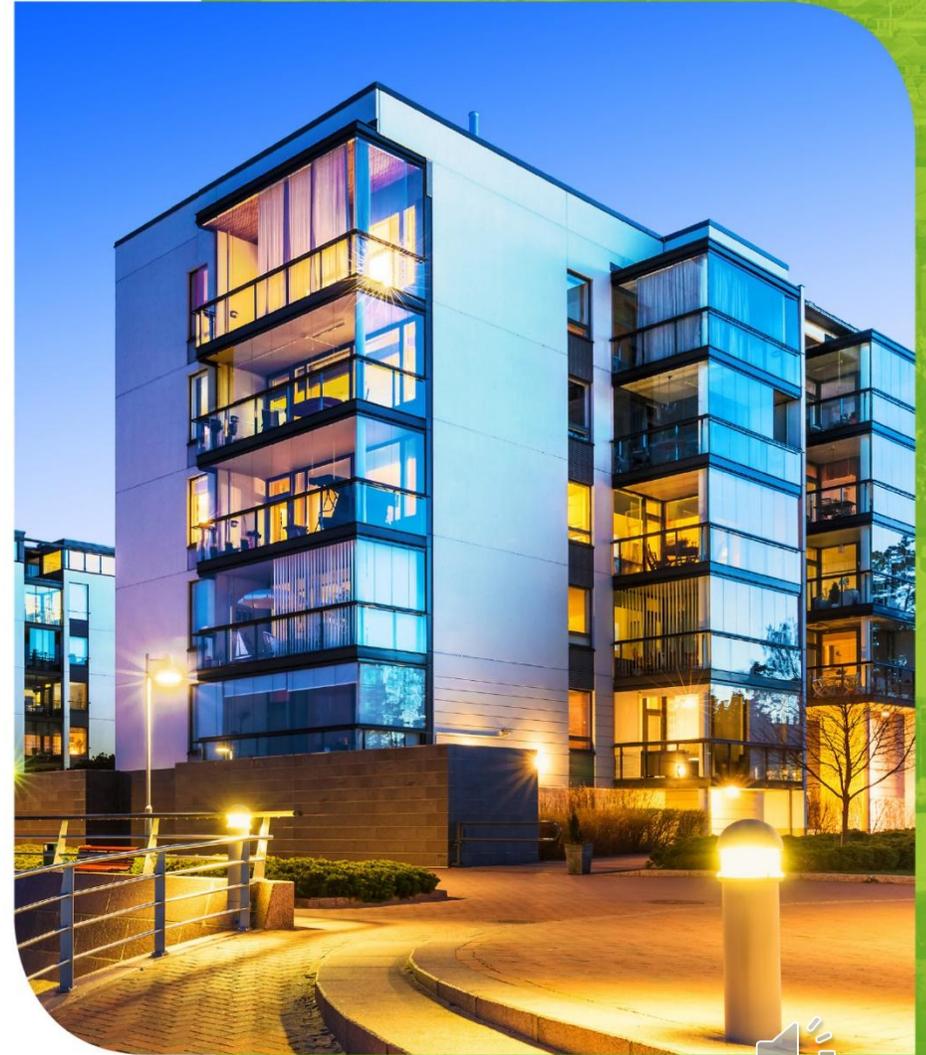




Industry Education Webinar:

