Troubleshooting Survey Plan Dataset Validation Errors

Tips to Resolve Dataset Validation Errors When Submitting a Survey Plan Dataset

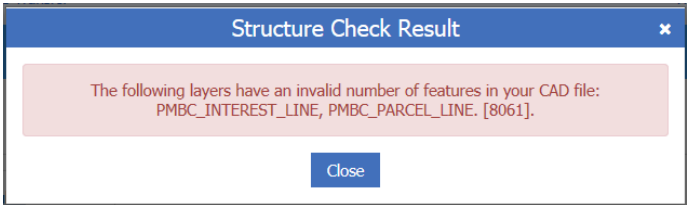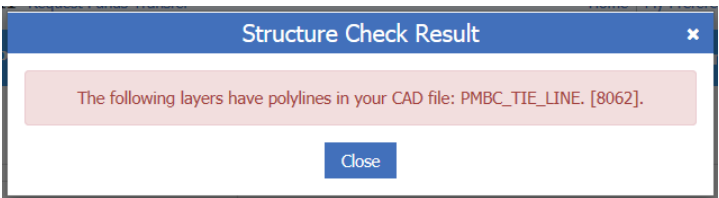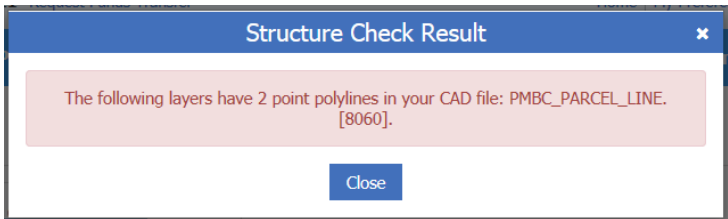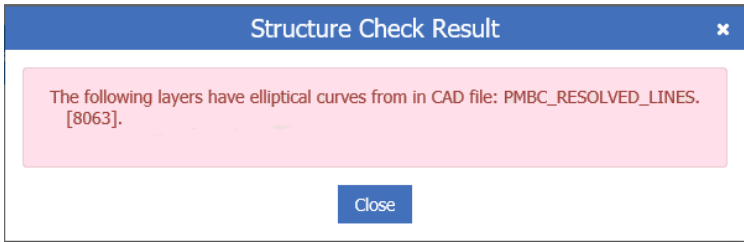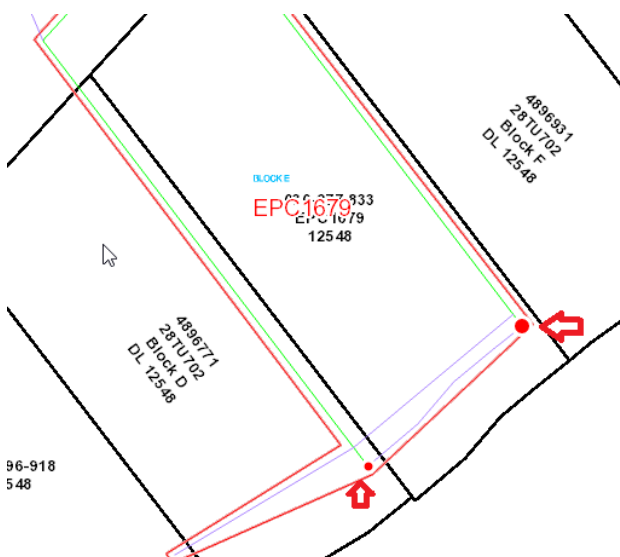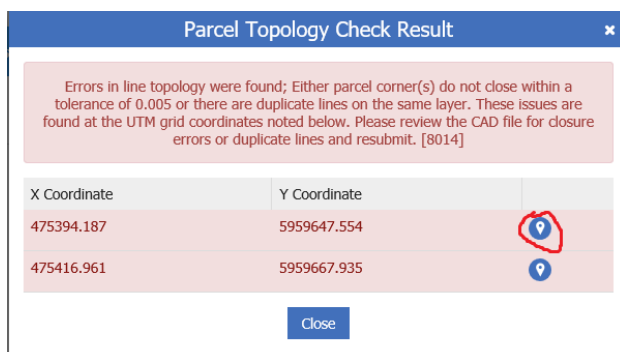### 1. Survey Limits Check

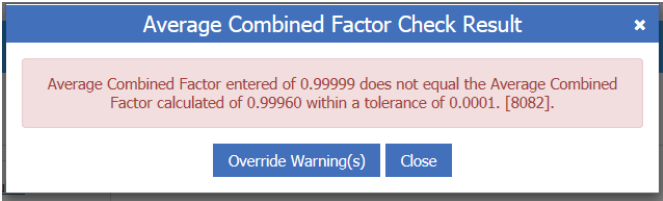| Validation Error Message	Description/Resolution
Survey Limits Check Result ✕ Survey Limits extent polygon does not fully contain the plan linework. Please review the CAD file and resubmit. [8070]. Close	• Users of the Parcel Map Search Service on myLTSA, rely on the Survey Limits feature submitted through the SPDS CAD file in order to locate plans in the fabric. It also aids surveyors in researching which plans may impact an area where they are going to be doing work. • As outlined on Page 3-2 of the Survey Plan Dataset Specifications, the Survey Limits feature "should include the lands surveyed (entities within the heavy outline as well as other survey evidence found or set on the plan and resolved boundaries)." Note that this does not include ties to control, unless those control points are contained within the general survey area.
Survey Limits Check Result ✕ Survey Limits extent polygon does not fall wihtin British Columbia. Please review the CAD file and resubmit. [8071]. Close	• As an additional confirmation, you will be notified if the Survey Limits feature falls outside the geographical extent of the Province of BC.

