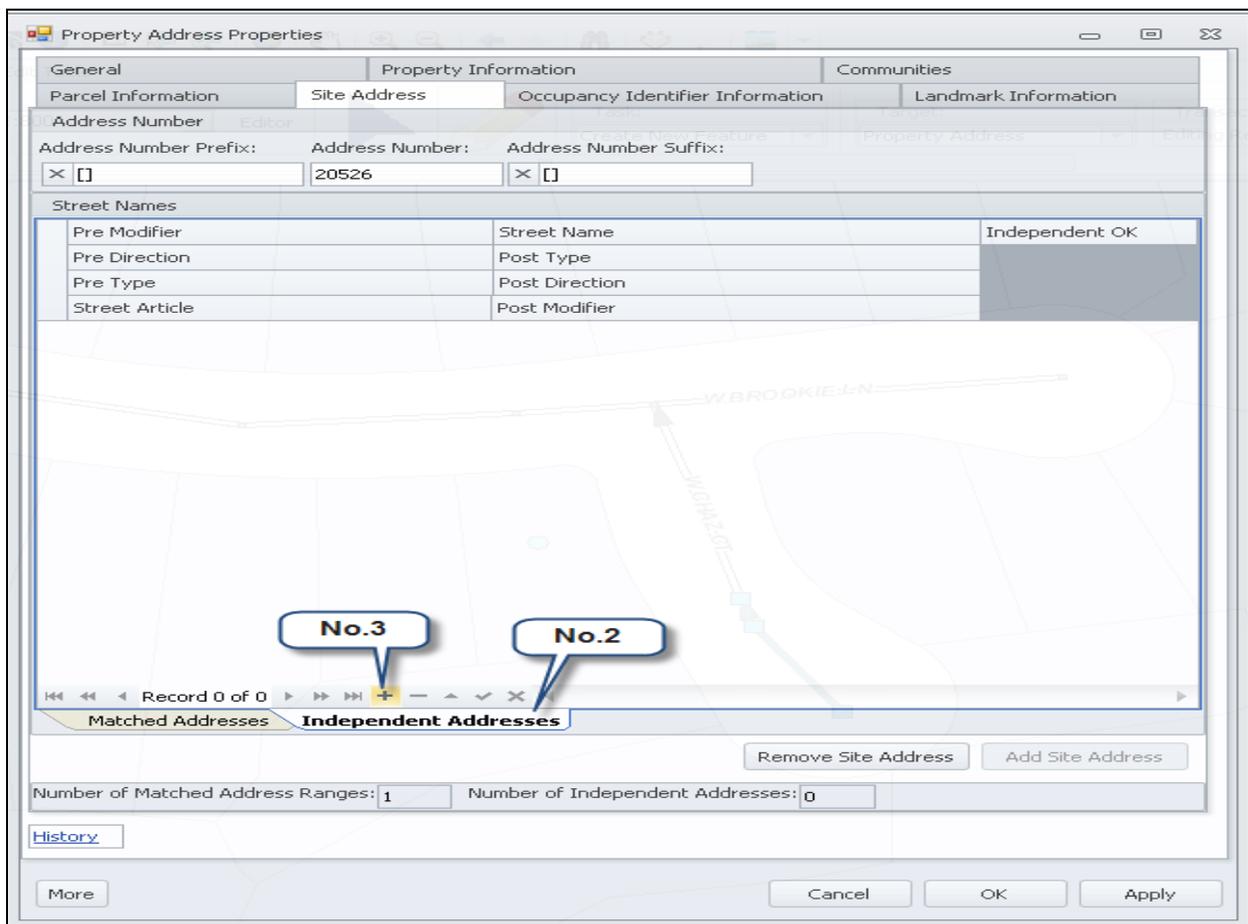
CAMS Editing

Add New Independent Address Point

If Auto Match does not find the right street match within the Address Ranges you are looking for, click on the Independent Address tab in the bottom of Property Address Properties and manually add the attributes in the required fields.

Please follow the below steps to insert an Independent Address in Property Address Properties:

- 1) Repeat step 1 through 10 of the Add addressing Point.
- 2) Click on Independent Addressing tab.
- 3) Click on the Plus sign “+” to add input fields for the new address point.



Countywide Address Management System

CAMS Editing

4) Fill out all the required fields.

5) Check “No” option under Independent OK if it is not a true Independent Address.

Property Address Properties

General Property Information Create New Feature Communities Address

Parcel Information Site Address Occupancy Identifier Information Landmark Information

Address Number

Address Number Prefix: Address Number: 20526 Address Number Suffix:

Street Names

Pre Modifier	Street Name	Independent OK
	BROOKI	<input type="radio"/> Yes <input checked="" type="radio"/> No
	BROOKIE	
	BROOKINGS	

Matched Addresses Independent Addresses

Remove Site Address Add Site Address

Number of Matched Address Ranges: 1 Number of Independent Addresses: 0

History

More Cancel OK Apply

6) Repeat step 13 through 16 of the Add Addressing Point.