Common Survey Errors

- A joint webinar with the
Office of the Surveyor-General



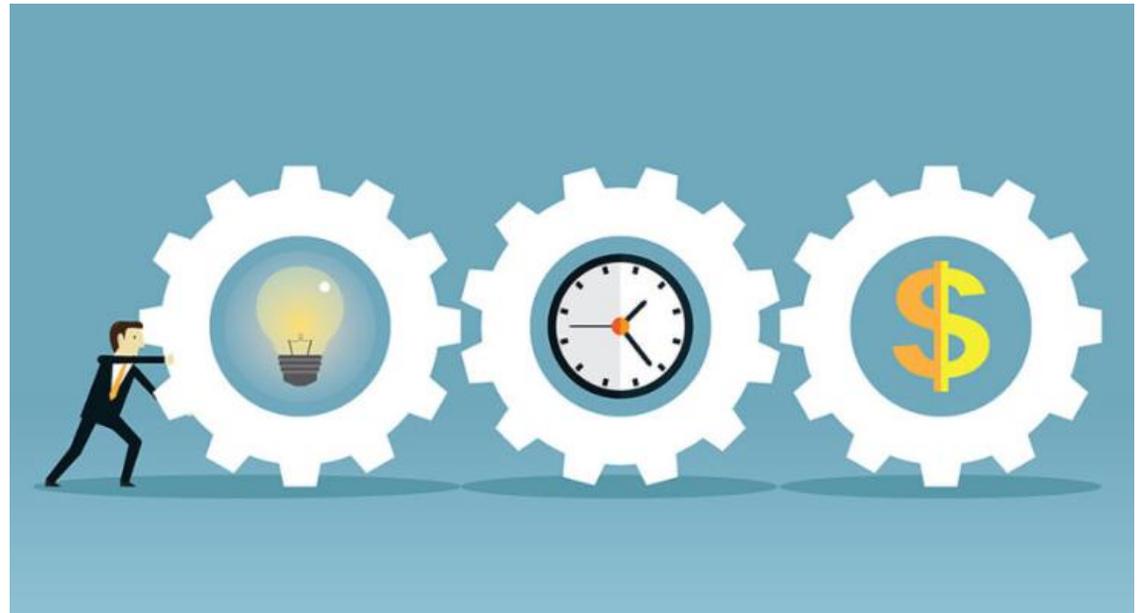


Industry Education Program

Land Services SA is committed to providing an excellent Customer Experience. One way we continue to deliver value to the Industry is through our Industry Education Program, where we produce a range of helpful educational materials, hold regular webinars and Industry Events.

Why are we doing this?

- ✓ Assist in educating the industry by providing regular training updates
- ✓ Assist in reducing requisitions across your business, saving you time and money
- ✓ Supporting you to deliver excellent service to your clients





About our Land Services SA Team

This Industry Education Webinar was prepared by LSSA and the Office of the Surveyor General.

Ruhi Afnan is a Senior Licensed Surveyor at LSSA. He has 30 years of experience in private practice. Ruhi attained his License to practice Cadastral Surveying in the Lands Department where he worked in a variety of locations within the state of South Australia. As a customer of LSSA, he worked on projects such as Electronic Plan Lodgement (EPL) and more recently the Digital Plan Drawing Standard for Digital Plan Lodgement (DPL).



John Linsell is the Senior Cadastral Surveyor with the Office of the Surveyor General. He has over 20 years surveying experience in a wide range of disciplines and currently specialises in cadastral definitions and compliance. John obtained his survey license in private practice whilst working widely across many urban and regional areas of SA. As an audit surveyor, John sees on a daily basis many of the avoidable plan errors and has a passion to teach and assist surveying professionals achieve high standards.



