

Mapping in Epworth - Field Papers

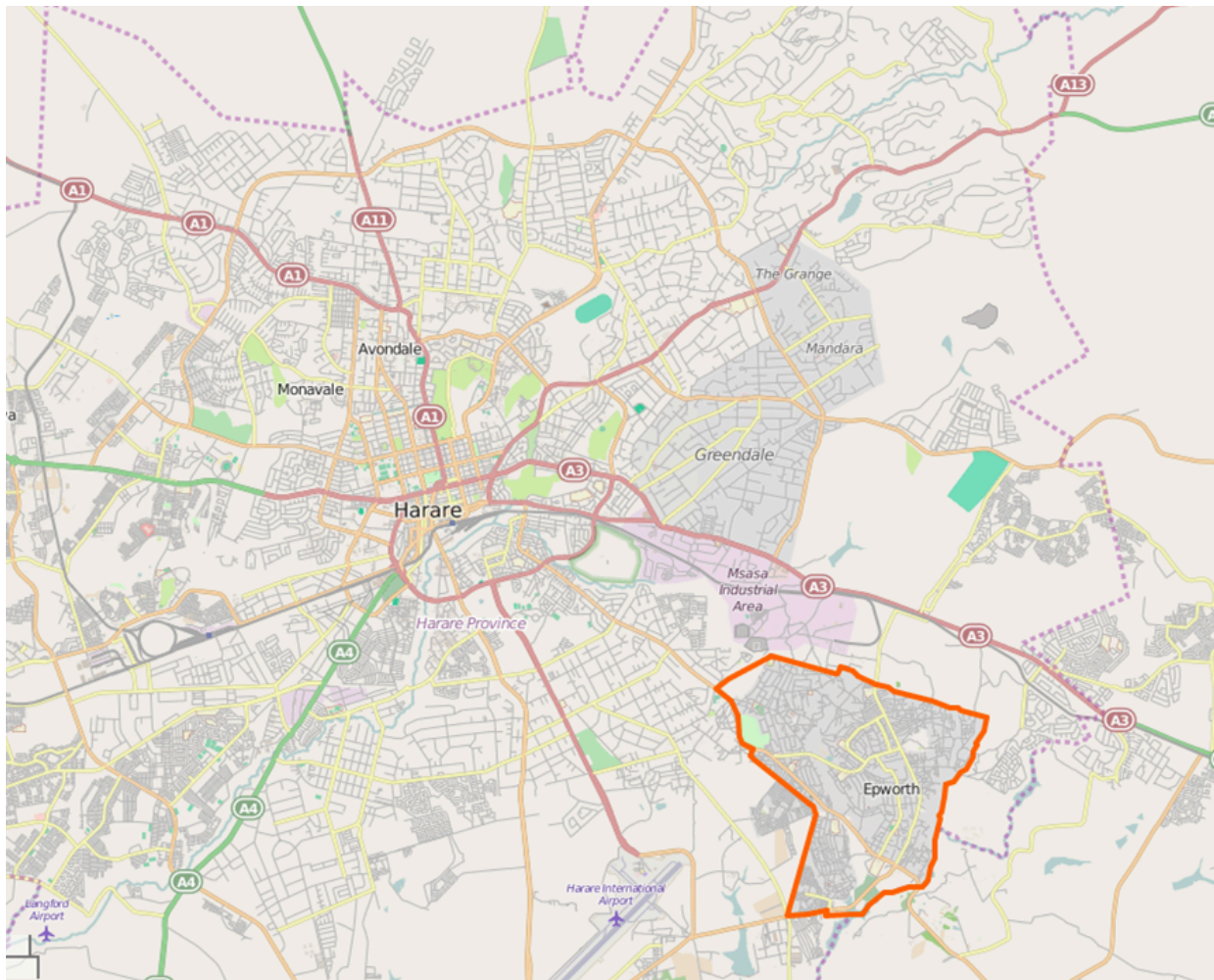
List of useful links

[How to get started with Field Papers for Epworth](#)

[Dropbox of field papers](#)

[OSM Wiki Page](#)

Epworth is a settlement in south-east Harare, Zimbabwe:



Epworth is made up of several areas, which are VERY ROUGH designations at the moment:



1. To get started:

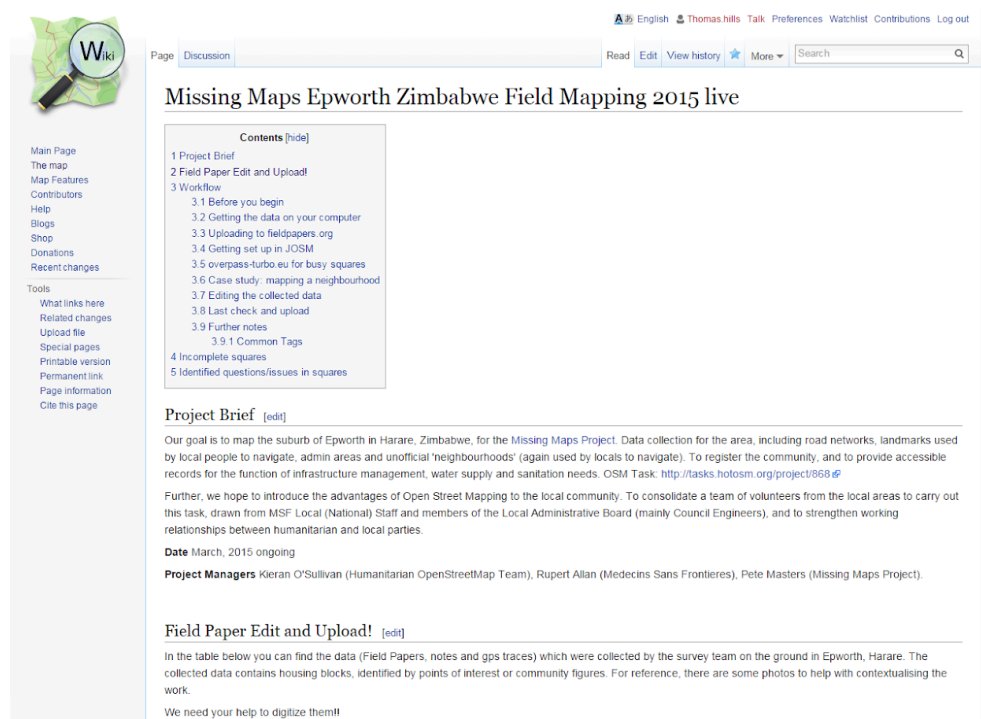
1. Choose a tile from [the Wiki page](#) to edit
2. Visit the '[How to get started with Field Papers in Epworth](#)' page to set up JOSM
3. Start tagging! (see below)
4. When you finish your session, add what you've done to the wiki

