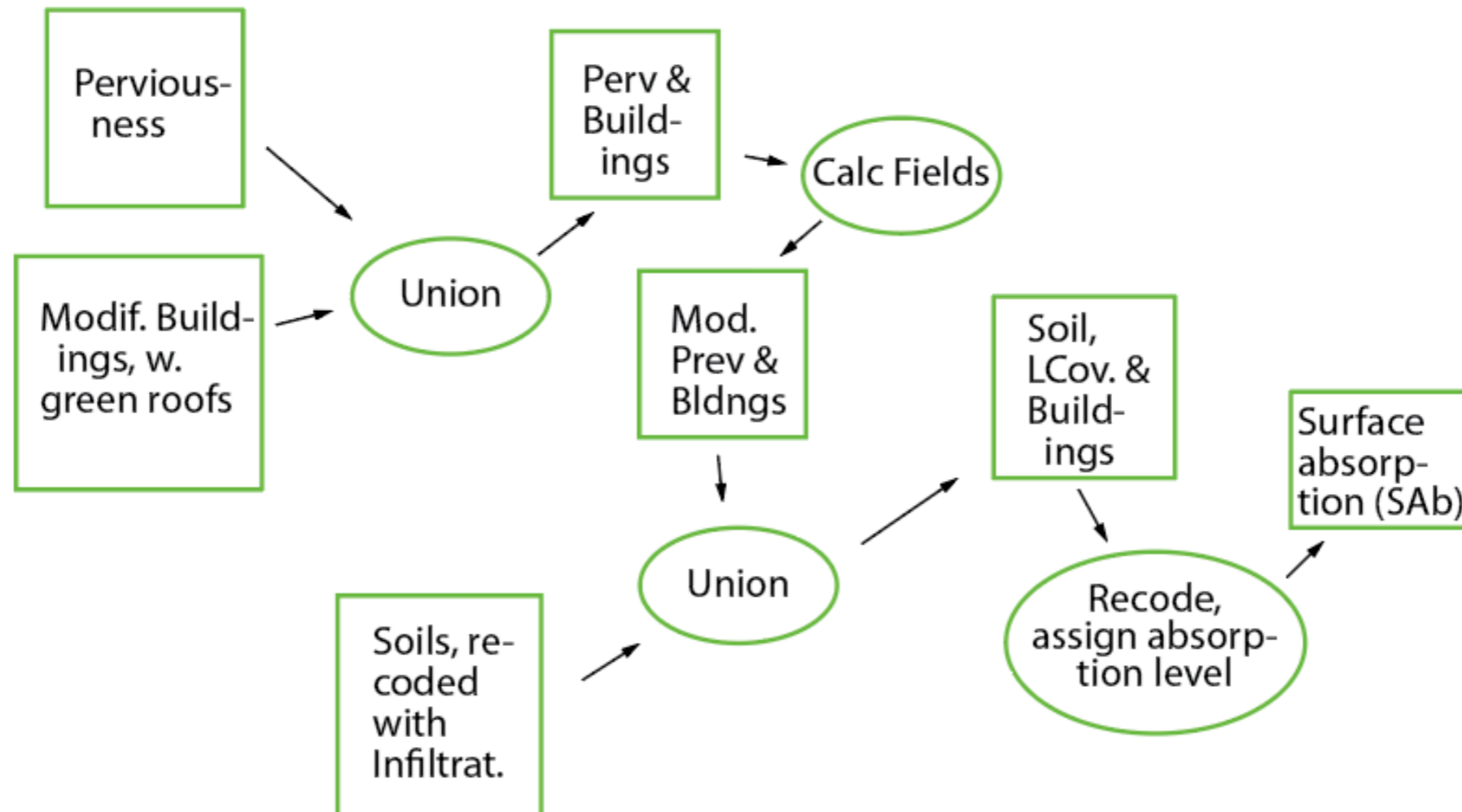