Countywide Address Management System

CAMS Editing

Add Suffix

A number suffix is a letter or fraction number that might come after an address. (E.g. if your address is 519U Rosemead BLVD the suffix would be “U” which is used for utility addresses* or if your address is 3719 1/2 Folsom St the suffix would be “1/2”)

The screenshot shows the 'Property Address Properties' dialog box with the 'Site Address' tab selected. The 'Address Number' section contains three input fields: 'Address Number Prefix' (empty), 'Address Number' (3719), and 'Address Number Suffix' (1/2). A red dotted arrow points to the 'Address Number Suffix' field. Below this, the 'Street Names' section shows a 'Matched Street Line' of 'FOLSOM ST'. The 'Matched Address Ranges' section shows a range '[3701 , 3799] FOLSOM ST' with a sub-entry '3719 1/2 FOLSOM ST' highlighted in blue.

The screenshot shows the 'Property Address Properties' dialog box with the 'Site Address' tab selected. The 'Address Number' section contains three input fields: 'Address Number Prefix' (empty), 'Address Number' (519), and 'Address Number Suffix' (U). A red dotted arrow points to the 'Address Number Suffix' field. Below this, the 'Street Names' section shows a 'Matched Street Line' of 'S ROSEMEAD BLVD'. The 'Matched Address Ranges' section shows a range '[501 , 529] S ROSEMEAD BLVD' with a sub-entry '519 U S ROSEMEAD BLVD' highlighted in blue.

***Note:**

For the right location of utility address point, click on the following link and check the PDF Address file for that address point.

(pwg\file\Sm\pm)\DBA\Database_Unit\Street Name & House Numbering Unit\1_HN_UNIT_APPROVALS_ALL – Copy)

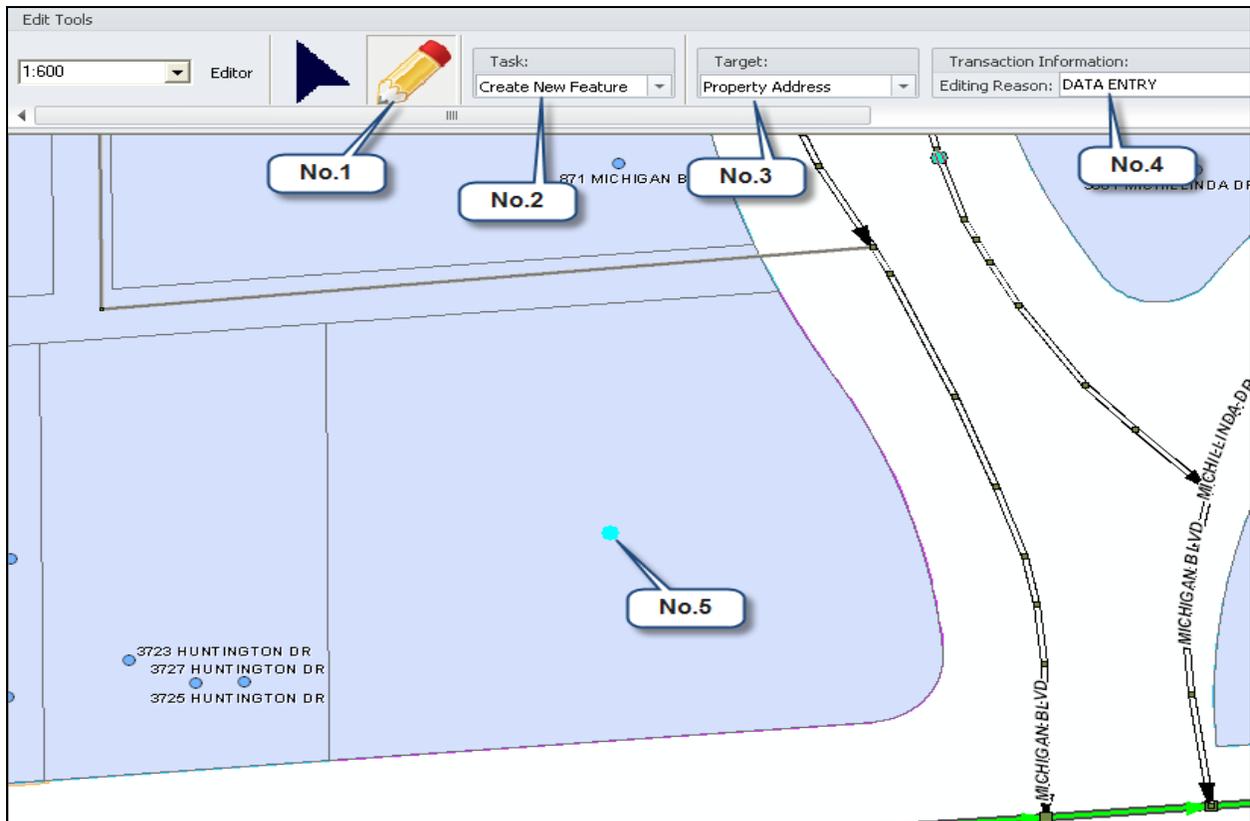
Countywide Address Management System

CAMS Editing

Addressing For Multi-Unit Buildings

To input multiple units in same complex so that each unit has a unique numeric or letter address that has no duplicates within the complex in CAMS please follow the below steps:
(E.g.879 Michigan Blvd Units A-T)

- 1) Click on the Sketch Tool  on the “Editor” toolbar.
- 2) Select Create new Feature command on the “Task” toolbar.
- 3) Select Property Address command on the “Target” toolbar.
- 4) Select Data Entry command on the “Transaction Information” toolbar.
- 5) On the map, click the left mouse button once at the position where you wish to place the new point.



