
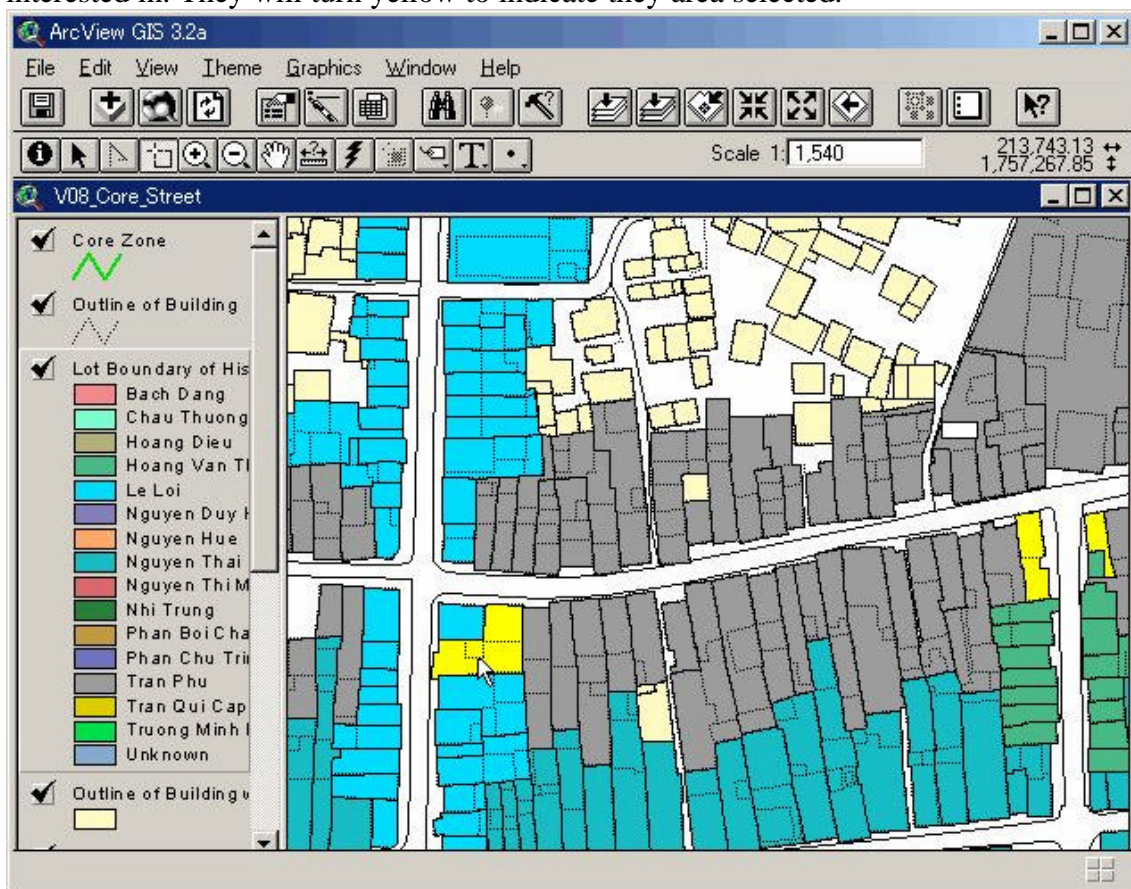




Exercise 3: Selecting features with the mouse

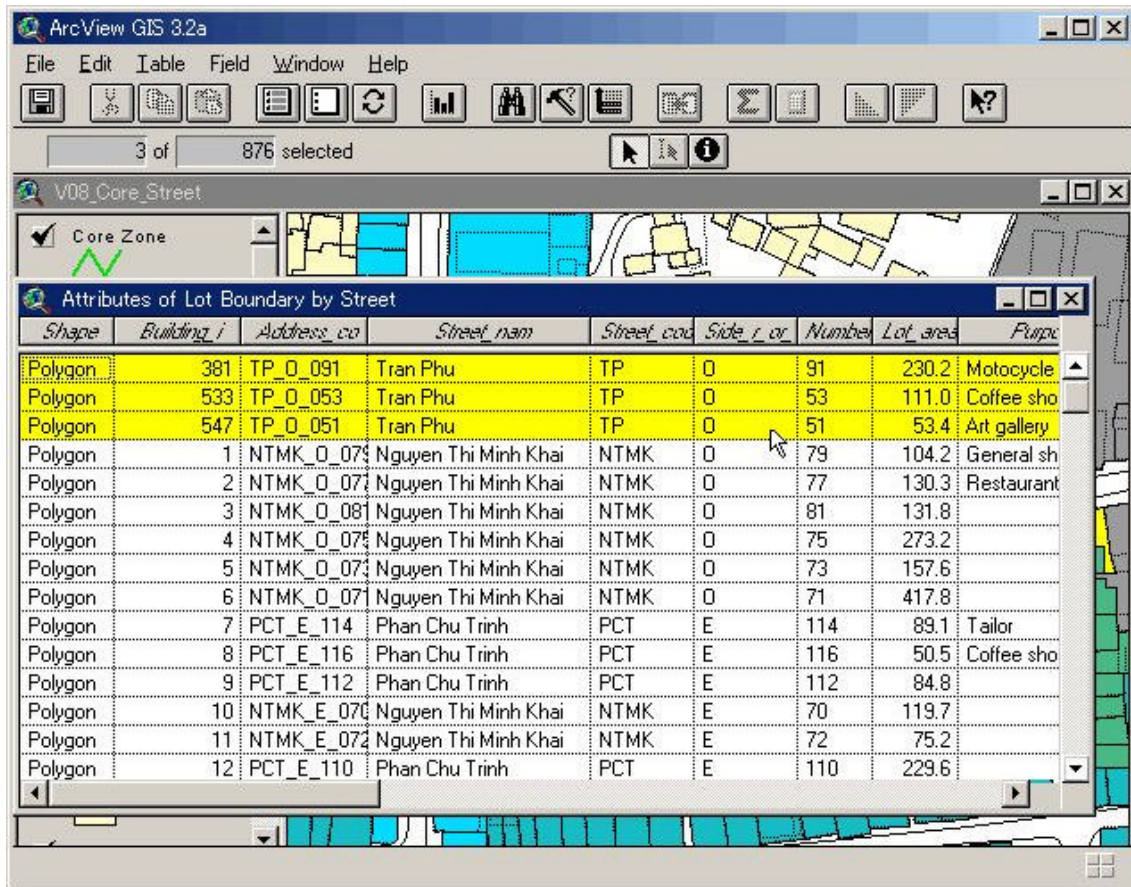
Suppose you are looking at a view of the Hoi An Old Town and you want to see the attribute of three historical building in the GIS Database for Monuments Management and Prevention.

1. Start ArcView. In the dialog that appears, navigate to c:\vn_ha'. Double-click the 'vn_ha' directory. Select the project file called 'Hoi_An_2.apr' from the list on the left side of the dialog and press OK.
2. Click the name of the theme containing the features you wish to select, in this case Lot Boundary of Historical Building by Street, to make this theme active.
3. Click the Select Feature tool , hold down SHIFT, and click the three lots you are interested in. They will turn yellow to indicate they area selected.



4. Click the Open Theme Table button  to display the attribute table for the Lot Boundary of Historical Building by Street. This table contains one record for each lot in the theme.

