Breede Valley Municipality Map Viewers

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Introduction

The GIS Section currently publishes and maintains 5 map viewers through ArcGIS Portal. These are as follows:

1. Internal Map Viewer
2. External Map Viewer
3. Land Audit Map Viewer
4. Maintenance Schedules Map Viewer
5. Planning and SDF Map Viewer

The reason for 5 different viewers is that they are theme based and to reduce data clutter per map. The idea is not to have too many data layers on one viewer to make it more user friendly.

All the map viewers have the same design, resulting in the same look and feel as well as similar functions.

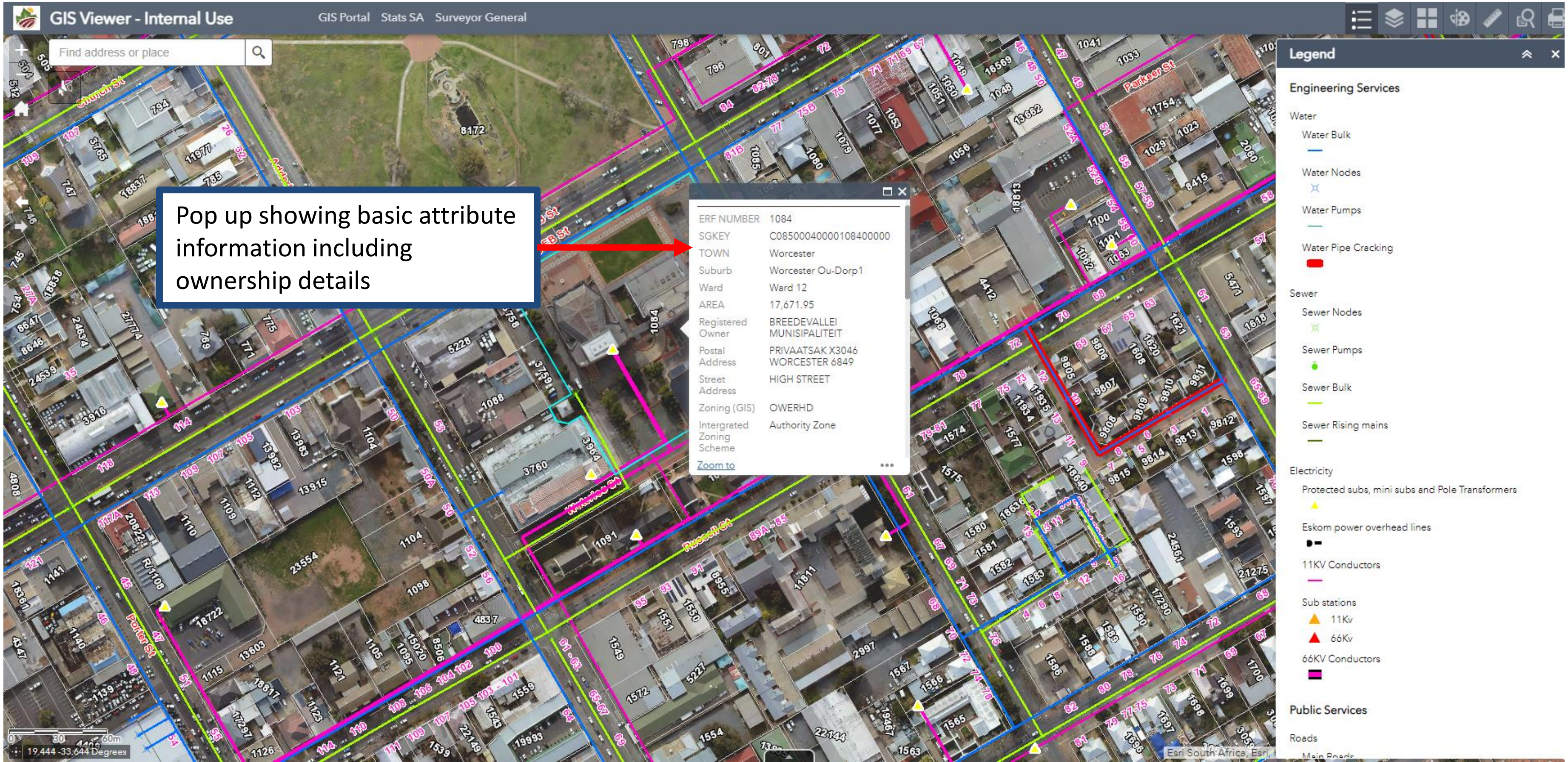
Internal and External Map Viewers

The Internal and External Map Viewers are our base map viewers. They are the map viewers that provide access to the general spatial data sets such as cadastral data, bulk services data and points of interest data. The user can interact with these datasets as well as do some simple searches and queries. The user can search for an address and/or erf/plot and then query these features using the query tool. The user can also do some basic measurements and add graphics and text.