Countywide Address Management System

CAMS Editing

- 6) A window will open up containing the Property Address Properties form.
- 7) Click on Site Address tab.
- 8) Click on Add Site Address from Site Address tab.
- 9) From Matched Addresses tab fill out the required fields.
- 10) Click on “More” button to match Address Number with the corresponding Street Line.
- 11) Click on Match Address Ranges dropdown arrow and select the Matched Street Line.

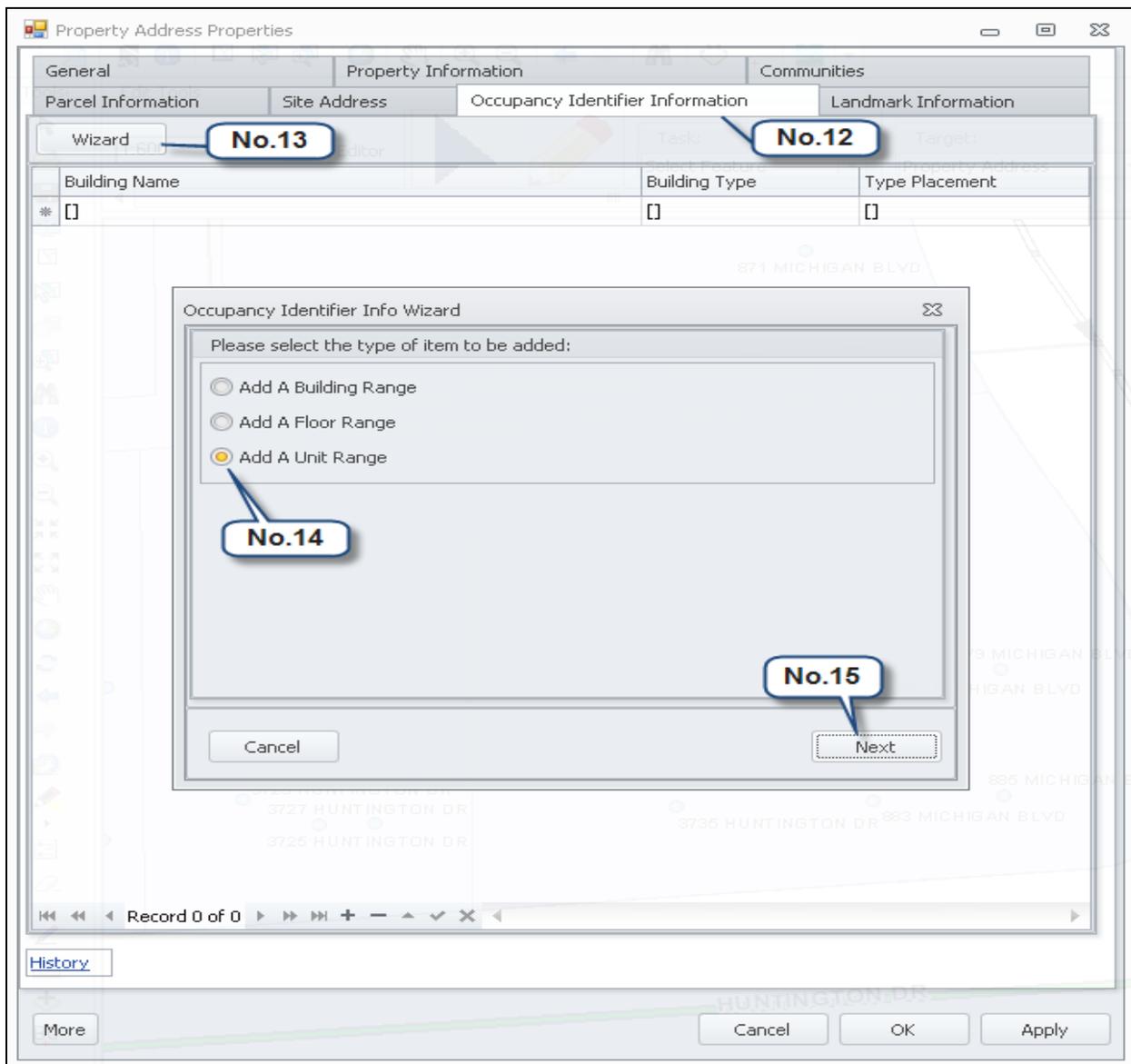
The screenshot shows the 'Property Address Properties' window. The 'Site Address' tab is selected. The 'Address Number' section has 'Address Number Prefix' as an empty field, 'Address Number' as '879', and 'Address Number Suffix' as an empty field. Below this is the 'Street Names' section with a 'Matched Street Line' dropdown menu. A table lists street names with their zip codes and communities. At the bottom, there are 'Remove Site Address' and 'Add Site Address' buttons, and a 'More' button at the very bottom.