5. Click the Promote button  to display the records for the selected lots at the top of the table.





3.3 Finding features by building a query expression

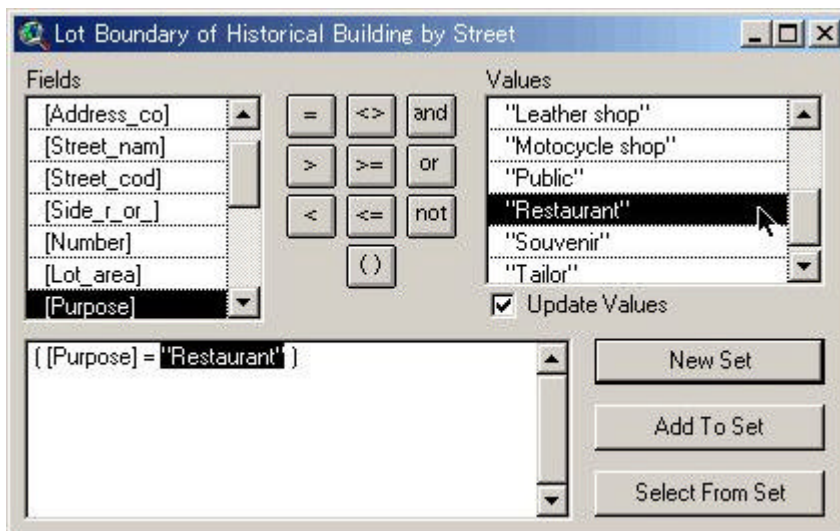
In the previous exercise you saw how to find out what features on a map represent, by selecting them and looking at their attributes. In this exercise you'll see how to find features according to their attributes, in order to discover where particular features are located, or to see which features meet particular criteria.

Exercise 4: Finding features by building a query expression

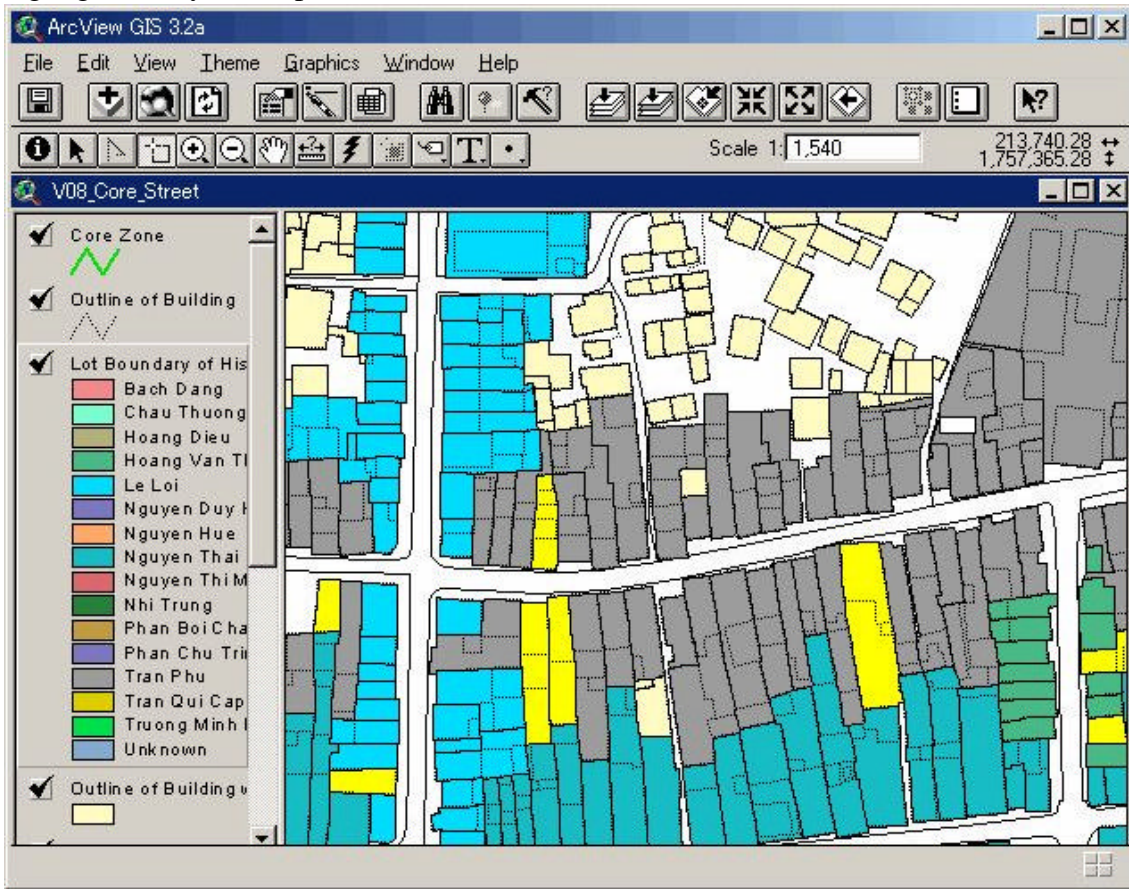
A *query expression* is a precise definition of what you want to select. Building a query expression is a powerful way to select features because an expression can include multiple attributes, operators, and calculations.