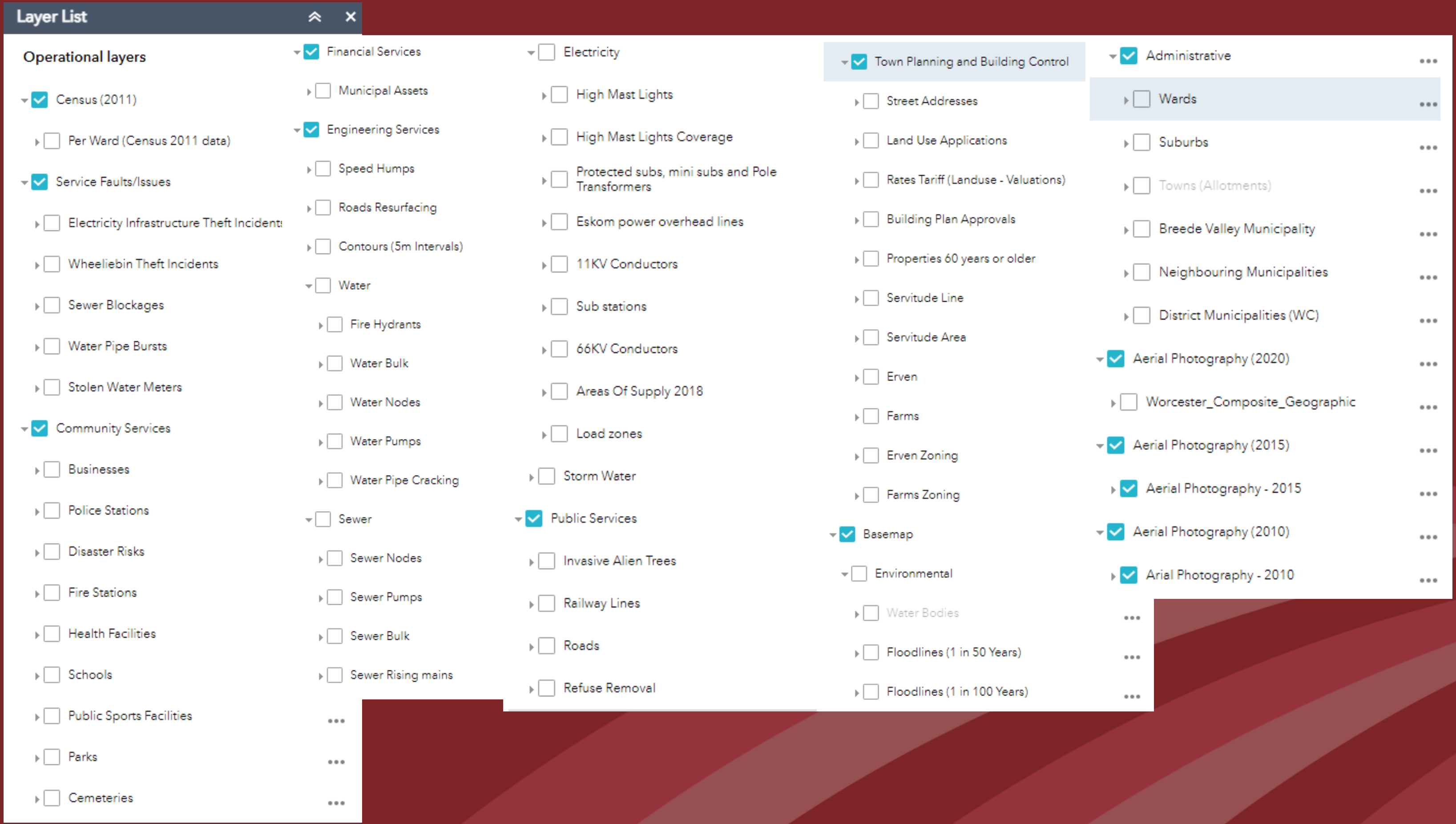
The main difference between the Internal Viewer and the External viewer is that the external viewer is made available to the public and does not contain data such as ownership details which are confidential.