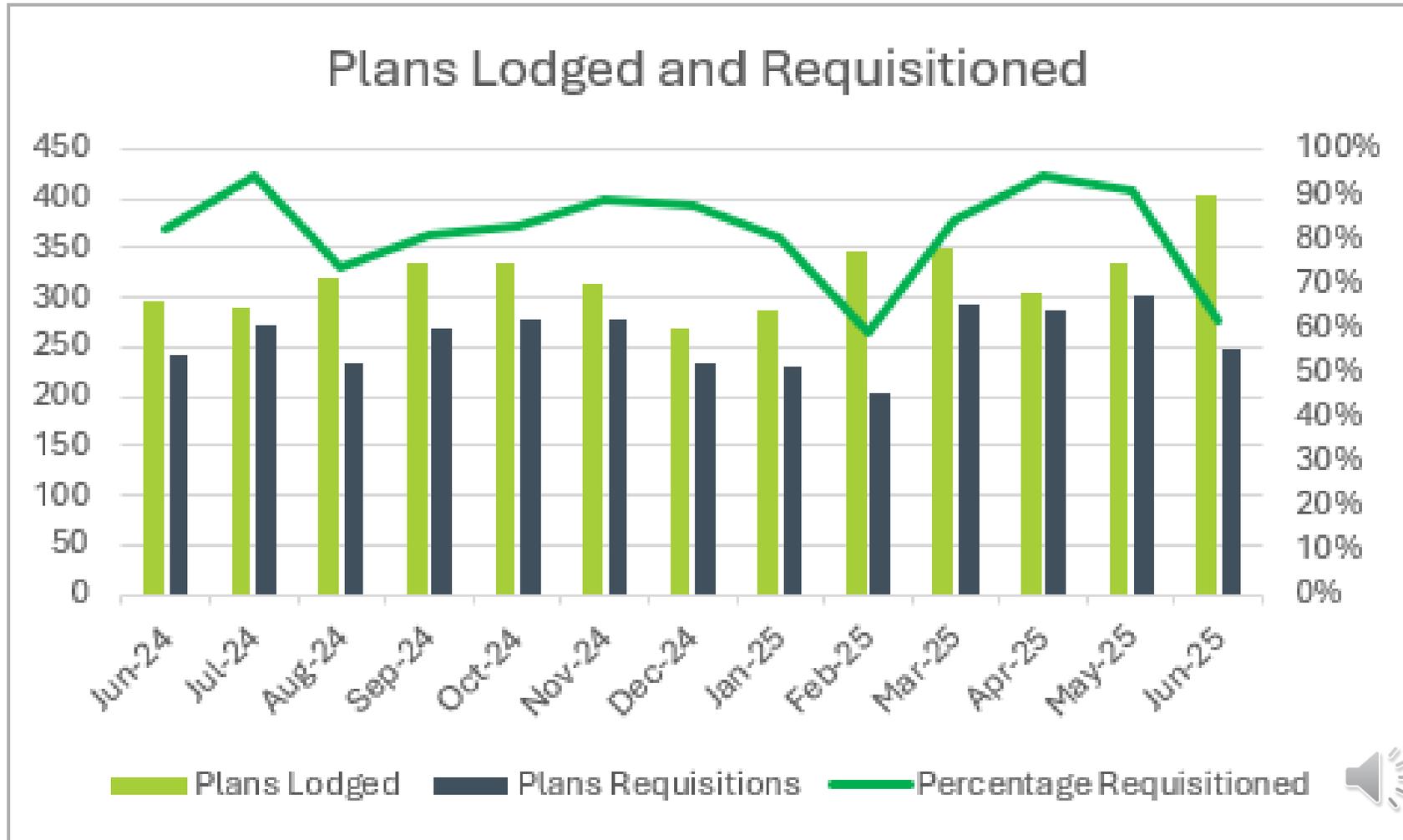
CONTENTS

- Statistical Data on Requisitions
- Categories of Requisitions
 - Plan Presentation
 - Survey Data
 - Boundary Definition
 - Digital Data
- Tools and Strategies for Quality Improvement