In this example, you want to find the location of building whose Purpose is "Restaurant". You can build an expression to specify this criteria.

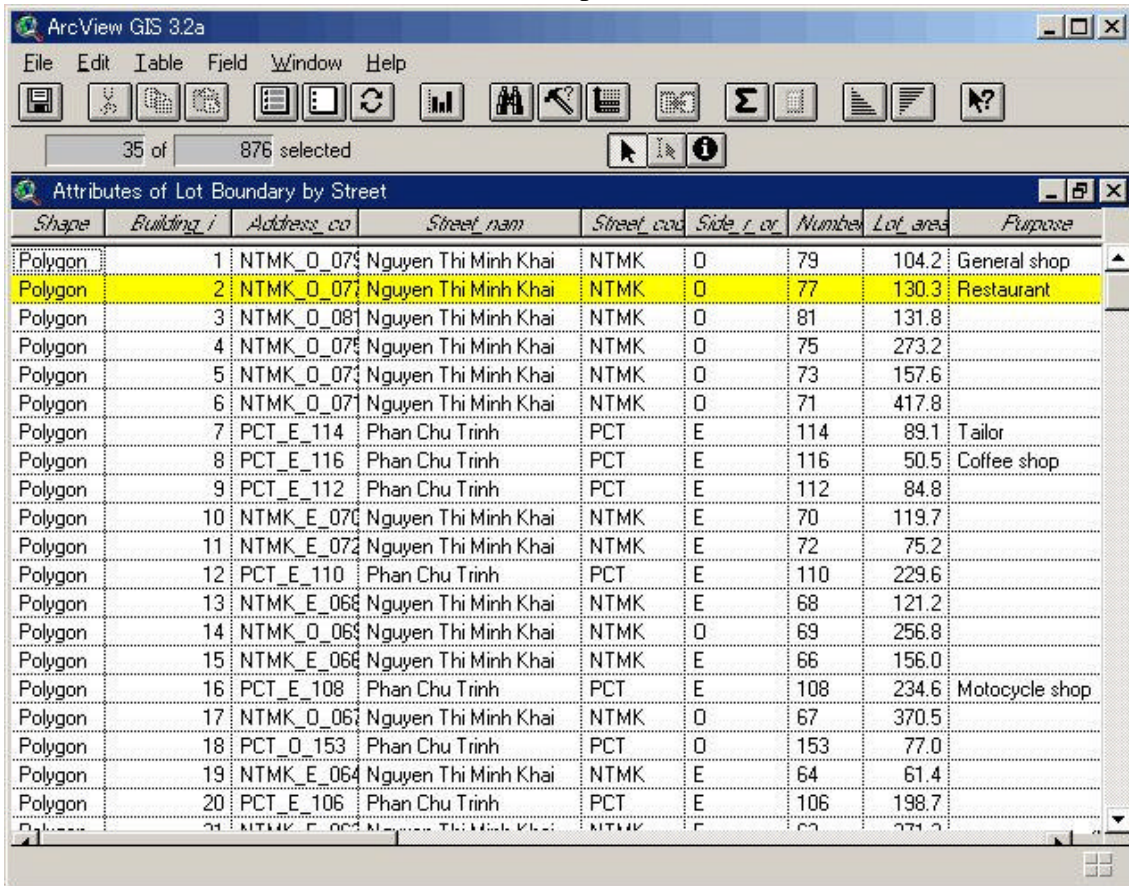
1. Start ArcView. In the dialog that appears, navigate to c:\vn_ha'. Double-click the 'vn_ha' directory. Select the project file called 'Hoi_An_2.apr' from the list on the left side of the dialog and press OK.
2. Click the name of the theme containing the features you want to find, in this case Lot Boundary of Historical Building by Street, to make this theme active.
3. Click the Query Builder button . The dialog that appears lets you build the query expression by either clicking on fields, operators, and values, or by typing it in. The Field list shows you all the fields in the theme's attribute table. We'll start by building the part of the expression to do with purpose.
4. In the list of fields, double-click the Purpose field to enter [Purpose] into the expression.
5. Click the Equal To button  to enter the = operator into the expression.
6. In the list of values, double-click the Restaurant field to enter "Restaurant" into the expression.