The next few slides describe these different viewers including some screen shots of them.

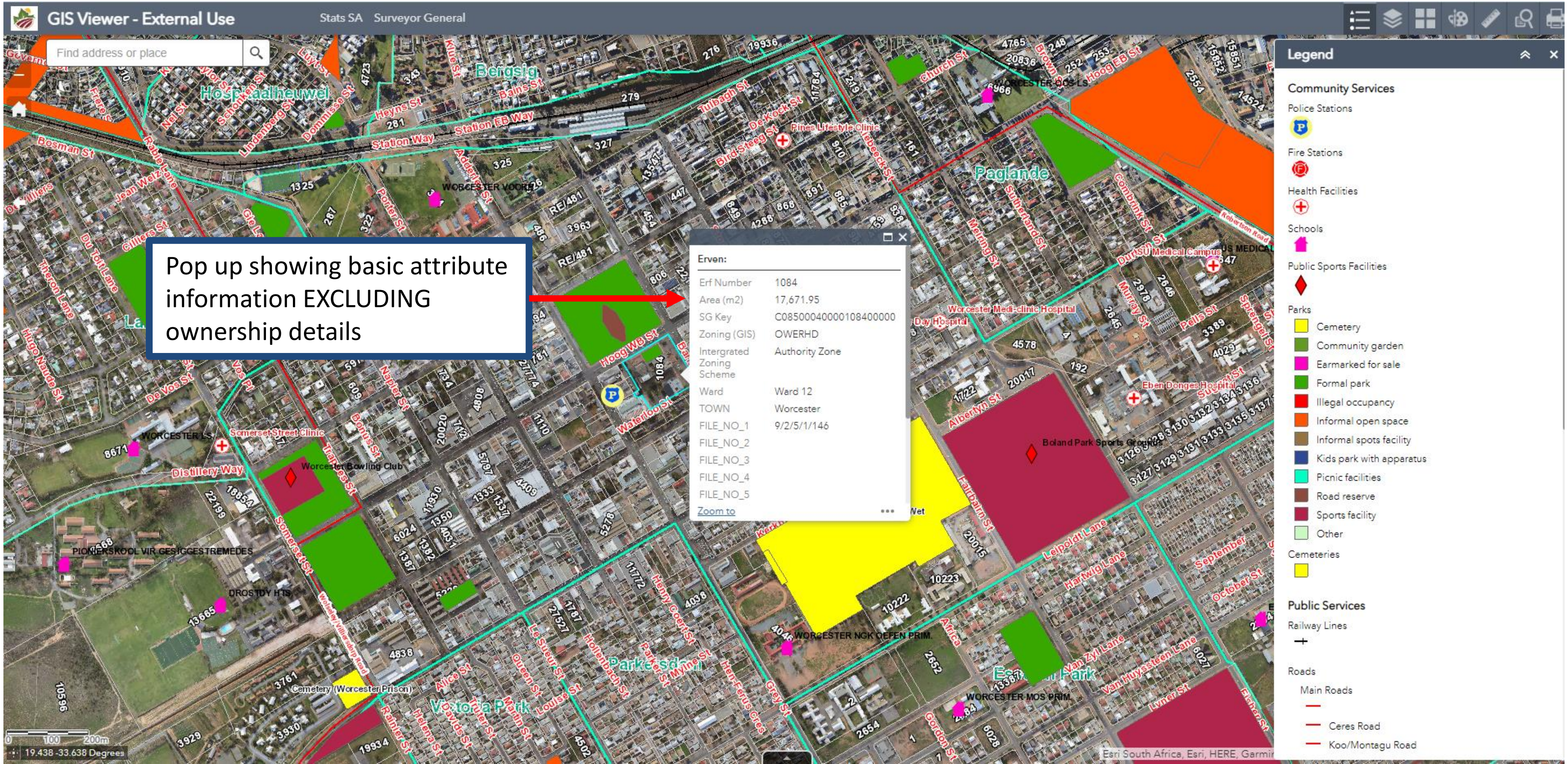
Internal Map Viewer - Example



Internal Map Viewer Data Layers



External Map Viewer - Example



External Map Viewer Data Layers

The data layers in the External Map Viewer are the same as the Internal Map Viewer, however the Engineering Services data layers and Financial Data Layers have been removed as they have been deemed sensitive information by the municipality.