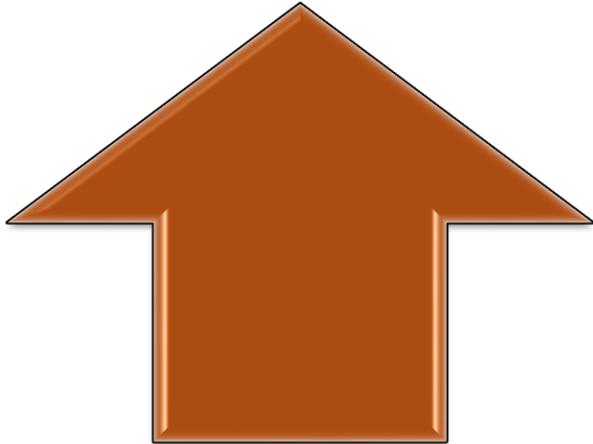


Statistical Data on Requisitions





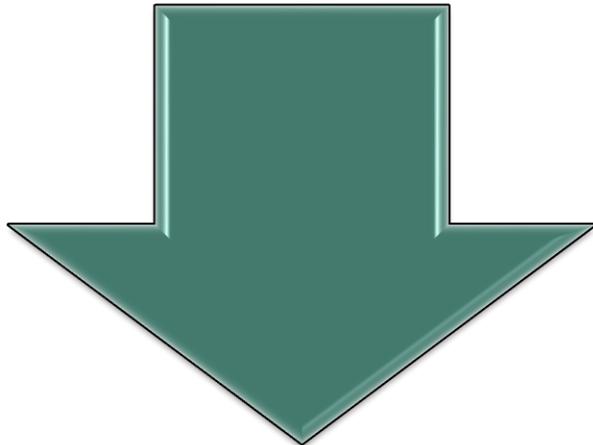
Plan Presentation Error



Common Error:

Incorrect plotting of road and abuttal boundaries.

This results in Permanent Survey Marks contained inside a parcel when all previous survey plans show it's in the road reserve.

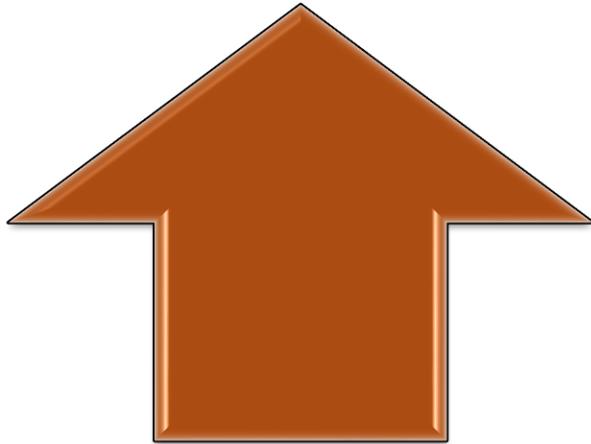


Instead:

Taking an extract from the Digital Cadastral Data Base (DCDB) is a fast and easy way to insert this data into your drawing file. However good judgement is still required by comparing this line file data with previous surveys

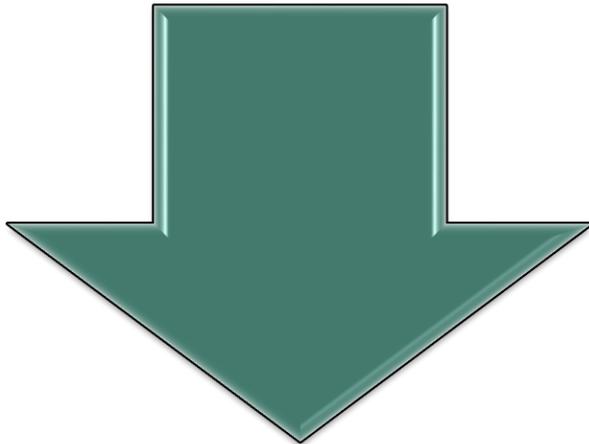


Digital Data Errors



Common Error:

- “Gaps” in digital line work
- Internal boundaries on the wrong layer
- Distances on the wrong side of the line.
- Missing survey data for survey lines ie: missing annotate lines.