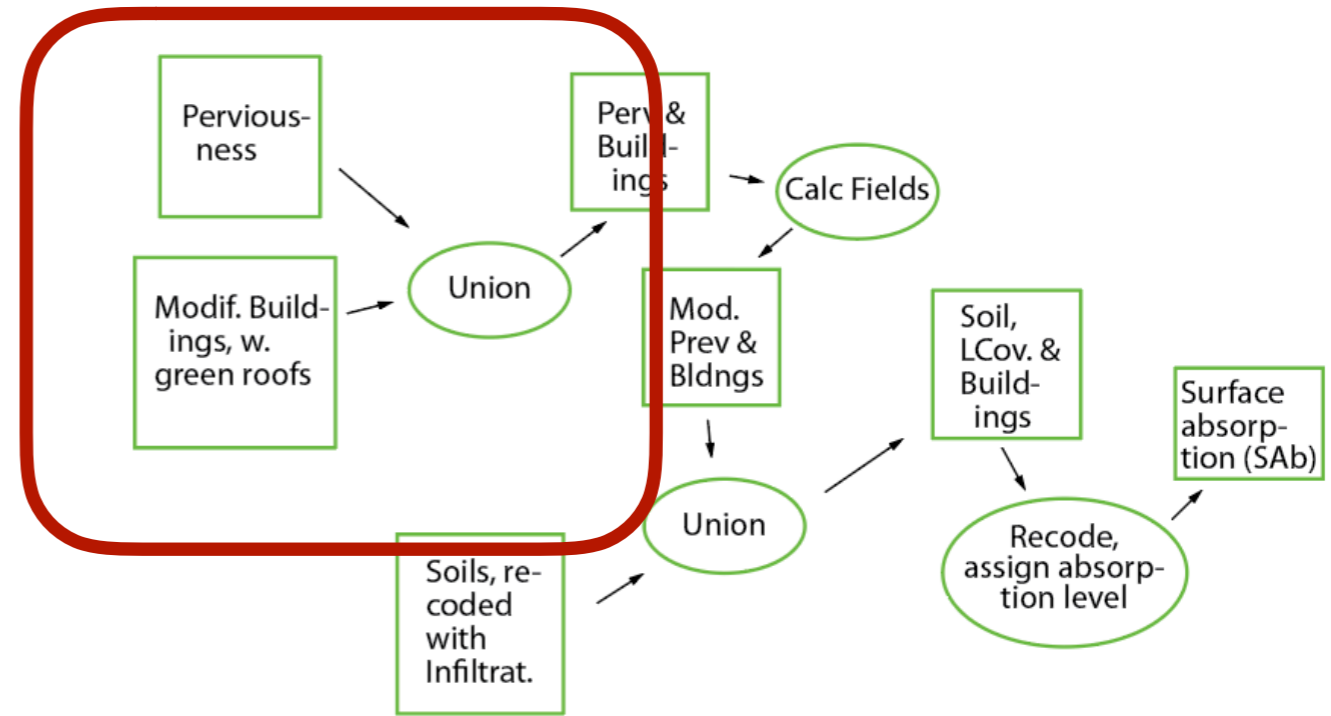