The property ownership information has also been removed in accordance with the POPI Act.

Land Audit Map Viewer

The Land Audit Map Viewer was created as a means for distributing the data and information captured through an internal land audit process.

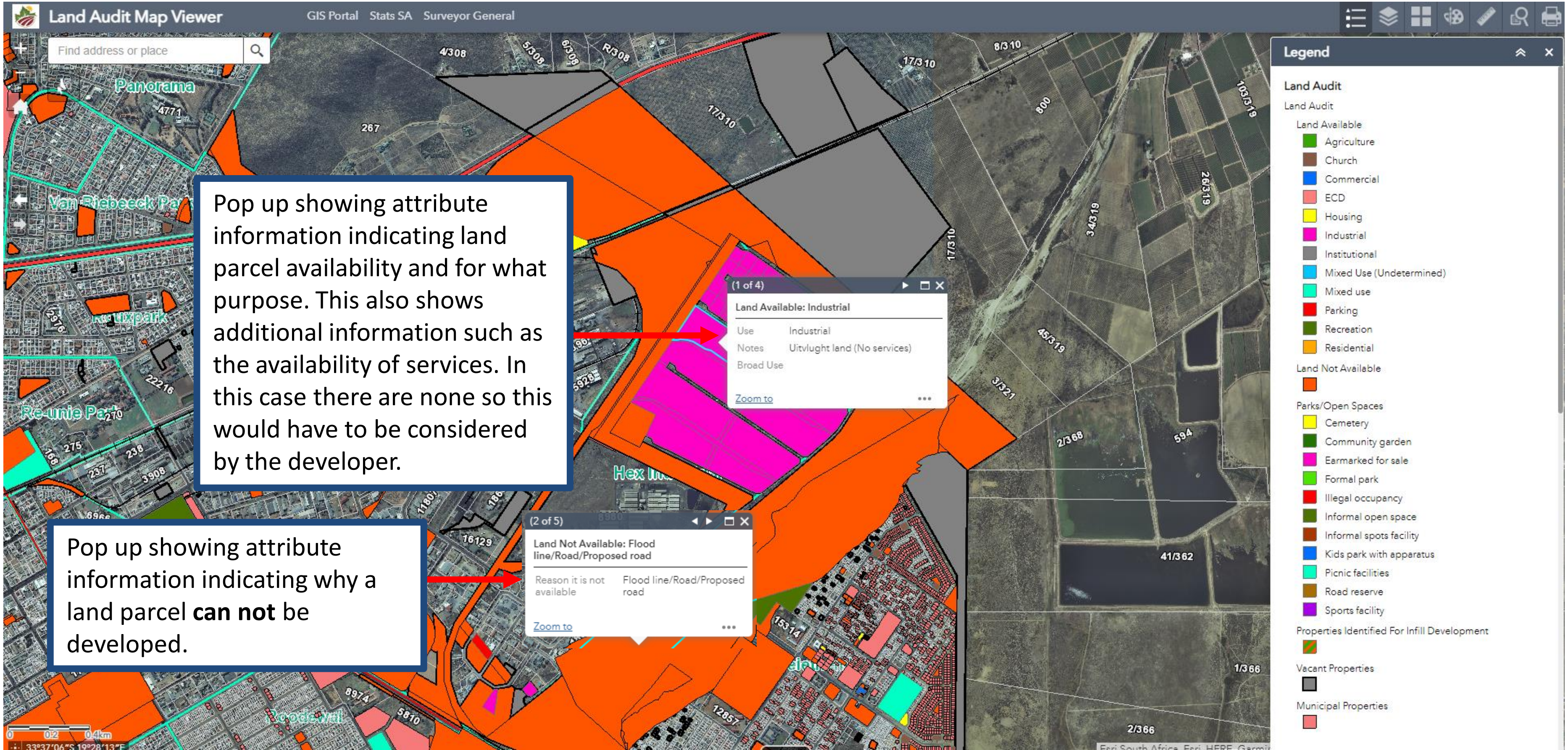
Various spatial datasets were captured indicating the ownership status of land parcels as well as their level of development and potential availability for internal and/or public development.

The Internal Map Viewer was used as a template for this map viewer. The datasets described above were then overlaid onto the existing layers.