6. Click the New Set button. ArcView executes the query and features that are selected are highlighted in your map.




7. To find out how many features meet the criteria in your expression, or to review the attributes of the selected features, click the Open Theme Table button .



Shape	Building_i	Address_co	Street_nam	Street_cod	Side_r_or	Number	Lot_area	Purpose
Polygon	1	NTMK_0_074	Nguyen Thi Minh Khai	NTMK	0	79	104.2	General shop
Polygon	2	NTMK_0_077	Nguyen Thi Minh Khai	NTMK	0	77	130.3	Restaurant
Polygon	3	NTMK_0_081	Nguyen Thi Minh Khai	NTMK	0	81	131.8	
Polygon	4	NTMK_0_075	Nguyen Thi Minh Khai	NTMK	0	75	273.2	
Polygon	5	NTMK_0_073	Nguyen Thi Minh Khai	NTMK	0	73	157.6	
Polygon	6	NTMK_0_071	Nguyen Thi Minh Khai	NTMK	0	71	417.8	
Polygon	7	PCT_E_114	Phan Chu Trinh	PCT	E	114	89.1	Tailor
Polygon	8	PCT_E_116	Phan Chu Trinh	PCT	E	116	50.5	Coffee shop
Polygon	9	PCT_E_112	Phan Chu Trinh	PCT	E	112	84.8	
Polygon	10	NTMK_E_070	Nguyen Thi Minh Khai	NTMK	E	70	119.7	
Polygon	11	NTMK_E_072	Nguyen Thi Minh Khai	NTMK	E	72	75.2	
Polygon	12	PCT_E_110	Phan Chu Trinh	PCT	E	110	229.6	
Polygon	13	NTMK_E_068	Nguyen Thi Minh Khai	NTMK	E	68	121.2	
Polygon	14	NTMK_0_065	Nguyen Thi Minh Khai	NTMK	0	69	256.8	
Polygon	15	NTMK_E_068	Nguyen Thi Minh Khai	NTMK	E	66	156.0	
Polygon	16	PCT_E_108	Phan Chu Trinh	PCT	E	108	234.6	Motocycle shop
Polygon	17	NTMK_0_067	Nguyen Thi Minh Khai	NTMK	0	67	370.5	
Polygon	18	PCT_0_153	Phan Chu Trinh	PCT	0	153	77.0	
Polygon	19	NTMK_E_064	Nguyen Thi Minh Khai	NTMK	E	64	61.4	
Polygon	20	PCT_E_106	Phan Chu Trinh	PCT	E	106	198.7	
Polygon	21	NTMK_E_063	Nguyen Thi Minh Khai	NTMK	E	63	371.2	

The number of records that are currently selected is displayed in the table's tool bar, in this case 35 records selected.