Label	Right Zip Code	Left Zip Code	Communities
MICHIGAN BLVD	91107	91107	[EAST PASADENA,Both Side(s)]
WOODWARD BLVD	91107	91107	[EAST PASADENA,Both Side(s)],[EAST PASA

Countywide Address Management System

CAMS Editing

- 12) Click on Occupancy Identifier Information tab.
- 13) Click on Wizard tab.
- 14) From Occupancy Identifier Info Wizard window select Add A Unit Range.
- 15) Click Next.

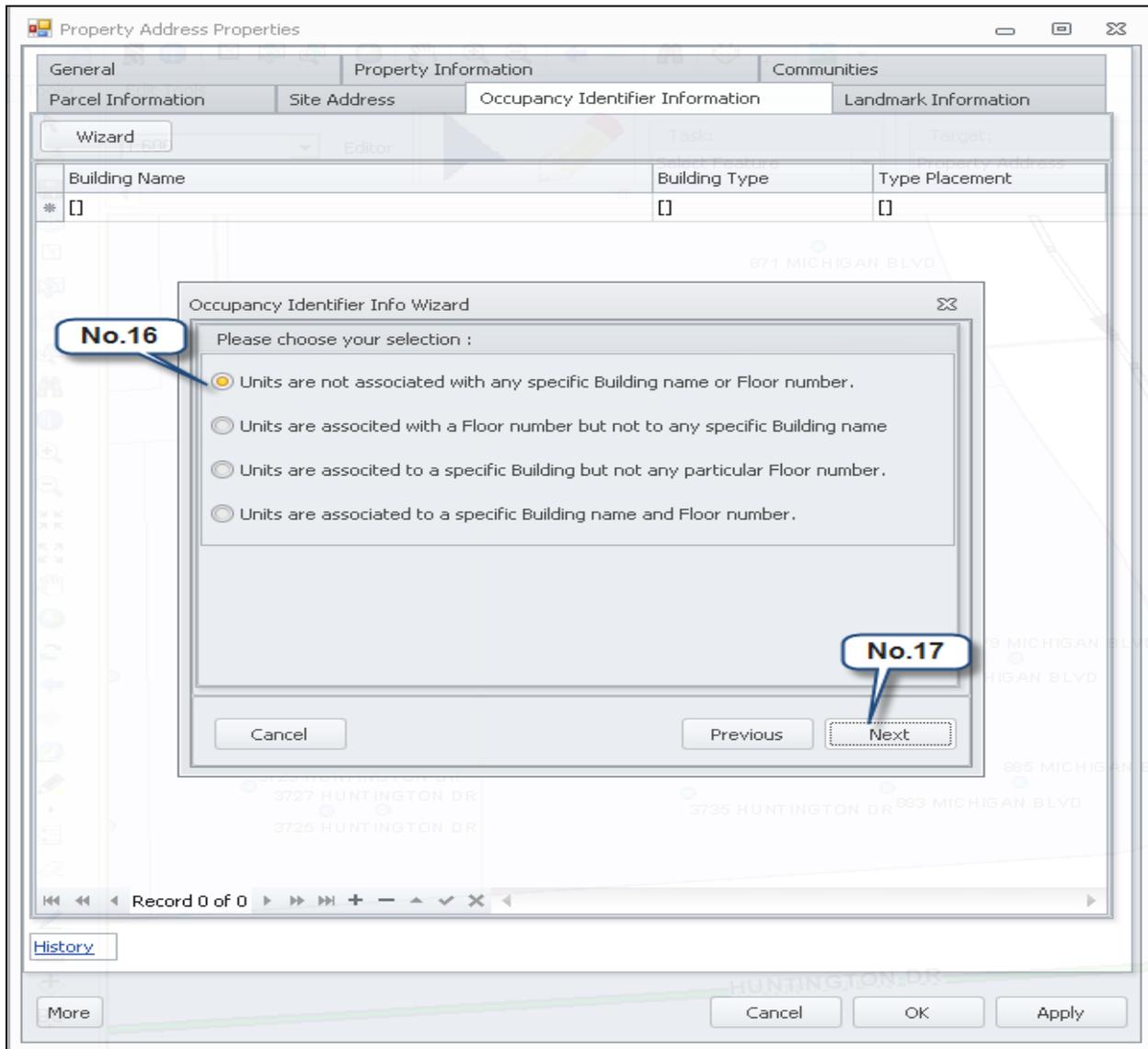


Countywide Address Management System

CAMS Editing

16) From Occupancy Identifier Info Wizard window select the first option (Unit are not associated with any specific Building name or Floor number.)*

17) Click Next.