Ultimately this map viewer allows the user to search for and identify land parcels that could potentially be used for various development purposes, such as residential, industrial, business etc. The map viewer also indicates areas that are unable to be developed due to things like flood lines, critical biodiversity areas, servitudes etc.

The idea behind this viewer is to make it easier to search for properties and not waste time on researching individual properties in terms of their availability and suitability every time there is an application or query.

Land Audit Map Viewer - Example

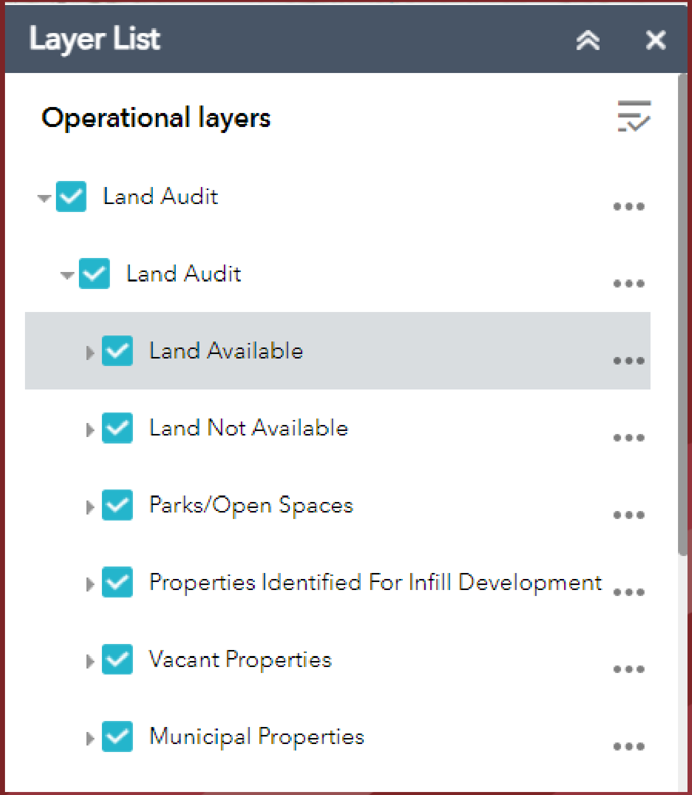


Pop up showing attribute information indicating land parcel availability and for what purpose. This also shows additional information such as the availability of services. In this case there are none so this would have to be considered by the developer.

Pop up showing attribute information indicating why a land parcel **can not** be developed.

Land Audit Map Viewer Data Layers

The data layers in the Land Audit Map Viewer are the same as the Internal Map Viewer however the following layers are added:



Maintenance Schedules Map Viewer

The Maintenance Schedules Map Viewer was created as a means for distributing and making available the scheduled maintenance programs of the Solid Waste, Roads and Stormwater and Parks and Cemeteries Departments within the Public Services Directorate.