Infiltration Branch



Infiltration Branch

Union of Buildings and Perviousness results in empty columns



Union layer and table

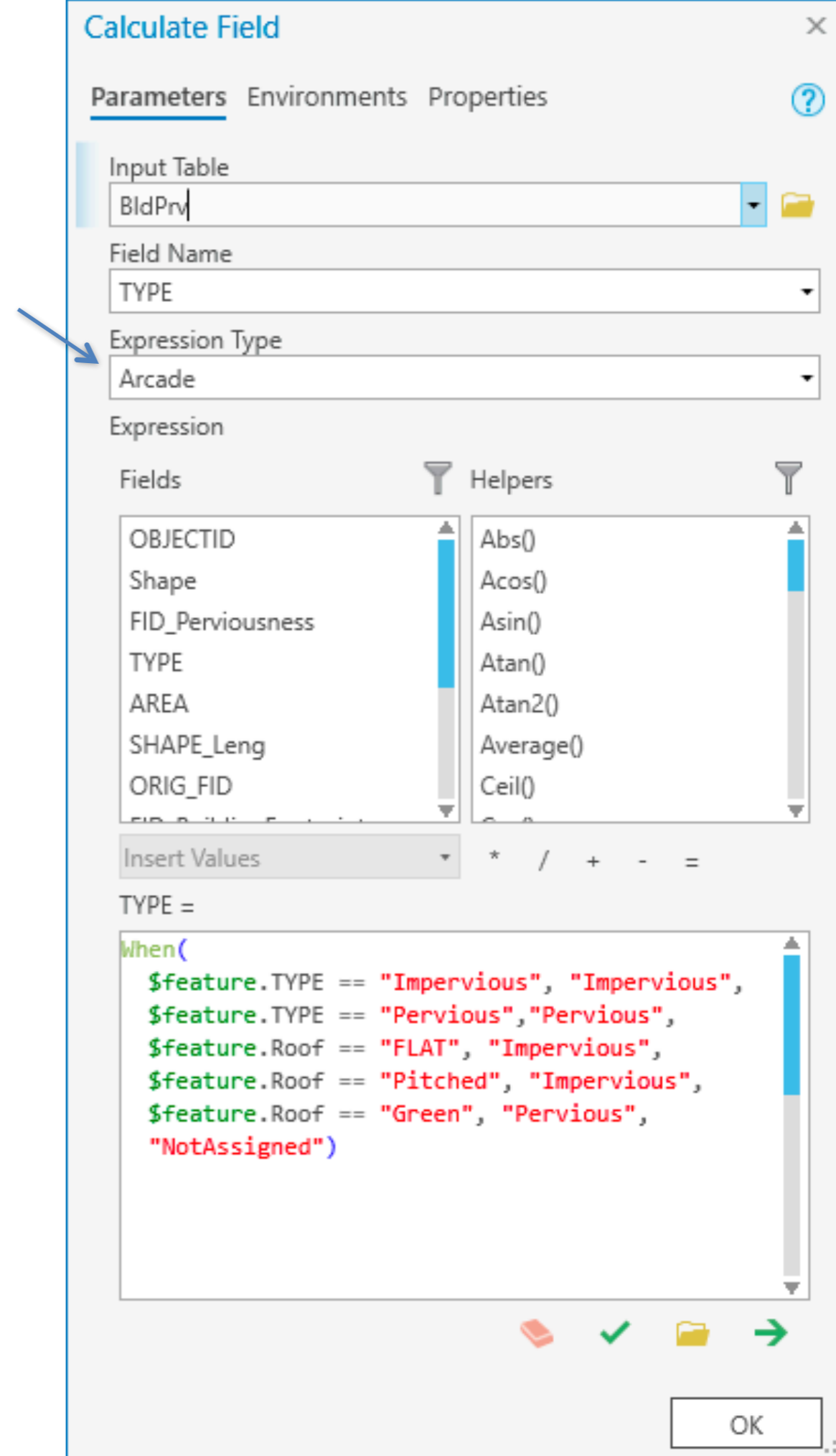


Field:	Add	Delete	Calculate	Selection:	Zoom To
OE	FID_BuildingFootprir	Roof	FID_Perviousr	TYPE	
145	145	FLAT	-1		
146	146	Pitched	-1		
147	147	FLAT	-1		
148	148	FLAT	-1		
149	149	FLAT	-1		
150	150	Pitched	-1		
151	-1		1	Impervious	
152	-1		2	Impervious	
153	-1		3	Impervious	
154	-1		4	Impervious	
155	-1		5	Impervious	
156	-1		6	Impervious	
157	-1		7	Impervious	

Select by Attribute won't work, as with manual workflow; use Calculate Field tool