***Note:**

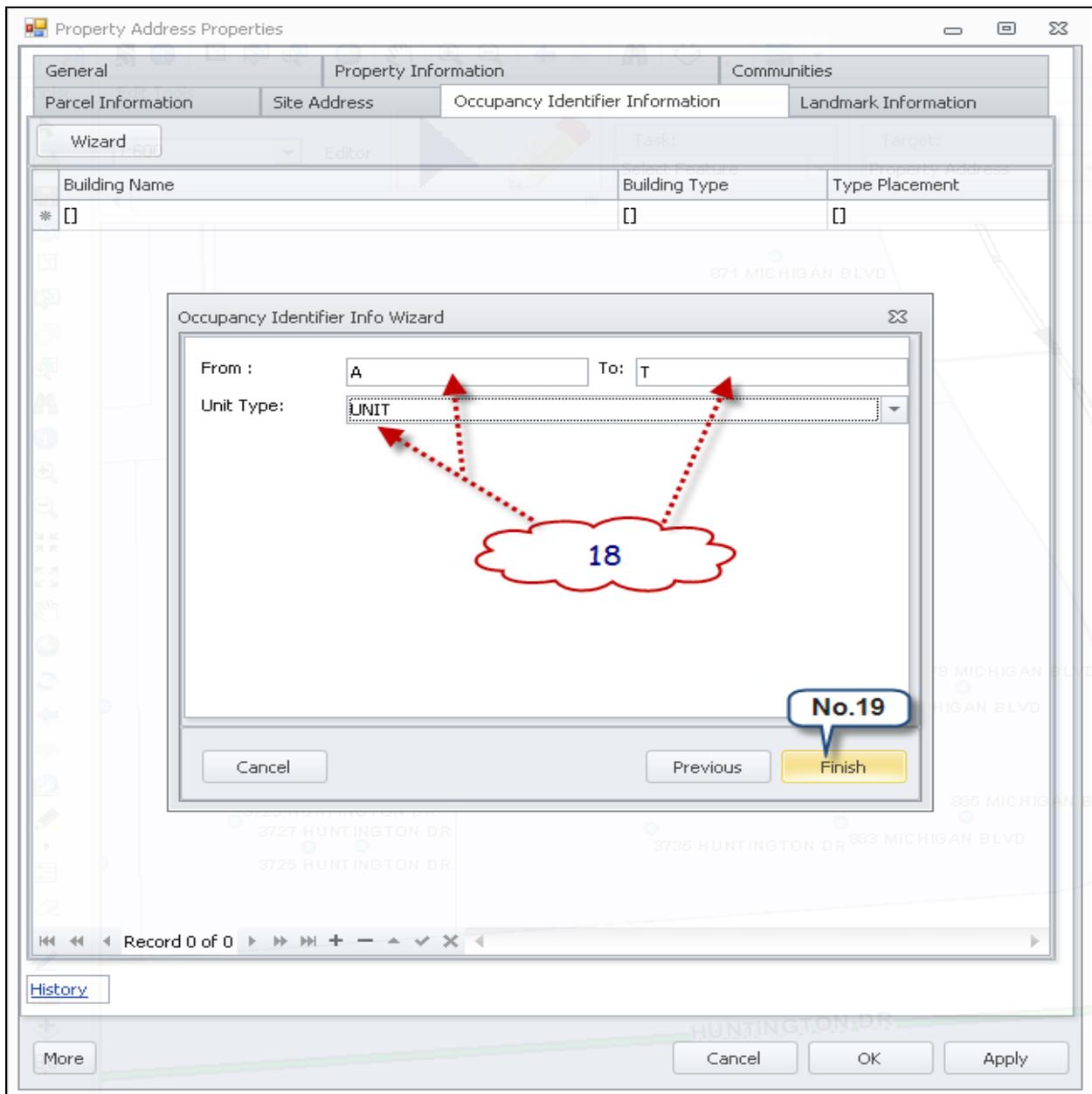
Options change depending on how the units are associated with any specific Building name or Floor number.

Countywide Address Management System

CAMS Editing

18) From Occupancy Identifier Info Wizard window fill out the required fields.