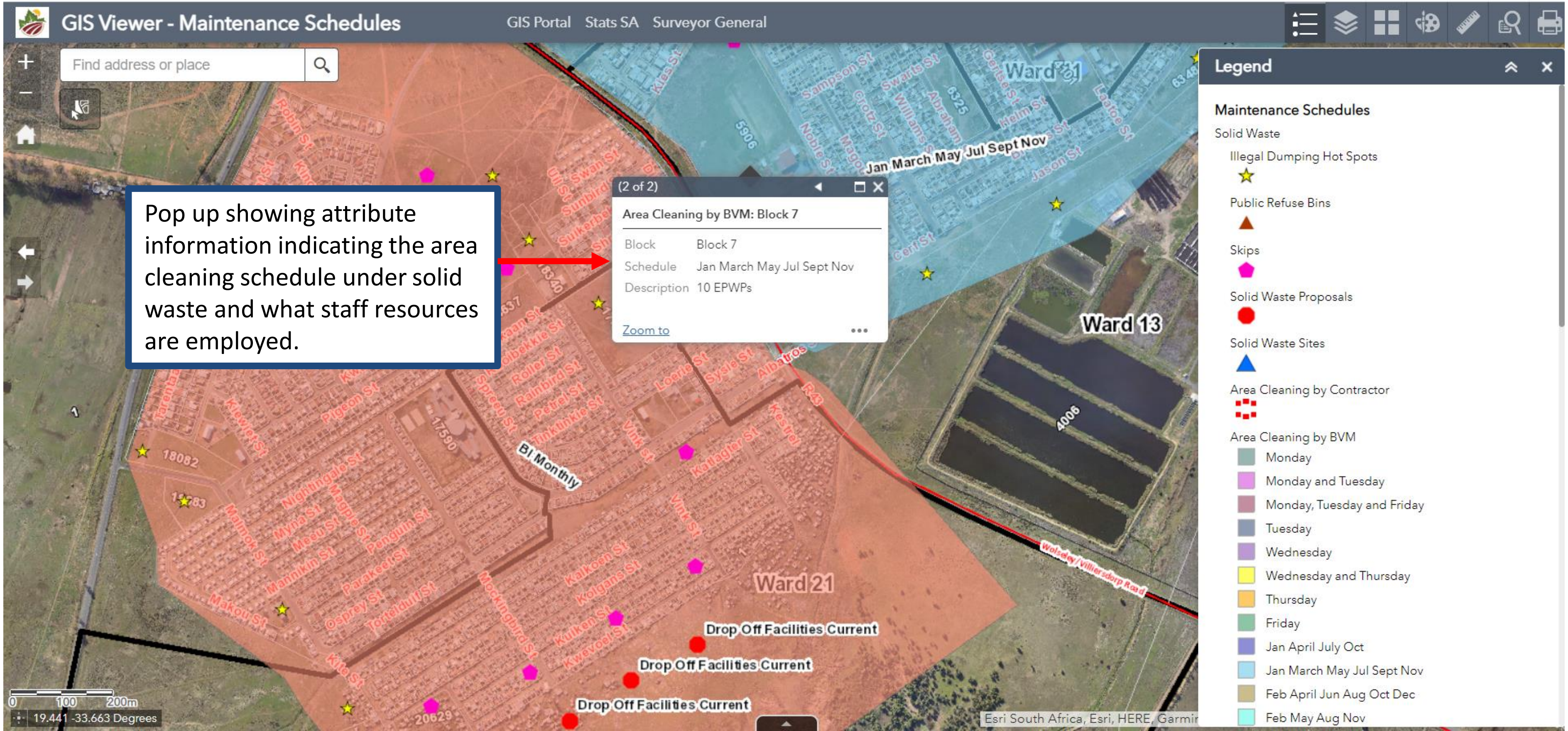
Spatial datasets of the maintenance schedules for each department were captured through consultation with the superintendents of each section.

The Internal Map Viewer was used as a template for this map viewer. The datasets described above were then overlaid onto the existing layers.

Ultimately this map viewer allows the user to visualize and query the various schedules. It also allows for management to monitor if the schedules are being adhered to and then also make recommendations should the schedules not be met. As a result, it assists strategic planning and resource allocation with regards to the maintenance work of these departments.

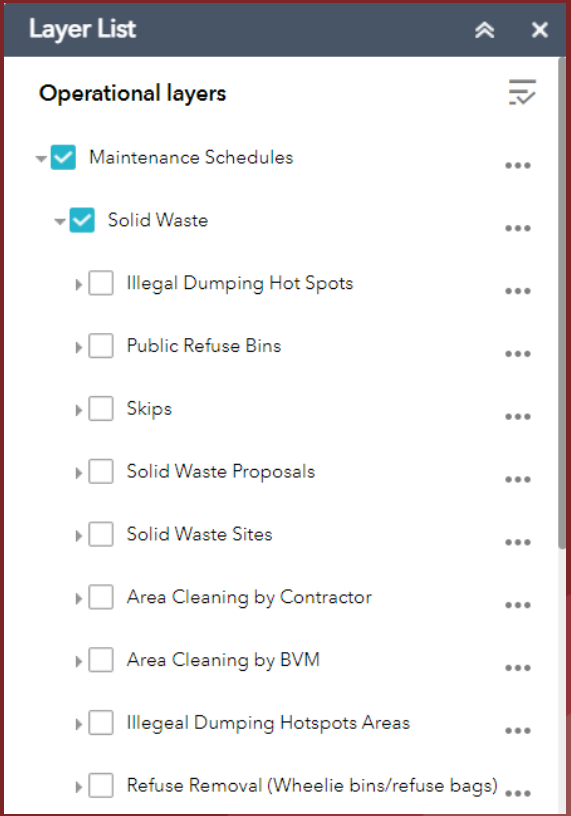
Maintenance Schedules Map Viewer - Example