Note Arcade expression,

When (for assignment statement



When syntax

Apply test, can use different columns,

\$feature. indicates iterate over all features in the layer,

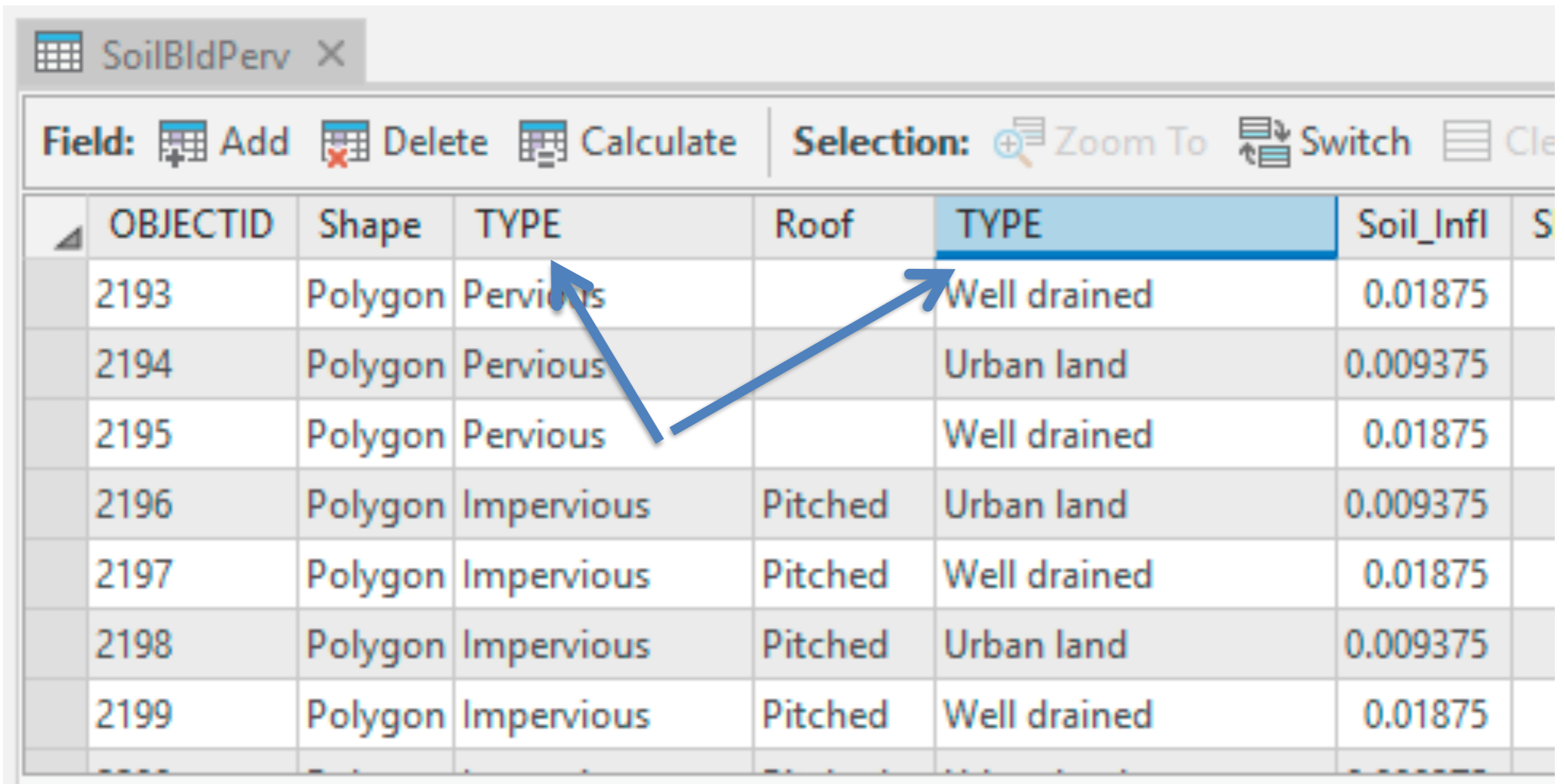
Default assignment at the end (here "NotAssigned")

```
When(  
  $feature.TYPE == "Impervious", "Impervious",  
  $feature.TYPE == "Pervious", "Pervious",  
  $feature.Roof == "FLAT", "Impervious",  
  $feature.Roof == "Pitched", "Impervious",  
  $feature.Roof == "Green", "Pervious",  
  "NotAssigned")
```

Multiple columns with the same name

How does the model know which to use?

Example Union Output:



The screenshot shows a table window titled 'SoilBldPerv'. The table has several columns: OBJECTID, Shape, TYPE, Roof, TYPE, Soil_Infl, and S. The second 'TYPE' column is highlighted in blue. A blue arrow points from the 'TYPE' column in the first row to the 'TYPE' column in the second row, highlighting the ambiguity of the name.

OBJECTID	Shape	TYPE	Roof	TYPE	Soil_Infl	S
2193	Polygon	Pervious		Well drained	0.01875	
2194	Polygon	Pervious		Urban land	0.009375	
2195	Polygon	Pervious		Well drained	0.01875	
2196	Polygon	Impervious	Pitched	Urban land	0.009375	
2197	Polygon	Impervious	Pitched	Well drained	0.01875	
2198	Polygon	Impervious	Pitched	Urban land	0.009375	
2199	Polygon	Impervious	Pitched	Well drained	0.01875	