2. Line work on correct layer check

Structure Check Result ✕

The following layers have an invalid number of features in your CAD file:
PMBC_INTEREST_LINE, PMBC_PARCEL_LINE. [8061].

Close

- Features on the PMBC_PARCEL_LINE or PMBC_INTEREST_LINE layers are used by ParcelMap BC to construct Parcel polygons which are used to update the fabric. Any Plan type that is expected to create new Parcels should have enough features on **one** of these two layers to define a closed polygon.

- Posting plans do not define new parcel boundaries and should <u>not</u> be placed on either of these layers. They should <u>only</u> be placed on the PMBC_RESOLVED_LINES layer.

- Note that if Polyline features are used to represent Parcel boundaries (instead of individual 2-point Lines or Arcs) this may be seen as only a single feature, and the same error message may display. This can be resolved by using the 'EXPLODE' command in your CAD application to convert Polylines (other than Natural Boundaries) into simple features.

3. Polyline Features in Tie Line Check

Structure Check Result ✕

The following layers have polylines in your CAD file: PMBC_TIE_LINE. [8062].

Close

- This Structure Check ensures that Polyline features have not been included within the PMBC_TIE_LINE layer.

- The ParcelMap BC system is only able to calculate bearings and distances for 2-point lines or arcs. Polylines should be used only to represent natural boundaries, which do not have surveyed dimensions labelled in the Plan. Table 3-1 of the Survey Plan Dataset Specifications and Table 1 of the

	outline which types of features are permissible to include on the PMBC_TIE_LINE layer. • Polylines can be easily converted to simple lines and arcs by selecting them and running the 'EXPLODE' command in your CAD application.
4. Two Point Polyline Feature in Parcel Line Check	
Structure Check Result ✕ The following layers have 2 point polylines in your CAD file: PMBC_PARCEL_LINE. [8060]. Close	• The ParcelMap BC system is only able to calculate bearings and distances for 2-point lines or arcs; if a Polyline feature is used, no dimensions get generated. Polylines should be used only to represent natural boundaries, which Table 3-1 of the Survey Plan Dataset Specifications and Table 1 of the Tips and Tricks for Survey Plan Dataset Creation outline which types of features are permissible to include on the PMBC_TIE_LINE layer. • 2-point polylines can be easily converted to simple lines and arcs by selecting them and running the 'EXPLODE' command in your CAD application.
5. Elliptical Curves in CAD file Check	
Structure Check Result ✕ The following layers have elliptical curves from in CAD file: PMBC_RESOLVED_LINES. [8063]. Close	• This structure check ensures that the CAD file contains no elliptical curves. • The survey plan dataset cannot be submitted until the elliptical curves are replaced by simple ("true") curves.

www.ltsa.ca

6. Topology Check

Parcel Topology Check Result ✕

Errors in line topology were found; Either parcel corner(s) do not close within a tolerance of 0.005 or there are duplicate lines on the same layer. These issues are found at the UTM grid coordinates noted below. Please review the CAD file for closure errors or duplicate lines and resubmit. [8014]

X Coordinate	Y Coordinate	
475394.187	5959647.554	📍
475416.961	5959667.935	📍

Close

- The Survey plan dataset topology check ensures that the CAD files contain valid, closed polygons.

- The survey plan dataset cannot be submitted until the topology errors have ben corrected.

- When an error has been flagged, the validation window will show "Locate by symbols" that when clicked on will launch the map check window and highlight red circles to allow the user to locate and correct the topology errors. In this example the parcel boundary (in green) is unclosed.

www.ltsa.ca

7. Average Combined Scale Factor Check

Average Combined Factor Check Result ✕ Average Combined Factor entered of 0.99999 does not equal the Average Combined Factor calculated of 0.99960 within a tolerance of 0.0001. [8082]. [Override Warning(s)] [Close]	• The **Average Combined Scale Factor** ensures that SPDS CAD files have been appropriately scaled to meet PMBC requirements. This is calculated from the coordinates of any control points supplied, along with an approximate elevation derived from a Digital Elevation Model. • The computed value is an estimate and is intended only as a check against accidental errors when entering the CSF into your Survey Plan Submission (such as transposed numbers or entry of a grid-to-ground direction factor when a ground-to-grid factor is expected). This warning can be overridden, if the entered value is consistent with the Combined Scale Factors listed in the Plan.

For additional tips and tricks in preparing Survey Plan Datasets for submission, please see: https://help.ltsa.ca/myltsa-enterprise/tips-and-tricks-survey-plan-dataset-creation