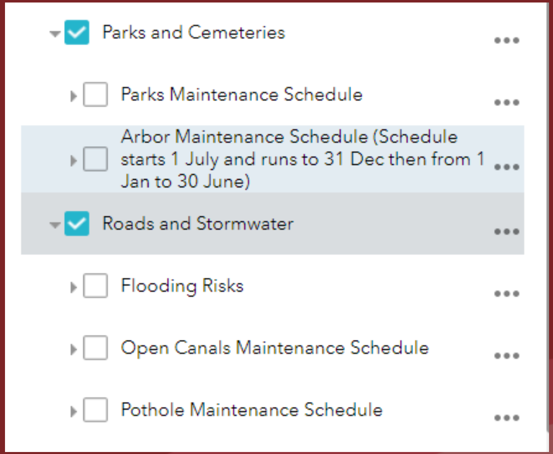
Pop up showing attribute information indicating the area cleaning schedule under solid waste and what staff resources are employed.



Maintenance Schedules Map Viewer Data Layers

The data layers in the Maintenance Schedules Map Viewer are the same as the Internal Map Viewer however the following layers are added:



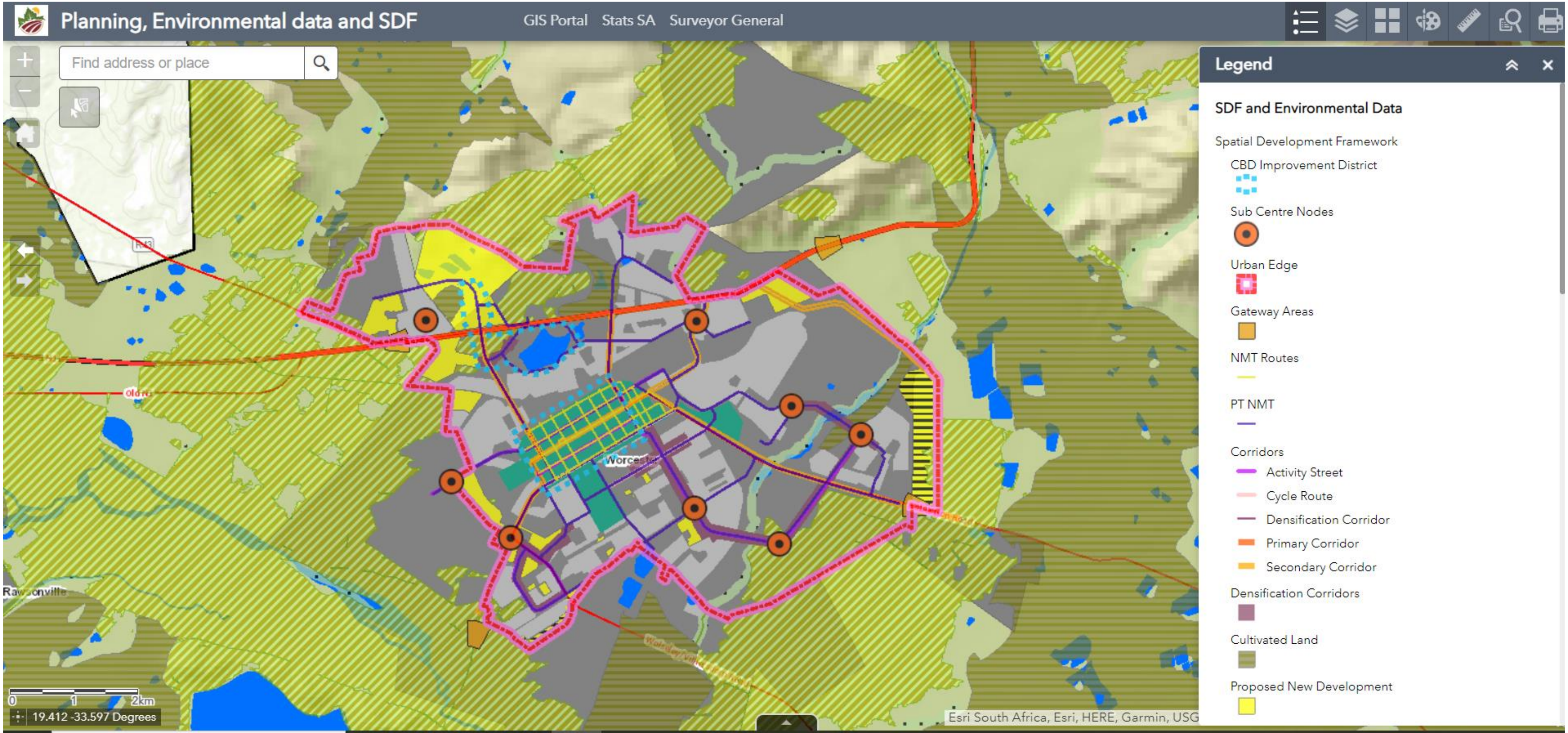


Planning and SDF Map Viewer

The Planning and SDF Map Viewer was created specifically for the Town Planning Department. It allows the user to view and query specific spatial datasets required for making decisions with regards to land use applications. These datasets include features like the Spatial Data Framework, environmental data such as the critical biodiversity areas (CBAs) and heritage status of properties.

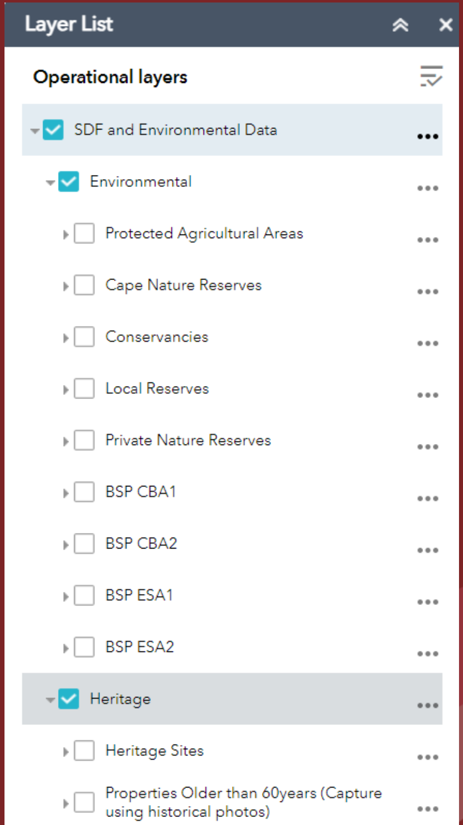
The idea behind this viewer is to make it easier for the planners to obtain relevant information with regards to subject properties thus reducing time and effort to evaluate land use applications.

