

Cadastral GIS-Ready Working Group

In June of 2007, Spatial Data Warehouse (SDW) invited users of SDW/AltaLIS datasets to participate in two Mapping Forums (Edmonton & Calgary) to discuss the various base mapping products available in Alberta. These sessions were attended by several industry sectors such as surveying, forestry, utility, petroleum and geomatics as well as municipal and provincial governments. 53 people attended the sessions which lasted about 5 hours each.

(see [Base Mapping User Forum](#) document for more information)

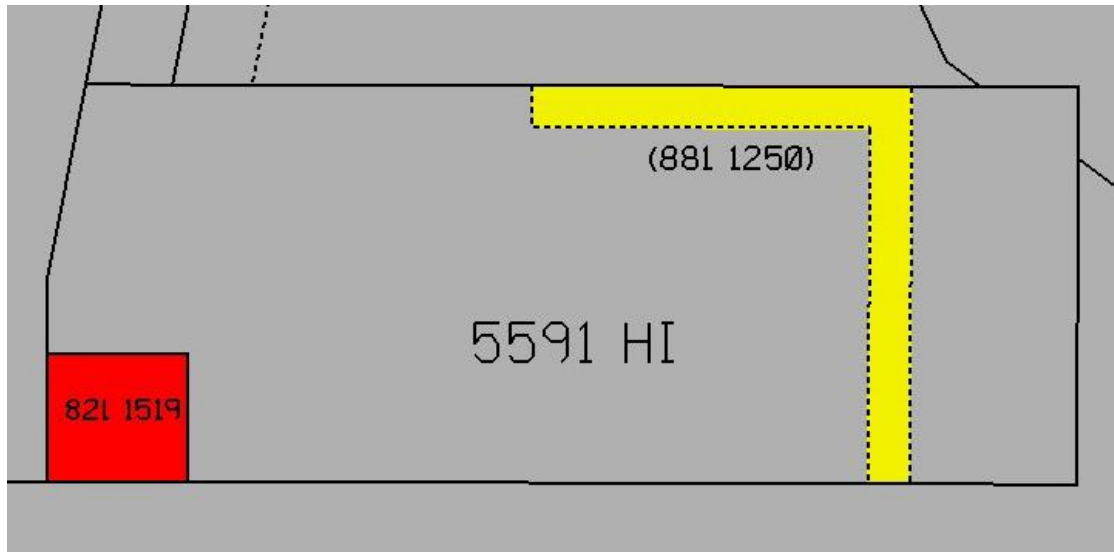
During the course of these sessions, it was determined that SDW would host two working group meetings to further discuss two items. One was to further define user requirements for a GIS Ready Cadastral Base and the other to discuss how Condominium Plans are being mapped in the Cadastral Base.

The following are SDW's notes from the Cadastral GIS-Ready Working Group meeting held in Calgary on October 11, 2007.

Working Group Notes

1. Ultimately Users would like every feature in the Cadastral as an attributed polygon.
2. In general, a large portion of the polygonization can be automated, but the remainder is more complex. For example:
 - The plan number is not repeated in every portion of the plan
 - Plan Numbers are not located within the plan extents (small polygons)
 - Multiple instance of plan numbers are within a single polygon
3. Automation of polygon creation is also problematic where Rights-of Ways intersect. Maintenance environment/methodology must be considered.
4. Details of file extents for product delivery- should it be township or 250K tiles and should it be clipped at border or overlapped.
5. Dimensions do not need to be intelligent attribute of plan leave as text node (point feature annotation) only.
6. Plans should always show current state no need to maintain original plan boundary. This would have to be on a go-forward basis do not need to go back and changes all historical plans.
7. If a phased approach is chosen then the priorities that should be considered are:
 - Plan Boundaries for Roads, right-of-ways and easements
 - Block/ lot features
 - Annotation
 - Hydrology

As stated the Product should depict the current state. For example, if the original plan 5591 HI has a portion superseded by plan 821 1519 then the feature created should have a 'hole' cut out of plan 5591 HI. These are both subdivision type plans. In the case of a right-of-way plan, unless the right-of-way is titled, it is not cut out of the underlying subdivision plan. In this example Right-of-way 881 1250 will overlay on plan 5591 HI.



The Plan polygon features should be attributed with the Plan number and the descriptor ie.

Plan Number = 8811250

Plan Descriptor= ANODE GROUND BED R/W

8. Format should be consistent with Titles & DIDs GIS product; Geographic projection and Shape file format.
9. Using Shape Format means that circular arcs are lost but this was deemed acceptable at this time, as it is the same with Titles and DIDs map products. The arc stroke length should be defined so that it is controllable and consistent.
10. Map entire geographic areas (all features) not just one type of feature at a time i.e ROW.
11. Would recommend a pilot be undertaken to prove concept. If a pilot is undertaken chose a geographic area that encompasses all feature types.
12. Most Users felt that a web service either WMS or WFS could be useful. However, all users felt they still need a copy of all data for internal use particularly off-site.
13. Should do further research on how Cities of Edmonton and Calgary are handling their GIS Cadastral; schema, features and attribution.

Other Issues

1. Existing Cadastral issue - Some users indicated they would like to have symbology files included with the product; i.e. layer files, level symbology files.