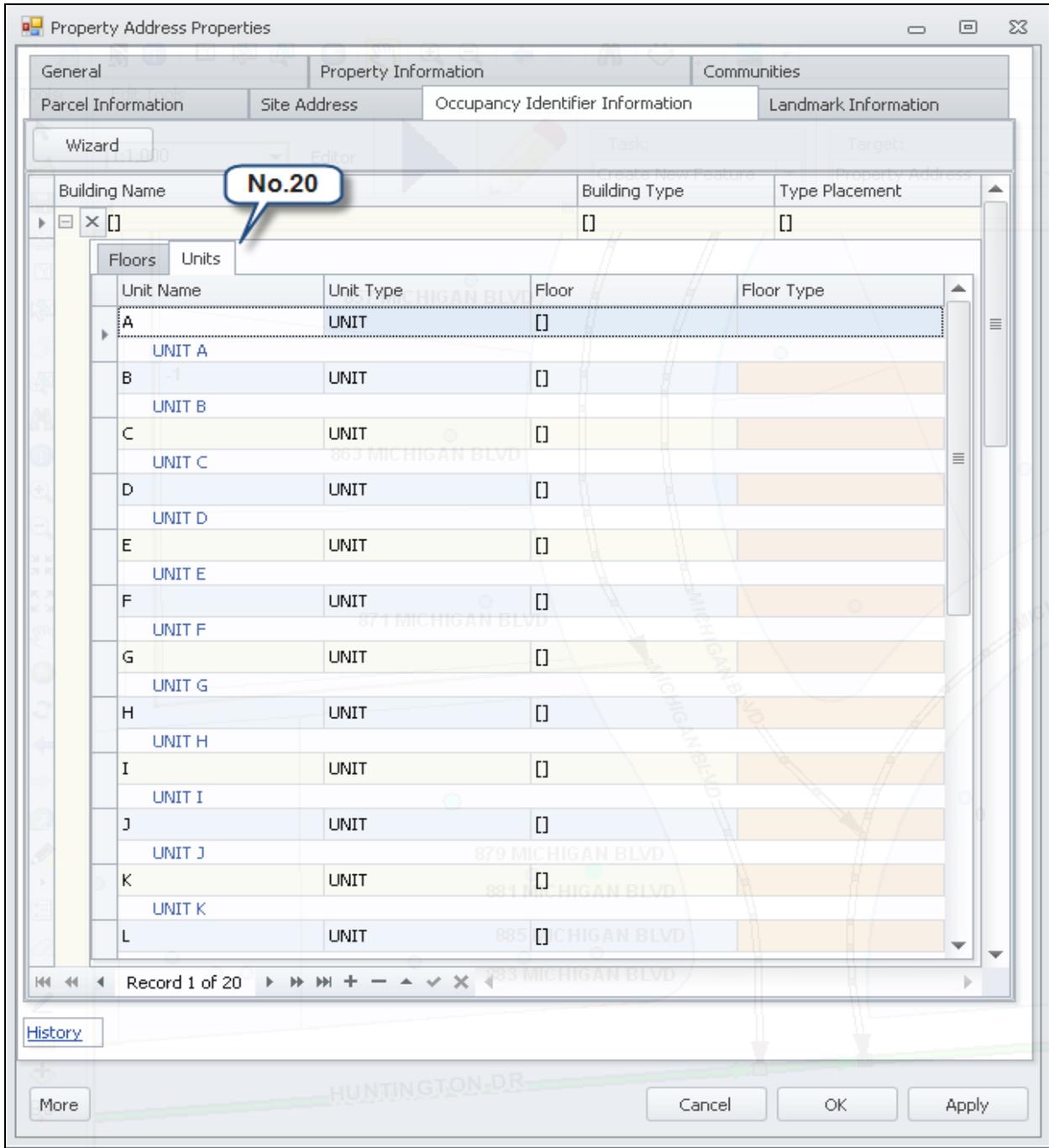
19) Click Finish.



Countywide Address Management System

CAMS Editing

20) In order to see the Units Click on Units tab.



