

The “Pincushion” Effect

How did we get here and where do we need to go...

Spring Seminar – ANSLS June, 2022
Compiled by: J. Isenor, P.Eng, NSLS, P.Surv



For Discussion:

1. How did we get here?
2. Guiding Principles
3. Examples for discussion
4. The way forward



How did we get here?

- Previously unfound evidence?
- Overlapping surveys?
- Errors or perceived misplacement?
- Office Calculation and field crew layout?
- Technological advancement and adaptation?
- Disagreement with previous surveys?
- Discussions (Perhaps No Discussion) with other surveyors?
- No discussion with owners/adjoiners?
- Other?

Guiding Principles:

The Doctrine of Original Monumentation

The doctrine states in part “.....if the ultimate goal of retracement is to stand where the original surveyor stood, the only remaining evidence of the survey consists of the objects that the surveyor either encountered or planted as he/she proceeded along the route”

Essentially meaning that original monumentation, when found, is critical AND....

We need to ask ourselves this question: Is this evidence (bar, pin, axle, stake, or other object) found and is it where from all relevant evidence where the original surveyor intended to place it. If so, then that is where the boundary IS and was INTENDED to be.

So, looking at the above – if we are finding all possible evidence on the ground, there should not be a need for the “pincushion effect”, and certainly not for multiple monumentation! This also means that if the calculations don’t seem to agree with other things, it is OK, the original placement and location is key!

Guiding Principles:

The Hierarchy of Evidence

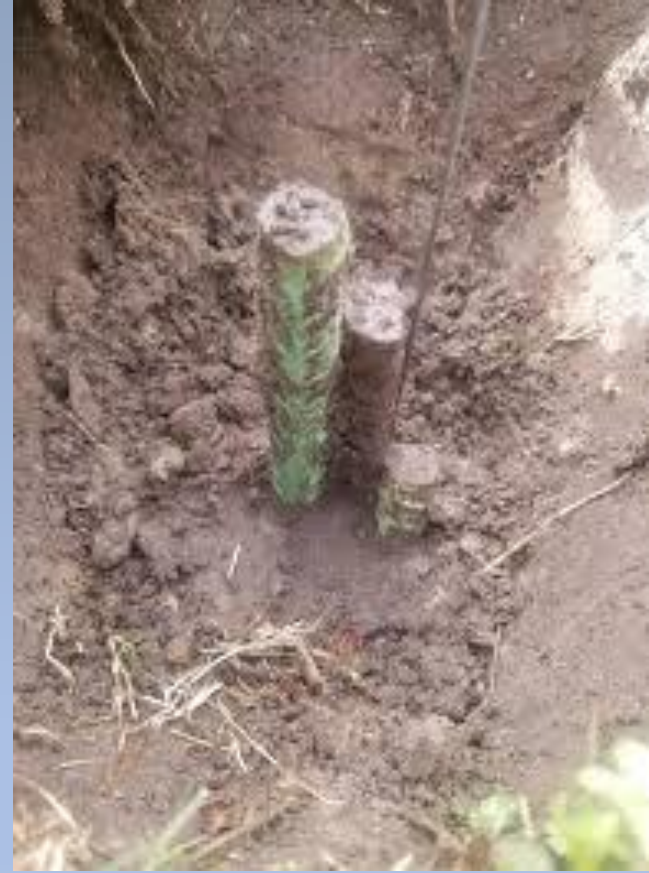
- a) Evidence of natural boundaries
- b) Evidence of original monuments
- c) Evidence of possession which can reasonably be related back to the time of the original survey.
- d) Measurements quoted by the original surveyor on a plan or in field notes (Paper based evidence, such as deeds).

Source: ACLS Practice Manual - <https://www.acls-aatc.ca/files/english/Practice%20Manual%202010.pdf>

Impacts of the “Pinchushion Effect”

- Confusion as to boundary location?
- Adds difficulty to making a boundary decision?
- Increased potential for Legal repercussions?
- Not in the public interest/confusing to landowners?
- Decreased confidence in our membership/association?
- Eroded public protection/trust?
- Others?

Some Examples:



Some Examples (continued):



Where do we go from here?

- Stop the practice of growing pincushions
- Educate field crews and staff
- Go to the site under survey
- Ensure we are operating within our own guiding principles
- Prescribe a standard or amend standards of practice to address the issue?

We certainly have much to talk about!!

References:

1. PINCUSHION EFFECT The Multiple Monument Dilemma in American Land Surveying By Jeffery N. Lucas
Professional Land Surveyor Attorney at Law © 2002-2015 – All Rights Reserved
At: <https://www.plso.org/Resources/Documents/PINCUSHION%20EFFECT%20Handout.pdf>
2. <https://www.boundarydisputelaw.com/surveys-depictions/dont-set-dont-pull-survey-monuments-over-the-apparent-boundary> (Photo 1, slide 7).
3. <https://www.facebook.com/Lakestatelandsurveying/posts/the-pincushion-effect-multiple-survey-iron-pins-at-two-locations-set-by-differen/1961471240610911/> (Photo 2 – slide 7).
4. <https://www.facebook.com/Lakestatelandsurveying/posts/the-pincushion-effect-multiple-survey-iron-pins-at-two-locations-set-by-differen/1961471240610911/> (Photo – slide 8).

Feedback:

At your tables, as a group, we ask that you provide your suggested solutions to this issue.

Each table is asked to nominate a speaker to read the suggested solutions to the members and provide the suggestions in writing to the continuing education committee.