2. How to Tag

Step 1: Choose your tile

There are many tiles which have been scanned in for completion. To keep track of which ones have been completed, started but not completed, or not even started there is a Wiki page with the information in a table:

https://wiki.openstreetmap.org/wiki/Missing_Maps_Epworth_Zimbabwe_Field_Mapping_2015_live#Field_Paper_Edit_and_Upload



The screenshot shows the OpenStreetMap Wiki page for 'Missing Maps Epworth Zimbabwe Field Mapping 2015 live'. The page has a sidebar on the left with links like 'Main Page', 'The map', 'Map Features', 'Contributors', 'Help', 'Blogs', 'Shop', 'Donations', 'Recent changes', 'Tools', 'What links here', 'Related changes', 'Upload file', 'Special pages', 'Printable version', 'Permanent link', 'Page information', and 'Cite this page'. The main content area has a 'Contents' table of contents with links to '1 Project Brief', '2 Field Paper Edit and Upload!', '3 Workflow', '3.1 Before you begin', '3.2 Getting the data on your computer', '3.3 Uploading to fieldpapers.org', '3.4 Getting set up in JOSM', '3.5 overpass-turbo.eu for busy squares', '3.6 Case study: mapping a neighbourhood', '3.7 Editing the collected data', '3.8 Last check and upload', '3.9 Further notes', '3.9.1 Common Tags', '4 Incomplete squares', and '5 Identified questions/issues in squares'. The 'Project Brief' section describes the goal of mapping the suburb of Epworth in Harare, Zimbabwe, for the Missing Maps Project. It mentions data collection for road networks, landmarks, and local navigation. It also mentions the consolidation of a team of volunteers from the local areas to carry out this task, drawn from MSF Local (National) Staff and members of the Local Administrative Board (mainly Council Engineers), and to strengthen working relationships between humanitarian and local parties. The 'Date' is March, 2015 ongoing. The 'Project Managers' are Kieran O'Sullivan (Humanitarian OpenStreetMap Team), Rupert Allan (Medecins Sans Frontieres), and Pete Masters (Missing Maps Project). The 'Field Paper Edit and Upload!' section has a link to edit. It mentions that in the table below you can find the data (Field Papers, notes and gps traces) which were collected by the survey team on the ground in Epworth, Harare. The collected data contains housing blocks, identified by points of interest or community figures. For reference, there are some photos to help with contextualising the work. It ends with 'We need your help to digitize them!!'.

Scroll down to the table in the *Field Paper Edit and Upload!* section. There are four columns. The first is the Quarter in which the field paper in question is located. Epworth has been broken down into four adjacent grids, NW, NE, SW and SE. Each grid comprises several tiles whose location is described by a letter (latitude) and a number (longitude). The table rows are ordered by Quarter, and then by letter, also known as a 'pack'. Each pack row shows which tiles are available to be worked on. The third and fourth rows show the people who have worked on this pack and any comments they may have made, respectively.

Quarter	Pack & tiles surveyed	User	Notes
NE	A	(e.g. Professor Your Name)	(any questions about this pack for the validators or subject matter experts)
NE	B (B2)	Ralph Aytoun	B2 INCOMPLETE -plot numbers on plan go up to B108 but detailed survey list stops at B63. Reached plot B55 on survey list which is missing on plan so have not added house numbering or building material from here. Have added tag for brick:type=unburnt as this brick is unstable in heavy rain. I have put all tags on nodes for consistency although polygon houses are good in this area. Only B2 in this pack.
NE	C (C1)	Matt Witchell	added C1 and C2
NE	D (D1, D3)	Ralph Aytoun	D1 D3 Nodes Complete - Added nodes with detail, no boundaries added.
NE	E (E1)	Nick Allen	Although the grid shows an E2, E3, E4 etc, there is only E1 in the packs
NE	F (F6)	Daphne Allen	have started & will continue at mapathon on 21/07/15 - folder only has F6 in it. Now complete
NE	G (G1)		23/07/15 - no map in folder so cannot see where to put the nodes. Leaving. Nick Allen
NE	H (H8)	Nick Allen	23/07/15 all complete, except have not added the field area=E but everything else okay.
NE	I (I5)	Nick Allen	03/08/15 attempted but given up! PLEASE REVIEW - Duplicated numbers on map & two sheets with B1 to about B13.
NE	J (None)	Nick Allen	Nothing in dropbox
NE	K (K8)	Nick Allen	Duplicated numbers and sheets making it difficult. Needs a review to work out which numbers to use.
NE	L (None)		
NE	M (None)		
NE	N (N6)	Ralph Aytoun	23/07/2015. Folder only has N6. N6 Complete except ID-B17 and a bit of confusion with numbers bottom right corner.
NW	A (None with survey)		
NW	B (None with)		

Pick a tile from this list that isn't noted as already completed (I find it easiest to write it down because you'll need to for several of the steps coming up).

Now move on to the next step.

Step 2: Getting started with Field Papers in JOSM

UPDATE FOR 20TH OCTOBER:

We have Field Papers codes in the wiki page in the big table! Please use these.

If you have downloaded the Feld Papers plugin:

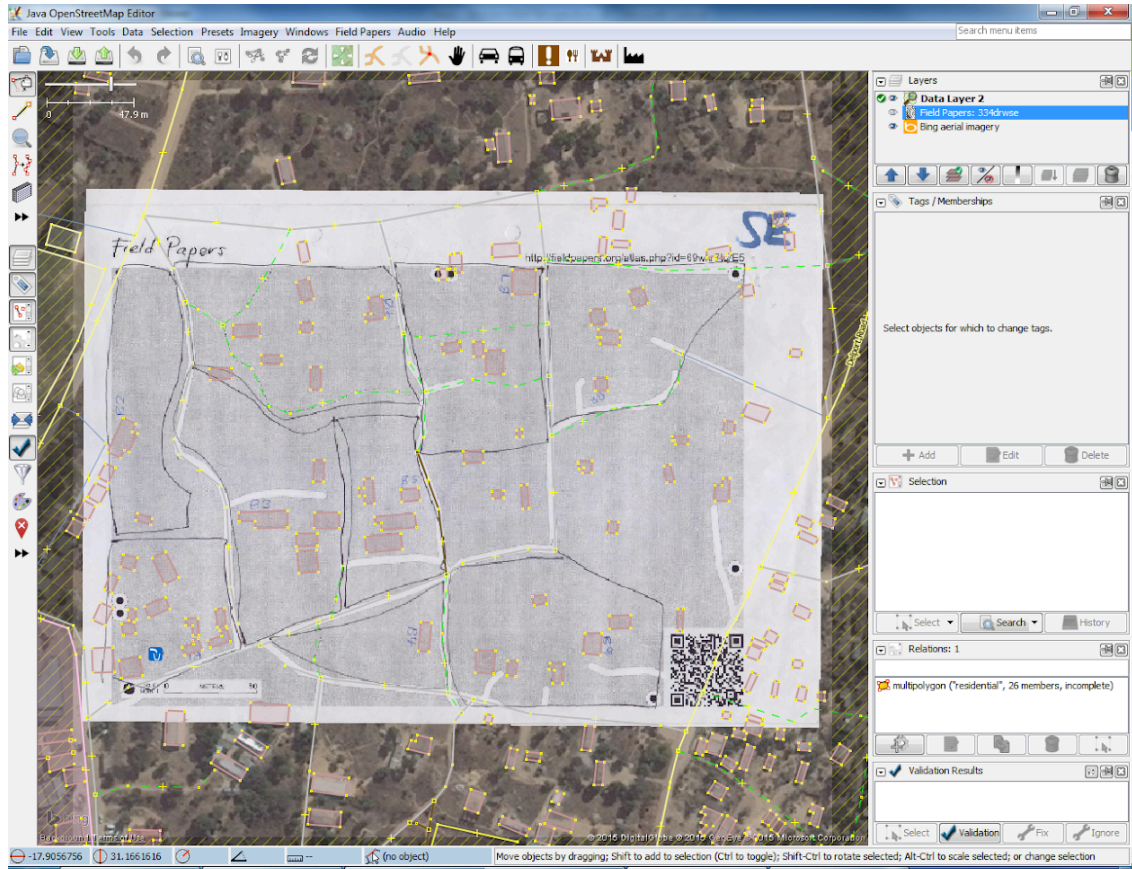
Use the codes found in the wiki page for each tile. You don't need to both uploading to Field Papers! So start the '[How to get started with Field Papers in Epworth](#)' at Part 3, Step 4.

If you haven't: Just miss out Part 3 Steps 1-3

These instructions are available in a separate document - '[How to get started with Field Papers in Epworth](#)' document. If you haven't read it, please do so now and follow the steps.

Step 3: Translating survey information into OSM tags

For this, I'll use the SE E5 tile as an example, but you can use a different tile. Mine looks something like this:



The survey looks like this:

SE

Field Paper#	Surveyors' Names	Smartphone#	Date	
ES				

ID#	House/Name Number	Construction	Neighbourhood/Street	Area	Ward
B1	1598	Common Bricks	MR Mhlunga	Chidnamano original	4
B2		Common Bricks	School staff house Chirungu	Chidnamano original	4
B3	1608	Common Bricks	MR Julius.	Chidnamano original	4
B4	1611	Common Bricks	Resident MR Topodzi.	Chidnamano original	4
B5	1608	Common Bricks	Residential MR Camanga	Chidnamano original	4
B6	1606	Common Bricks	Residential MR Marunga	Chidnamano original	4
B7	1643A	Common Bricks	MR Ncube	Chidnamano original	4
B8	1642	Common Bricks	MR Jona	Chidnamano original	4
B9	1638	Stone work Common Bricks	MR Chirwe	Chidnamano original	4
B10					

Please read the section at the end of this document entitled *Tagging stuff- the tags* for an explanation of which tags to use in which circumstances.

Immediately, a few things pop out at us.

Firstly, there's loads of names of people! This is quite uncommon, but not something we can't deal with - they go in under the loc_name tag. They've used the Neighbourhood column because there's nowhere else to put the information. This means that the neighbourhood information has been s This isn't a massive deal - you just have to work out what the surveyor was trying to get across!

Secondly, the ‘area’ these buildings are in seems to be called ‘Chinamano Origin’ or ‘Chinamano Original’. Although this isn’t one of our hamlets, Chinamano is. So here’ we can assume that ‘Chinamano Origin’ is a neighbourhood within the hamlet of Chinamano since the names are so similar. And we should put them all as ‘Chinamano Origin’ rather than ‘Chinamano Original’ because although we don’t know which is correct, there’s only one ‘Original’ and eight ‘Origin’ names on the survey.

Next, we see that most of the buildings have numbers, but not all of them do. That’s okay because the building without a number is a school building. They all have construction materials recorded and are in Ward 4.

The ID# does not need to be recorded in JOSM - it is simply an ID used to match up the buildings on the hand-drawn map with those in the survey paper. They have no other meaning.