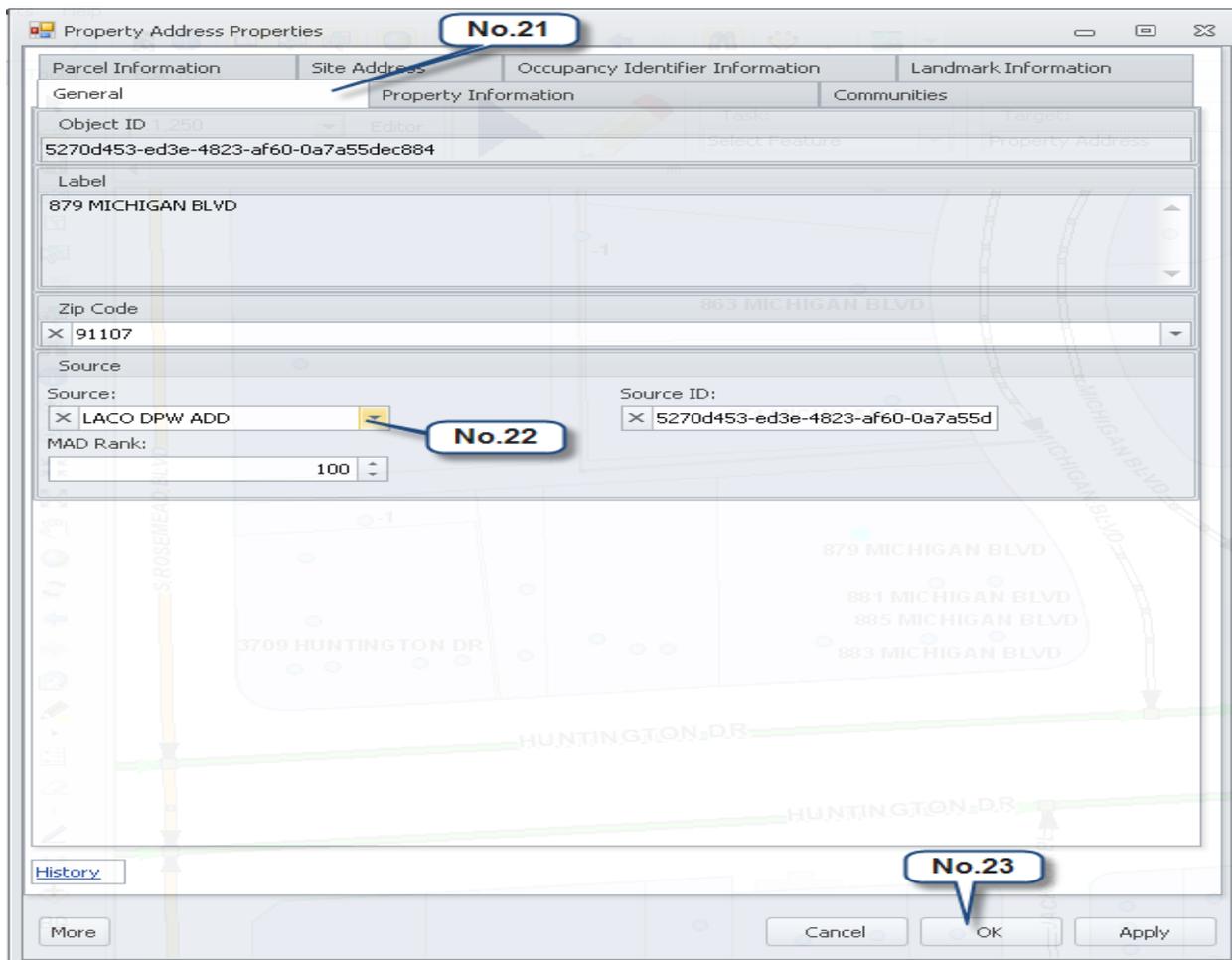
Countywide Address Management System

CAMS Editing

21) Click on General tab.

22) From Source dropdown arrow, select “LACO DPW ADD”.

23) Click OK.



24) To save the changes to the database, click on Save Editing from the “Editor” dropdown menu.

Note:

CAMS will have/display one Address point but will contain a point for each unit when is exported.