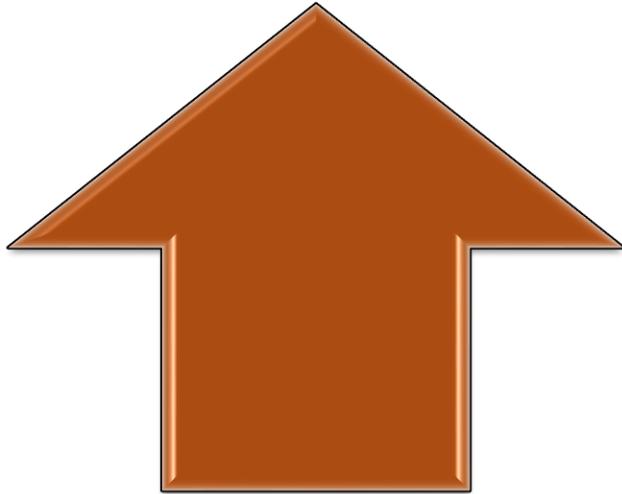


Remember:

PPG error report and CAD report will identify errors even though it passes with “WARNINGS”

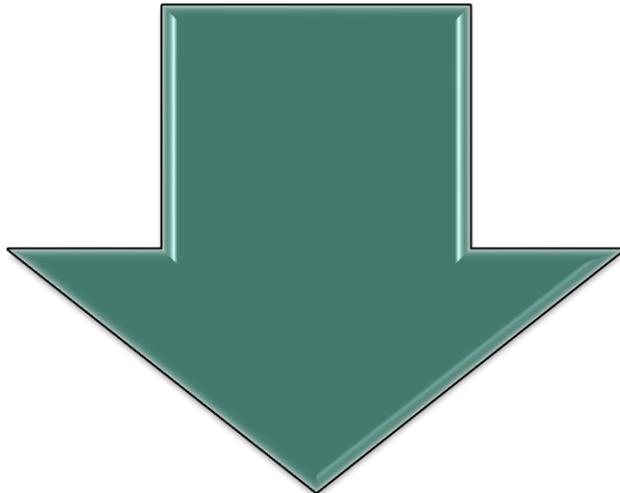


Digital Data Errors



Common Errors:

- Missing road widths on each line segment, can't assume the road is parallel.
- Missing a bearing for each line segment of an easement, can't assume the easement boundaries are parallel.
- Using the old chainage tool.



Instead:

- PPG error report and CAD report will identify errors even though it passes with **“WARNINGS”**
- Use current LSSA Template V1.4 for your drawings



Survey Data Errors



Common Errors associated Tertiary Network and Parcel Closures:

- Missing Network Coordinates for new PSMs or PSMs outside the Tertiary network missing prior to lodgement
- PM Gone reports not uploaded prior to lodgement.
- Bearing Datum is outside 10” of the join between coordinated PMs.
- GNNS Observation as a bearing datum.
- Ignoring PMs that your survey traverses by.
- Unacceptable misclosures in survey data.

Refer to:

- Plan Presentation Guidelines 7.73 Bearing Datum
- Cadastral Survey Guidelines 14.1 and 15 Connection to Surveys
- Cadastral Survey Guidelines 13.1 Survey Accuracies



Survey Data Errors



Common Errors in Occupation:

- Occupation symbol is shown but offset data is missing.
- Notes on the plan saying “occupation not measured” against survey measurement data for Subject Land
- Missing surveyed bearings along connection only lines to fix occupation.

Refer to:

Under the Cadastral Survey Guidelines 7 Occupation Surveyors are required to show occupation information for one or more of the following reasons:

- demonstration to plan users of boundary redefinition evidence,
- demonstration to plan users of physical status of subject land boundaries surveyed, and/or
- to assist future surveyors in relocation of PSMs connected.