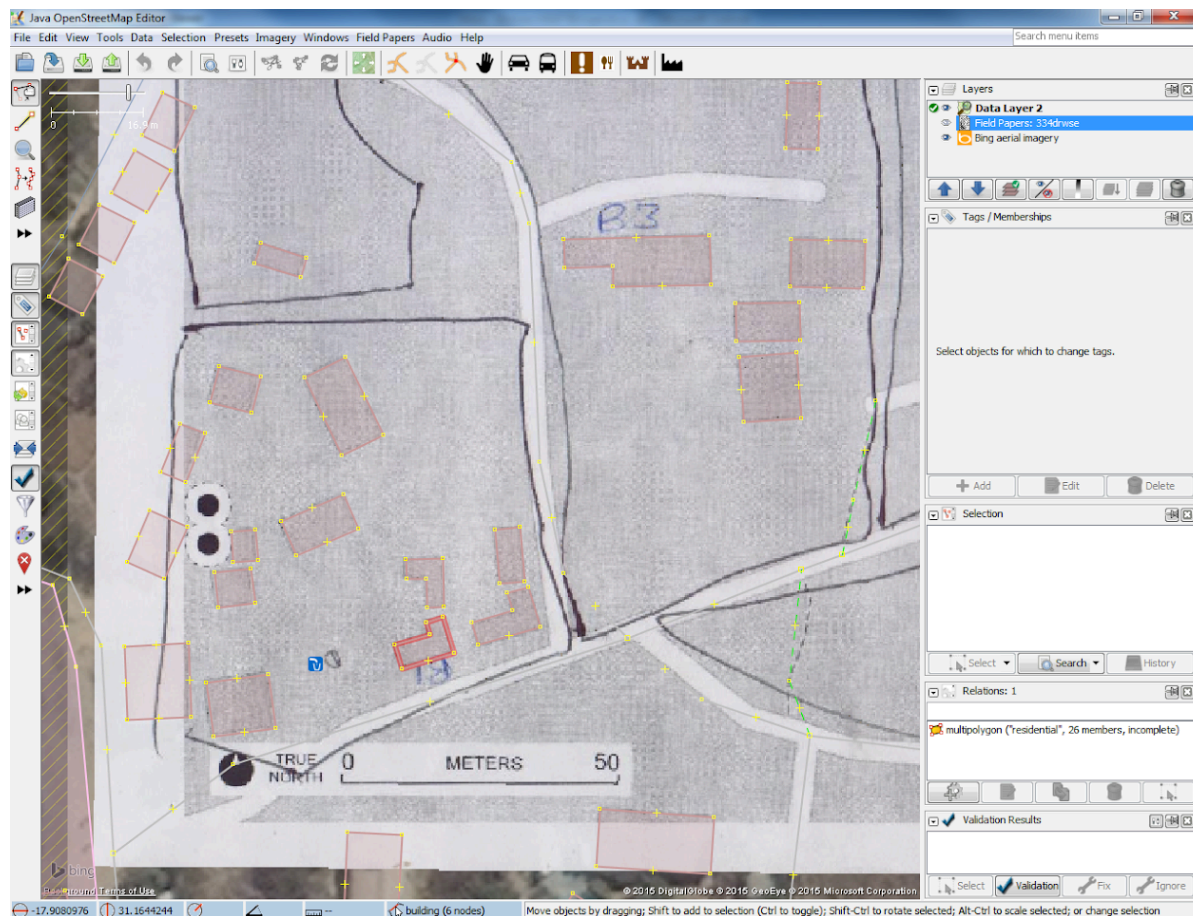
So now we know what the main tags will be:

source=survey
building=residential (except for B2)
building:material=brick (except for B9)
addr:ward=4
addr:neighbourhood=Chinamano Origin
addr:hamlet=Chinamano
name= a number (except in the case of B2)
loc_name= someone’s name (except for B2)

Now we have to put the information into JOSM. I find it easiest to work from the top downwards!

Step 4: Entering the tags into JOSM

Return to JOSM, with the field paper overlaid, to find B1:



Now we have to create a node in which to put the information. It appears that the building highlighted is the relevant one - it's quite large and is right by the B1 marker. To create a node,

click the draw nodes' button like this:



in the top-left of JOSM, or press the A key on your keyboard. Your cursor should now turn to a crosshair.

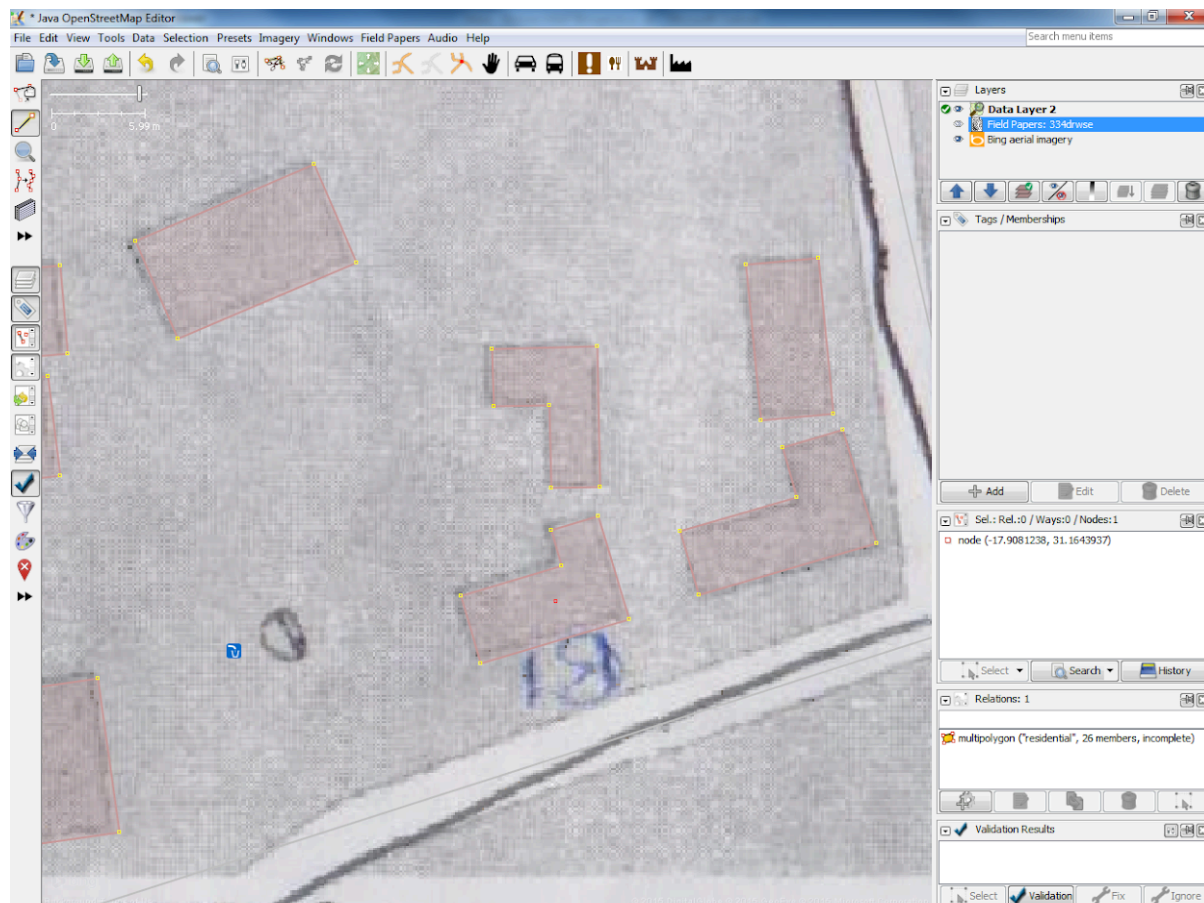
Please create new nodes within, but not attached to, the building you are tagging. This is the standard we are using at the moment.