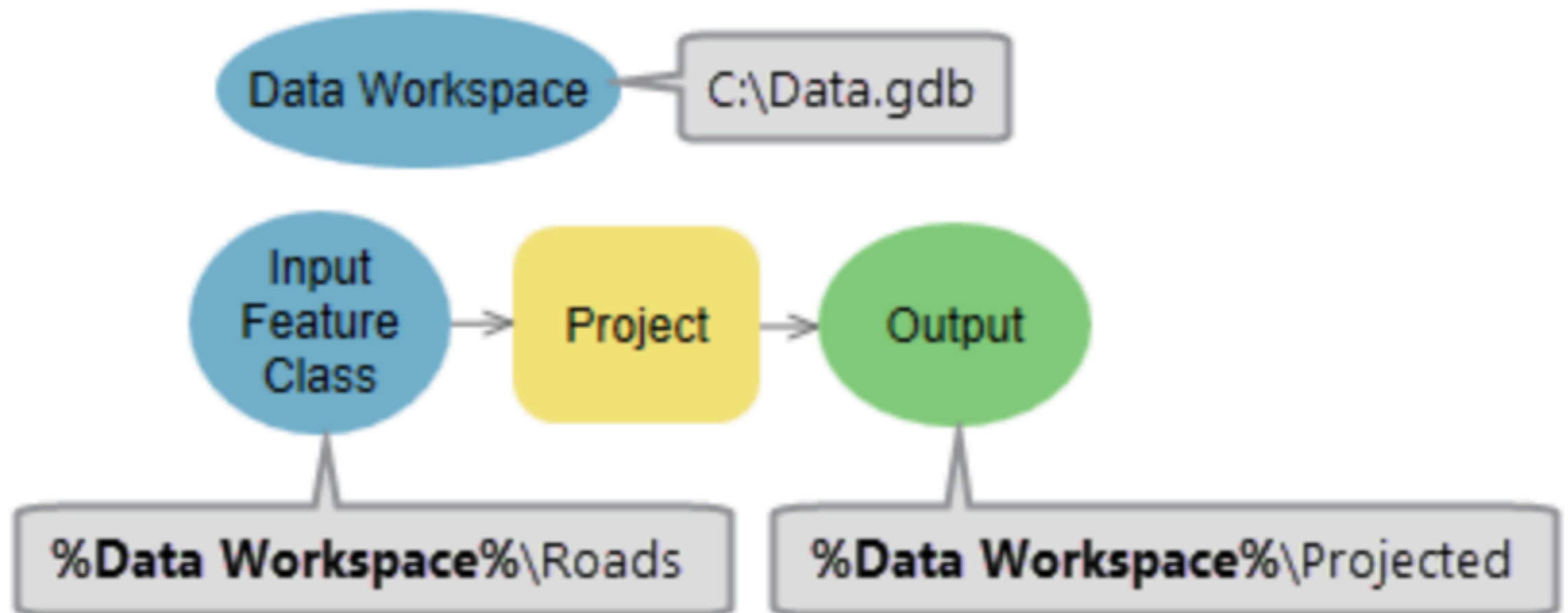
Multiple columns with the same name

Actually, not a problem - aliases. You can use the Field Name and not the alias to remove doubt

	Visible	Read Only	Field Name	Alias
	<input type="checkbox"/>	<input type="checkbox"/>	FID_Perviousness	FID_Perviousness
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TYPE	TYPE
	<input type="checkbox"/>	<input type="checkbox"/>	AREA	AREA
	<input type="checkbox"/>	<input type="checkbox"/>	SHAPE_Leng	SHAPE_Leng
	<input type="checkbox"/>	<input type="checkbox"/>	ORIG_FID	ORIG_FID
	<input type="checkbox"/>	<input type="checkbox"/>	FID_BuildingFootprints	FID_BuildingFootprints
	<input type="checkbox"/>	<input type="checkbox"/>	AREA_1	AREA
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Roof	Roof
	<input type="checkbox"/>	<input type="checkbox"/>	selcalc	selcalc
	<input type="checkbox"/>	<input type="checkbox"/>	FID_SoilsStudy	FID_SoilsStudy
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TYPE_1	TYPE
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Soil_Infl	Soil_Infl
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Shape_Length	Shape_Length

Making your models a bit more flexible: Inline substitution and parameters

- Create a new “unattached” variable - may be a parameters
- Substitute with %variable name% in model



Making your models a bit more flexible: Inline substitution and parameters

- Should add inline substitution after you've written/ debugged a model branch, at least while you're learning
- Model Builder Editor often shows obscure error messages while substituting inline, even though the model works
- Not all operations/data will be "colored" in the model, as they aren't defined within the model builder editor
- You might have to add some tool variables to the model parameters list when doing inline substitution