3.4 Hot linking features

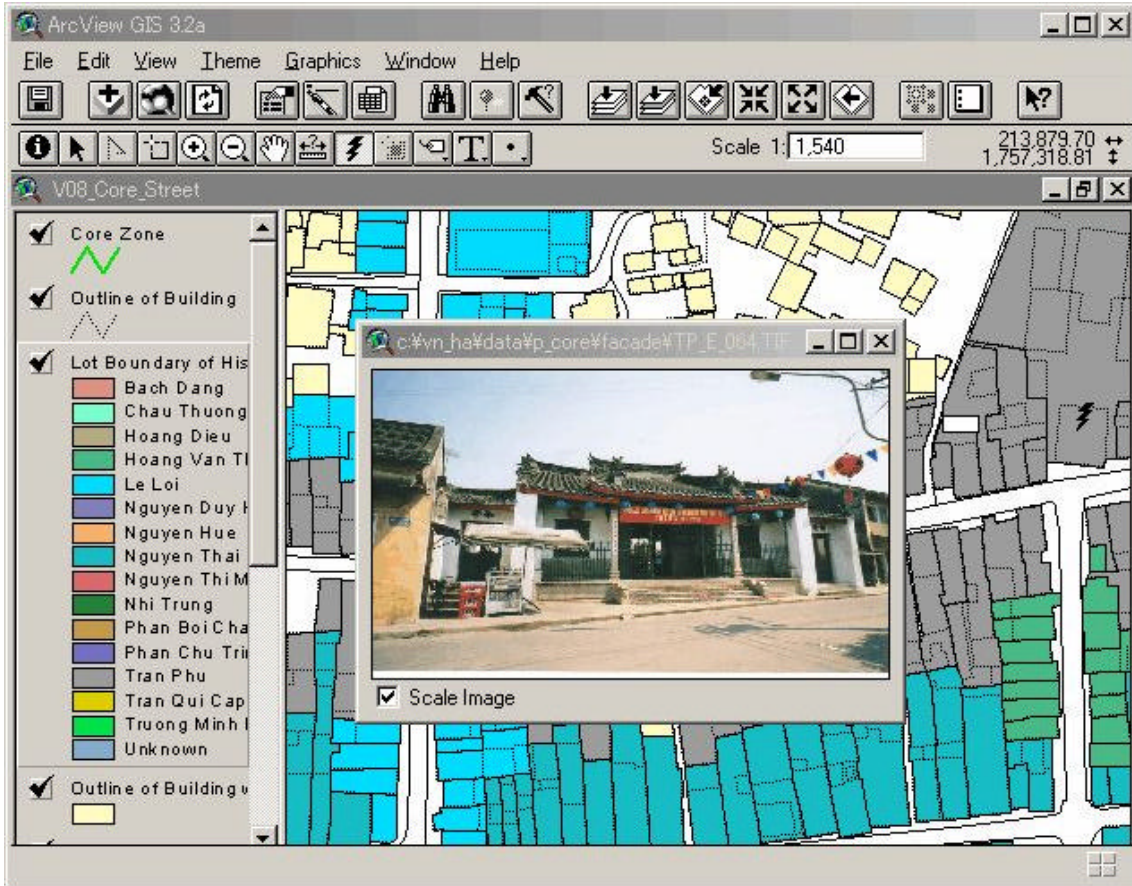
One of function to provide additional information on a view is to set up 'hot links (or hyper-links)' between the features in a theme and external files. Once a theme's hot links have been defined, clicking one of the theme's features with the Hot Link tool  automatically displays the file specified as the hot link for that feature. Almost any information can be hot linked, such as building floor plans, photographs, legal documents, and video clips. You can also set up hot links to the other views, tables, charts and layouts in your project.

Exercise 5: To use a hot link with the mouse

In this exercise, the Lot Boundary of Historical Building by Street theme has already been added a field called Picture containing the pathname of a photo of each facade. Therefore you want to see the facade of historical building which is interesting to visit in the Hoi An Old Town before.

1. Start ArcView. In the dialog that appears, navigate to c:\vn_ha'. Double-click the 'vn_ha' directory. Select the project file called 'Hoi_An_2.apr' from the list on the left side of the dialog and press OK.

2. Click the name of the theme which hot links have been defined, in this case Lot Boundary of Historical Building by Street, to make this theme active.
3. Click the Hot Link tool . If this tool is dimmed out, hot links have not been defined for the active theme.
4. Click on one of the active theme's features.



4. HOW TO UPDATE ATTRIBUTE DATA ON THE GIS DATABASE

GIS database is containing two data types. One is spatial data, such as shapefiles, ArcInfo coverages, and so on. Another is attribute data about the features linked its spatial data. Hoi An Town's People Committee has established the Protection Plan for the Historic Town of Hoi An Town in 1998 and the UNESCO inscribed Hoi An Town on the World Heritage List in the 1999. According to the Protection Plan, the historical buildings must be preserved in primitive state of the ancient town. This means spatial data will not change in the future. Therefore this section is describing how to update attribute data on the GIS database for Monuments Management and Prevention in Hoi An Town.