Double click to add a node where the cursor crosshair is. You don't want the building in which you're placing the node to be highlighted when you do this. If you can't manage to un-highlight the building, zoom in two or three steps and try again. Go back to select mode by pressing S or

the button that looks like



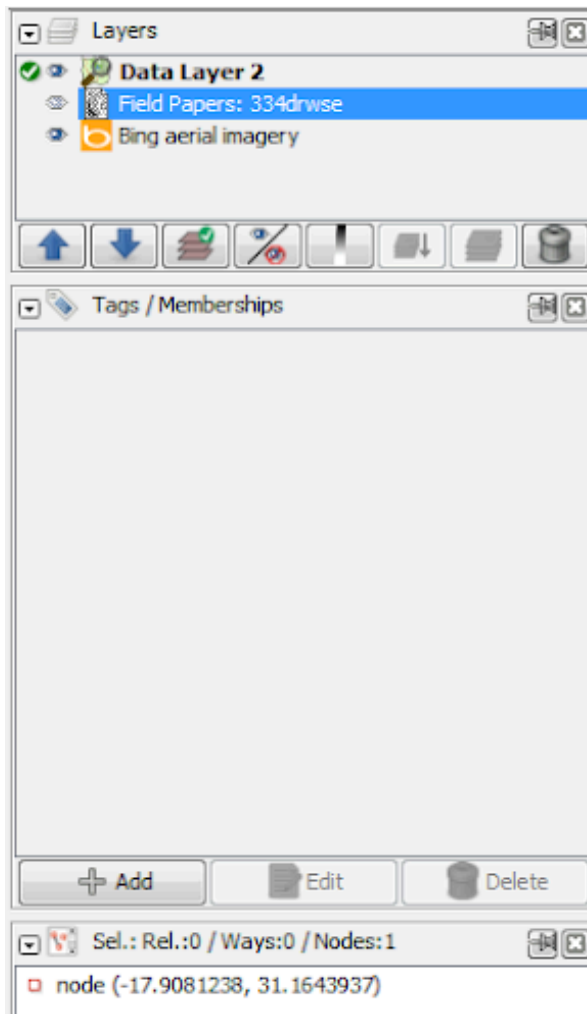
. The node should look something like a small red square:



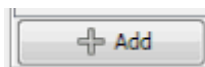
It's red rather than yellow because it's automatically selected for editing. If you change to select mode, you can deselect the node and it will turn yellow. To select it again, ensure you're in select mode and single click on the node.

You can move the node when you're in select mode and have it selected by dragging it across the screen.

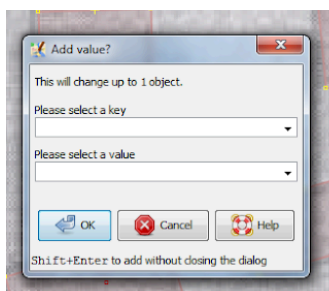
Now we need to add the tags to the node. To do this, ensure that your Tags/Memberships section is open. It is on the right hand side under layers and above Selection.



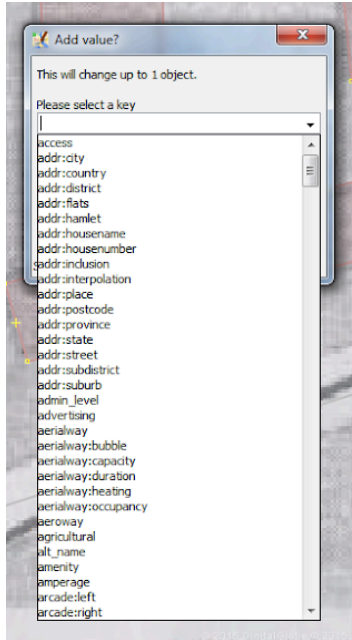
With the node selected, click the '+ Add' button



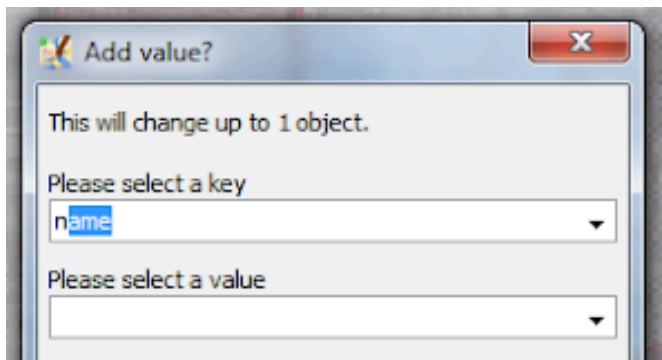
and a box will appear, looking something like this:



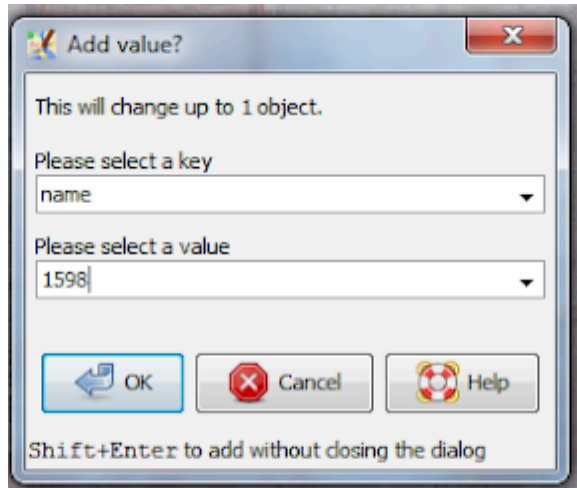
This is where we add tags. The top field is for the tag type, and the bottom one is for the value of that tag. If you look at the drop-down menu you will see dozens of tag types:



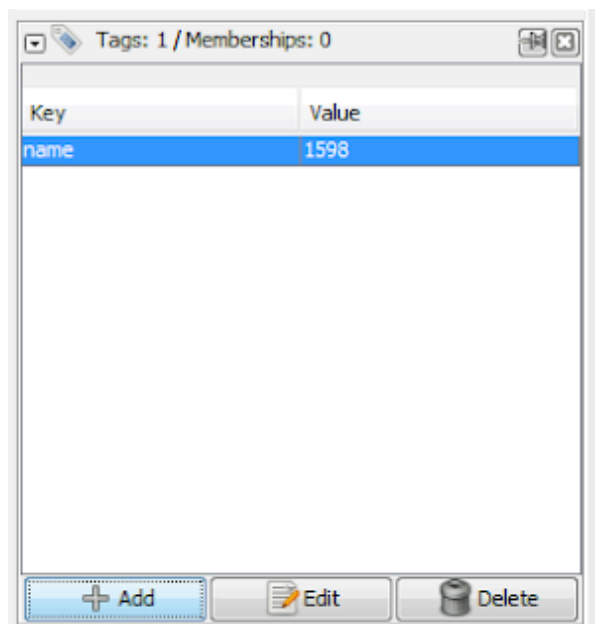
You can also just start typing one, and it may autofill the correct word:



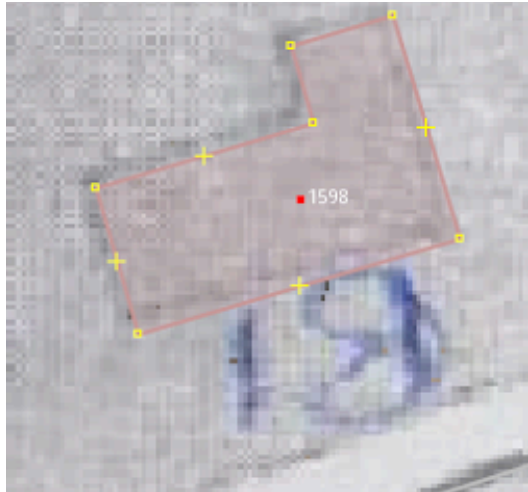
To select that tag type, either press Tab or click in the bottom box. Then, add the necessary value. In this case, it's 1598:



Click OK or hit Enter to confirm the new information. You will see it pop up in the Tags/Memberships section on the right hand side:



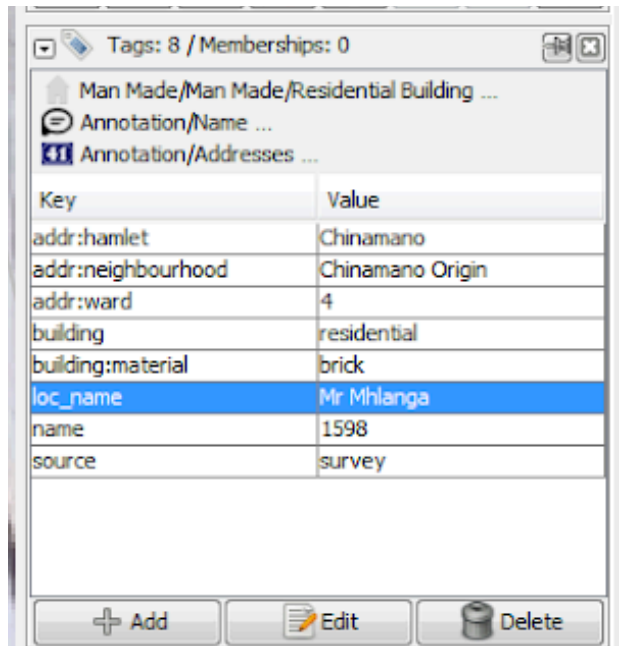
Depending on what type of tag it is, it may have modified the node's appearance too. In this case, the name appears next to the node:



Next we add the other values. building=residential also affects its appearance:



Eventually, the list of tags should look something like this:

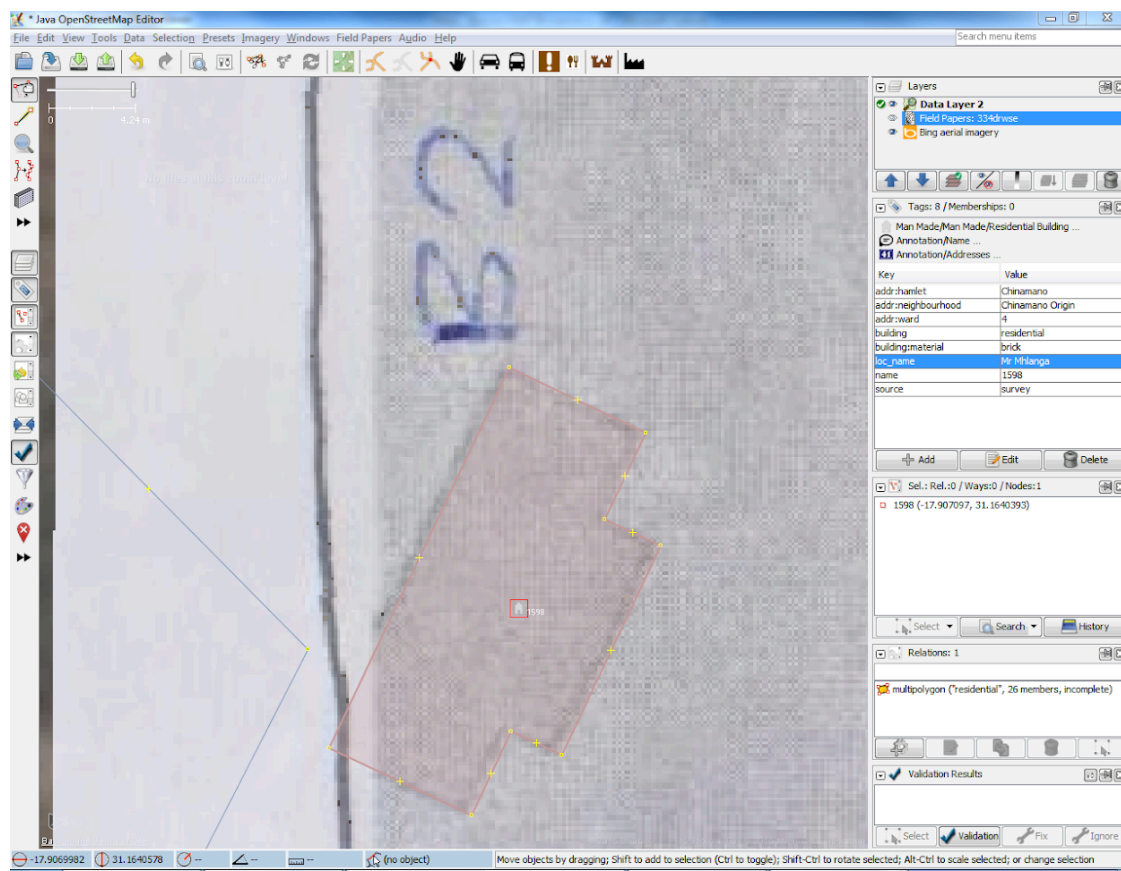


Well done! You've tagged your first building.