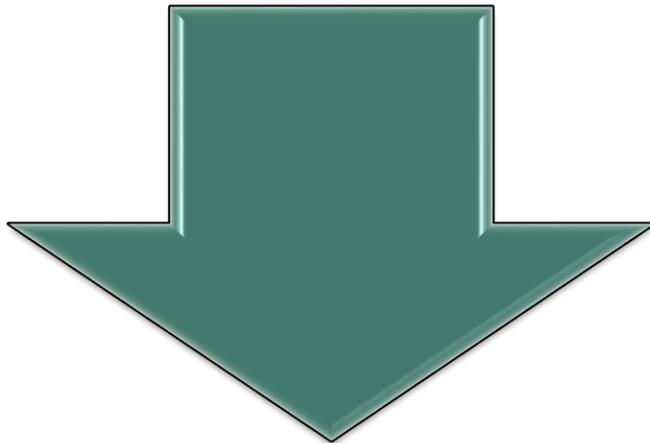
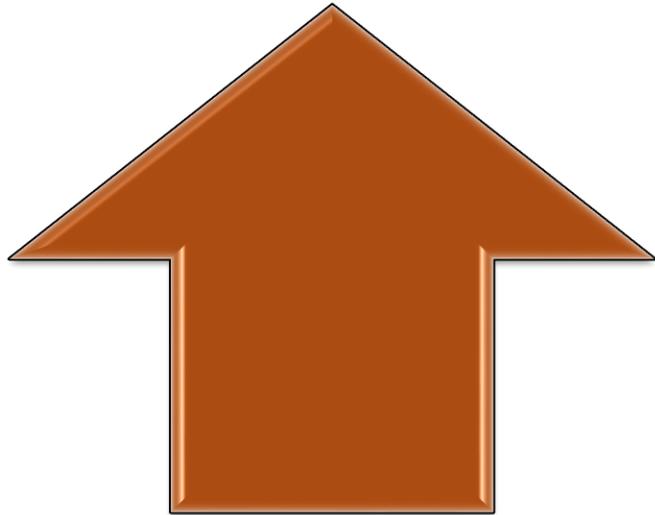




Boundary Definition Errors

Common Errors:

- Derivation of long fixings for PMs or reference marks that are within cadastral limits but have errors of 0.02-0.03 to previous surveys.
- Adopting an MGA bearing from a previous survey as the basis for the definition of a boundary.
- Errors in not protecting data angles or “original intent” along curves and subject land boundaries with no justification.
- Connection to reference marks placed pre-DSA that define road corners and boundary corners. Commenting on Metal Pins that define subject land.
- Copied data



Refer to:

Cadastral Guidelines 17 Reports



Boundary Definition Errors



Boundary definition is subjective; in some cases, there can be multiple solutions.

- The Survey plan should justify the definition of the subject land and impact on surrounding titles. Efforts should be made to avoid creating steps in rear boundary; it is recognised that this may happen when previous surveys don't survey from the whole to the part. This might require investigating occupation around the entirety of the block you are working within.

How to avoid redefinition requisitions:

- Survey the occupation around the entirety of the block when that block is created in the same division plan.
- Investigate the cause the discrepancies in title data. Is it calculable misclosure in the old division plan?
- Survey reports need detail alternative solutions, to avoid been requisitioned.
- Cadastral Survey Guidelines Section 4 Survey Principles and Section 9 Searching is a valuable source of information to guide you in redefinition of boundaries





Tools and Strategies for Improvement

Reference Material:

Plan Presentation Requirements (PPR)
Version 12

Cadastral Survey Guidelines (CSG)
Version 6

Tools:

CAD and PPG reports generated from DPL

Plan Presentation Checklists

Closure Report

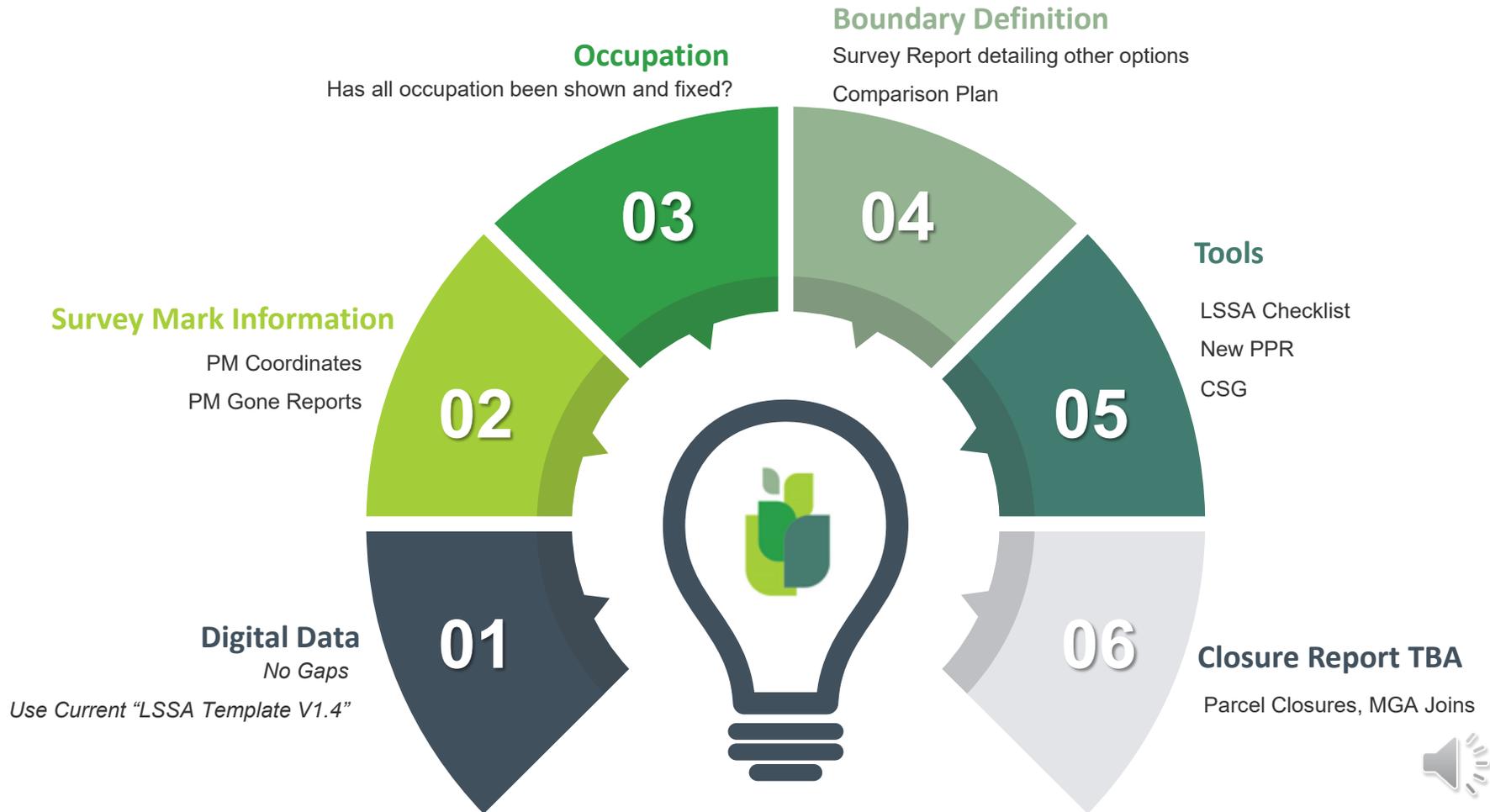
Strategies to avoid redefinition errors:

“Comparison plan” helpful to identify errors in logic, upload to DPL detailed Survey Reports and Comparison Plans

Seek the opinion of another Licensed Surveyor first before seeking an opinion from the OSG. Upload to DPL any correspondence.



Summary of Key Points



Industry Education Hub



Land Services SA partner with the SA Government and relevant Industry Bodies to deliver a range of Educational Materials to support property industry professionals. This webpage is dedicated to the publication of Industry Education Materials to assist conveyancing and survey professionals.

Industry Education Series	+
eConveyancing	+
Digital Plan Lodgement	+
SAILIS Video Tutorials	+
Land Services SA Fact Sheets	+



Hot Tip:
Keep updated on
LSSA's webinars and
video's

Questions