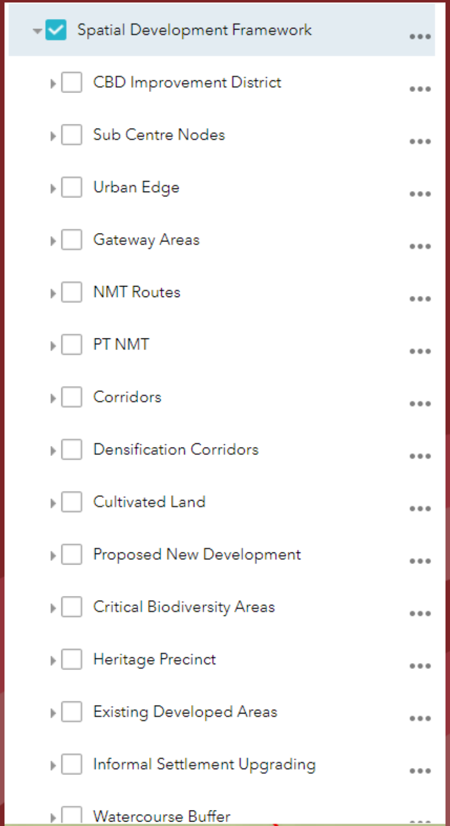
Planning and SDF Map Viewer - Example



Planning and SDF Map Viewer Data Layers

The data layers in the Planning and SDF Map Viewer are the same as the Internal Map Viewer however the following layers are added:





Conclusion

Spatial data is critical for planning, resource allocation and decision making within a local government environment. The map viewers described within this presentation will hopefully assist the decision makers within the Breede Valley Municipality with their planning, resource allocation and decision making by making spatial data readily available. This will also hopefully improve service delivery through the more effective and efficient planning and management of resources.

It is the aim of the GIS Section of the Breede Valley Municipality to continuously maintain, update and expand on the existing map viewers and to potentially produce additional viewers in the future providing for further spatial data needs.