When you do your subsequent nodes, it is often easier to copy a node than to start from scratch again. For example, we can copy our recently-created node by selecting it, pressing Ctrl-C (Command-C on a Mac?), placing our cursor where we want to build the new node, and pressing Ctrl-V (Command-V) to create it:



It has all the same attributes as the original node except for its location. So you'll need to change some of the tags to update it to the relevant information. I've dragged the node to the correct place, in this case in the building B2:



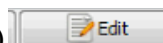
B1	bricks	original	1
B2	Common Bricks	School Staff House Chinlanga	4
		Chinamano original	

It's still in Chinamano Origin (and therefore Chinamano too), and also still in Ward 4. It's made of bricks too, so none of these tags needs to change. We will need to change the name, the building type and remove the loc_name tag.

To remove a tag, highlight it in the list of tags and click the delete button



To edit a tag, highlight it in the list and click the 'edit' button (no surprises there)



The dialog box reappears, and you can now change whatever you need to, and then click OK to confirm the change.

Here, I've changed the name to 'School Staff House'. This could arguably go as a loc_name but I've put it in as a name as this is likely to be the primary identifier of the building. If it had a

number like the local houses, the number would go under name and School Staff House under loc_name.

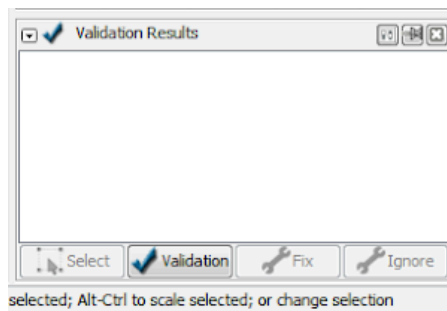
Keep doing this with all the lines in your survey until you've finished it!

Step 5: Uploading your work

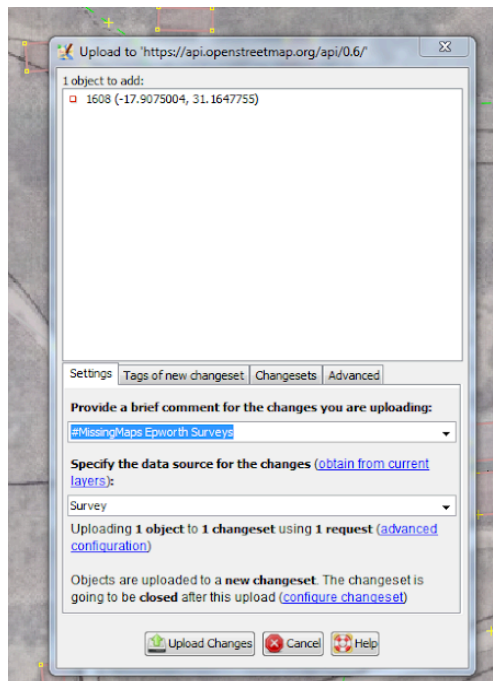
Now you need to upload your work to the server. Press the upload button in the top left of JOSM



. You may get some validation errors - please fix these if you can! They will be detailed in the Validation box in the bottom right of JOSM:



Once those are dealt with, this screen should appear, with all of your work summarised:



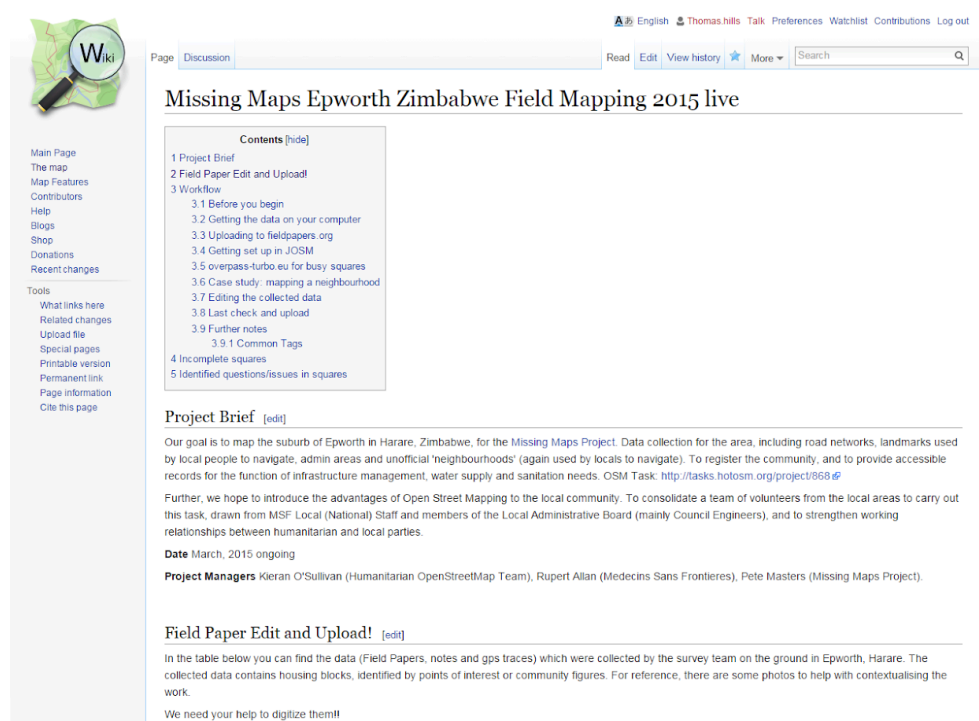
This shows only one node being uploaded, but yours should show as many as you've created. Please write *#MissingMaps Epworth Surveys* in the comment box, and write *Survey* in the data source. If you've used Bing imagery for anything, include that as well, separating them with a semicolon and a space, i.e. *Survey; Bing*

Press Upload Changes to upload your changes. If you're not logged in, you may be asked to enter your OSM login details first.