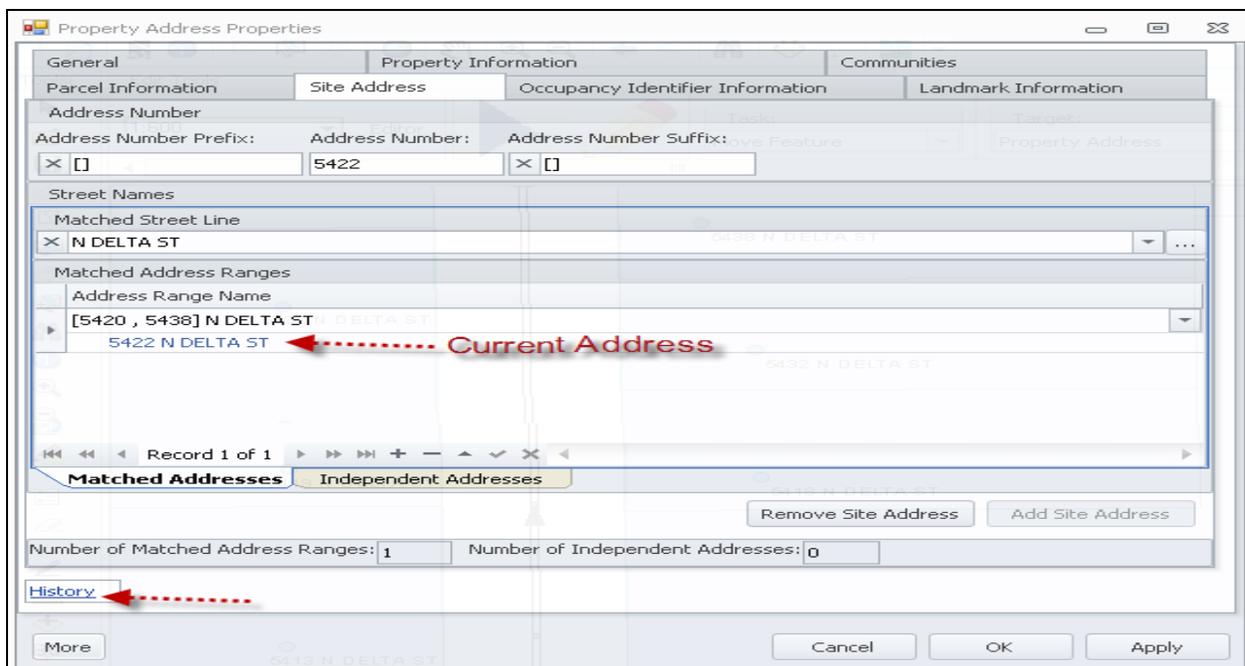
Countywide Address Management System

CAMS Editing

The difference between History and the Historical in Property Address Properties

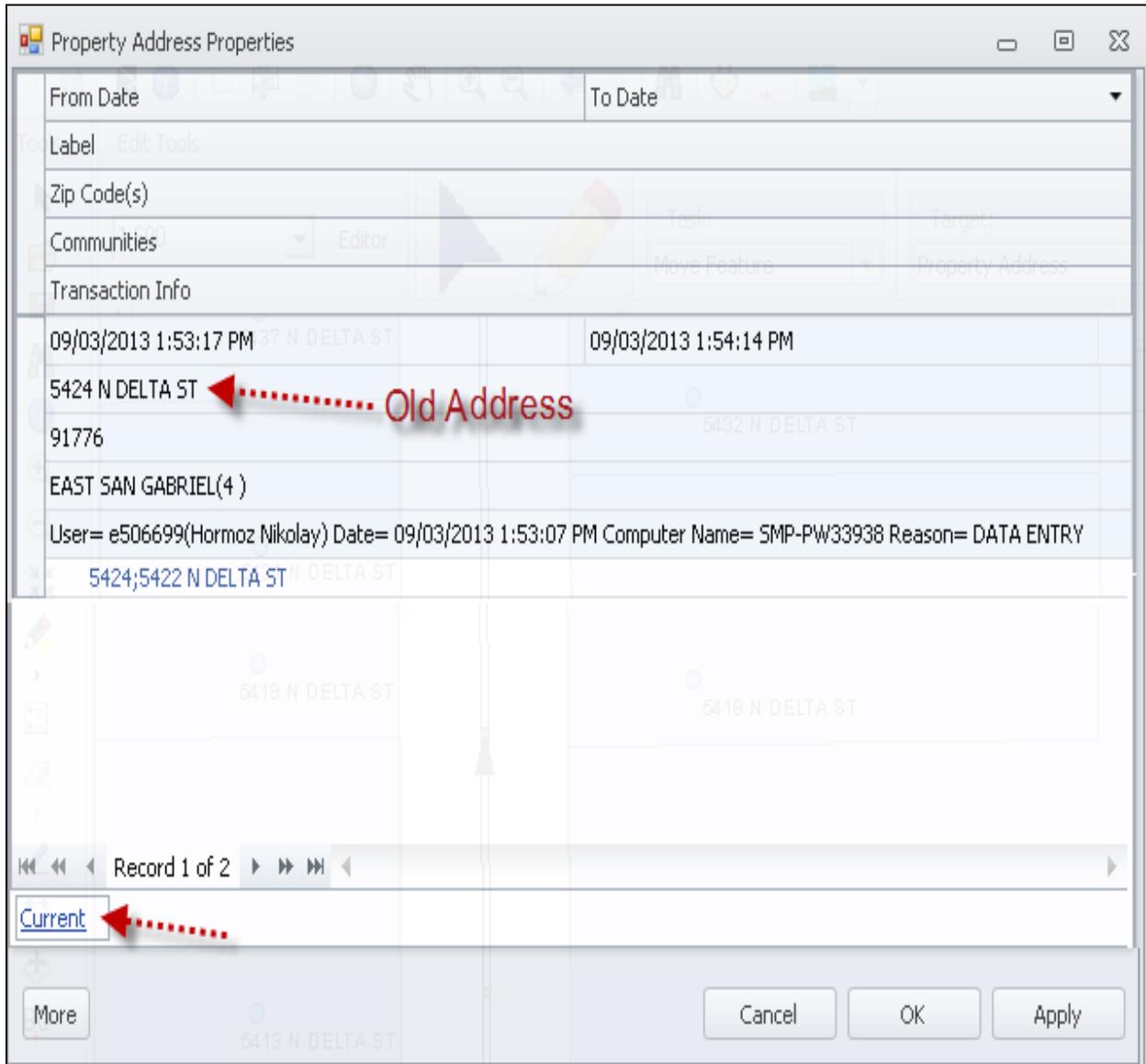
History

The History window is accessible from the Site Address tab using the toggle button located at the lower left corner of the page. The History window is a read only list of old address records previously associated with the point. When an edit is made to the current address in the Site Address tab and saved, the History window is automatically populated with the old address data with a date and time stamp (unsaved edits will not populate the History window). This window provides a chronological order of edits made to the point address. If old address data has to be entered for a new address point being created, enter each old address in chronological order before entering the current address (each address has to be saved prior to entering the next address so that the History window is populated correctly). If old address data has to be entered to an existing address point with old addresses in the History window, do not make any edits to this point. Instead, the old data shall be entered as a separate point and marked as Historical (see description of Historical points on page 41). If old address data has to be entered to an existing point with no records in the History window, create a new point entering the old address(es) first and the current address last as described above. Be sure to populate all fields in the new point to match the original point data before deleting the original point. (For example if the existing address has changed from 5424 N.Delta Street to 5422 N.Delta Street, the old address will be History which has been updated to the new address.)



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Note:

If there is an address change for a point where the old address point has not been put on the map and does not exist, first update the address with the old address, save the changes to the database then update it with the new address.

Countywide Address Management System

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Historical

The Historical option is selected in the Property Type field from the Property Information tab in the Properties Address Properties window. The Historical option is used when the data of an existing address point is no longer current, but is kept for its historical value. Once a point is saved as Historical, the address data is no longer editable. A Historical point may coexist with other points on the parcel. When adding old address data to an existing point that already has saved records in the History window, but the old data to be added is not listed, it is recommended to create a new address point and save it as Historical. In this circumstance, adding the old data as a new Historical point keeps the date and time stamp(s) of the History in the existing point intact.