Step 6: Updating the Wiki page

Now you need to tell people what you've done! The record is on the OSM Wiki site, for which you need a separate login, so you'll need to register for that if you haven't already. The page is here:

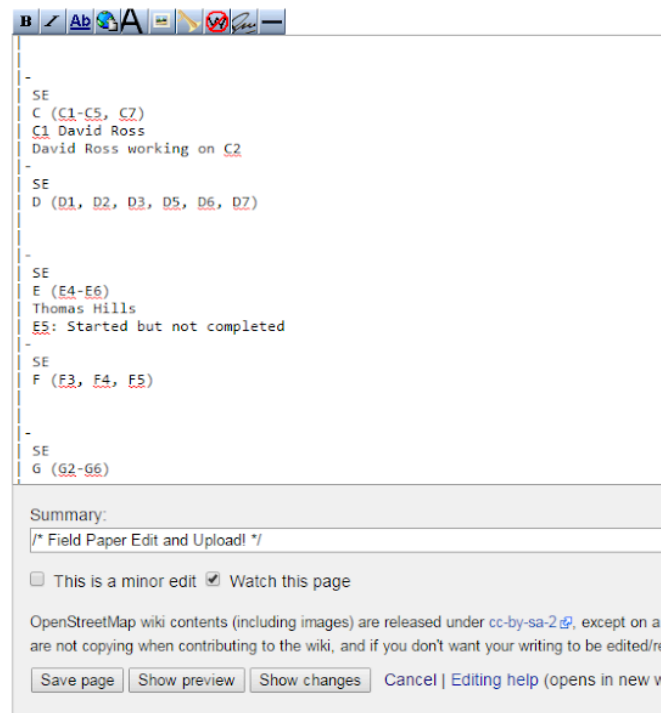
https://wiki.openstreetmap.org/wiki/Missing_Maps_Epworth_Zimbabwe_Field_Mapping_2015_live



The screenshot shows the OpenStreetMap Wiki page for 'Missing Maps Epworth Zimbabwe Field Mapping 2015 live'. The page has a sidebar on the left with links like 'Main Page', 'The map', 'Map Features', 'Contributors', 'Help', 'Blogs', 'Shop', 'Donations', 'Recent changes', 'Tools', 'What links here', 'Related changes', 'Upload file', 'Special pages', 'Printable version', 'Permanent link', 'Page information', and 'Cite this page'. The main content area has a 'Contents' table of contents with sections: 1 Project Brief, 2 Field Paper Edit and Upload! (highlighted), 3 Workflow, 4 Incomplete squares, and 5 Identified questions/issues in squares. The 'Project Brief' section describes the goal of mapping the suburb of Epworth in Harare, Zimbabwe, for the Missing Maps Project, and mentions the date as March 2015 ongoing. The 'Field Paper Edit and Upload!' section is partially visible, mentioning a table of data collected by the survey team.

Scroll down to Field Paper Edit and Upload! and click on the 'edit' button. The edit box, which is almost identical to that of normal Wikipedia, will appear. Scroll down to the row which represents your square (in this example it's SE E) and complete the details in a similar fashion to that shown here:

Editing Missing Maps Epworth Zimbabwe I



The screenshot shows the OpenStreetMap wiki editing interface. At the top is a toolbar with icons for bold, italic, link, unlink, image, table, and other formatting options. Below the toolbar is a text area containing the following text:

```
-  
SE  
C (C1-C5, C7)  
C1 David Ross  
David Ross working on C2  
-  
SE  
D (D1, D2, D3, D5, D6, D7)  
-  
SE  
E (E4-E6)  
Thomas Hills  
E5: Started but not completed  
-  
SE  
F (F3, F4, F5)  
-  
SE  
G (G2-G6)
```

Below the text area is a 'Summary:' section with a text input field containing the text: `/* Field Paper Edit and Upload! */`. Below the input field are two checkboxes: ☐ This is a minor edit and ☒ Watch this page. Below the checkboxes is a paragraph of text:

OpenStreetMap wiki contents (including images) are released under [cc-by-sa-2.0](#), except on a few pages. Please do not copy/paste content from other pages without permission, and if you don't want your writing to be edited/revised, please mark it as 'protected'.

 At the bottom of the summary section are four buttons: 'Save page', 'Show preview', 'Show changes', and 'Cancel'. To the right of the 'Cancel' button is a link: 'Editing help (opens in new window)'.

In other words, there's four columns: the first says which quadrant the information is from, the second is the letter designation (E in this case) and which squares are available. Put your name in the third column and your comment in the fourth one. The click 'show preview' to check what you've done, or click on Save Page to save your edit.

Well done - that's it!

Tagging stuff - the tags

Please create new nodes within, but not attached to, the building you are tagging. This is the standard we are using at the moment.

The hierarchy of 'informal' regions is:

Hamlet > Neighbourhood/Street > Building

Wards are a formal (official) designation and don't necessarily conform to the informal regions.

There are 15 hamlets that have been identified:

Overspill	Makomo Extension	Pamayuta/Pamajuta
Muguta	Chinamano	Pentagon
Muguta Extension	Chinamano Extension	Domboramwari
Jacha	Zinyengere	Glenwood
Makomo	Nyikavanhu	Glenwood Park

These should be put in using the tag `addr:hamlet` e.g. `addr:hamlet = Chinamano`

All other regions are neighbourhoods. They should be put in using the tag `addr:neighbourhood` e.g. `addr:neighbourhood = Zuidozenath` . Note that neighbourhood is spelled the UK way!

Other tags that should be used are:

`name =`

This should be a number in the case of Epworth, e.g. 2114.

`loc_name =`

This should contain any extra information. For example, the name of someone who lives there. Also put in information such as that a water tank is located here.

`building =`

This is what the building is being used for, e.g. `building=residential`.

If your building is under construction, use the tag `building=construction` and the additional tag `construction=` , e.g. `construction=residential`.

addr:ward =

Here, put the ward number. For example, addr:ward=4 .

source=survey

Please add this to all nodes you add based on the field papers.

building:material =

This is the type of material the building is made out of. There is a list of common tags here:

<https://wiki.openstreetmap.org/wiki/Key:building:material>

How can we handle data that don't make sense?

Remember - maps are an **interpretation of reality** and are a reflection of the mappers as well as what is actually on the ground! Your effort is vital.

Contextualise and interpret what you're seeing

- Consider other **entries next door** by same person – if a house is in the same complex, it is probably in the same neighbourhood/ward
- **Personal style** – look at other entries or papers by the same surveyor for clues to how they record information
- Consider **consecutive field papers** for greater regional context
- Some information should be under an “alternative name” (**loc_name=**) or other **qualifier tag**
 - E.g. a tuck shop can be put as a kiosk
- If something is crossed out, this is likely to be for a reason - don't include it!

Consult other sources

- Consult **base map data** (e.g. if Chiremba Road runs past all of these, that's a hint!)
- Consult **Mapillary images** or other **audio-visual results** (e.g. “Experia” geotagged photos)

Importantly, **don't worry!** These maps are relatively rough, despite the number of addresses. They can be, and will be, refined by volunteers here and in Epworth.

Without formal administration of many of the areas, there are **no formal boundaries**. Even formal boundaries don't always count - how many of you officially live in an area called one thing but you call another?

If still in doubt, ask!