

ASSOCIATION OF ONTARIO LAND SURVEYORS

SURVEY REVIEW DEPARTMENT ANNUAL REPORT FOR YEAR 2024

Paul C. Wyman OLS, MANAGER

The Association of Ontario Land Surveyors (AOLS), Survey Review Department (SRD) operates pursuant to the Inspection Program of the Surveyors Act, O. Regulation 1026, Section (40). It has been my privilege to manage this program and department for the past 3½ years. Spiro Sinnis, OLS CLS will be the new SRD Manager as of January 2025 and I will be transitioning my responsibilities until March 2025 when I will retire. Spiro will also take on the position of AOLS Deputy Registrar as these functions have been merged into one full time position.

Spiro is an Erindale graduate (1986) who was commissioned as Ontario Land Surveyor 1673 in 1990 and as a Canada Lands Surveyor in 1994. He has extensive experience in both the private and public sectors and has been active on AOLS committees.

Over the past 5 years, the AOLS has undertaken several changes as it focuses its activities on its primary role as Regulator of the profession. Coupled with a shrinking (and aging) membership, the Association has continued to find more efficient and cost-effective strategies to undertake essential functions.

The SRD is shrinking its 'footprint' by reducing staff time through the introduction of new processes, technology and by outsourcing to suppliers who can provide the same or improved services at a lower cost. Changes that SRD has made over the past few years are:

- Outsourced the receipt of plans from the Land Registry Offices (LRO). Prior to this change, the LRO shipped all new deposited / registered survey plans to the SRD as hardcopy prints. These were sorted and temporarily stored in filing cabinets at the AOLS office. We selected the projects for comprehensive and systematic review from these plans. At the end of each year, the plans were shredded and space made for the next group – several thousand plans each year. Now the LRO sends digital (pdf) copies of these plans to our contractor who use character recognition technology to scan, index and digitally archive these plans. They provide SRD with enhanced access to the plans (including plotting them on a map) which greatly simplifies our selection of projects for review.
- Introduced the option of digital data submission for comprehensive reviews. This simplified the process for firms under review and reduced the amount of paper being handled, stored and shipped by SRD staff and consultants. In 2024, 80% of firms elected to use digital submissions.
- Eliminated the sale of physical plan submission form stickers and increased the minimum sticker order to 50. This not only reduced staff time in processing these orders but will allow the full automation of sticker sales in the future.
- As corporate organization and management structures have evolved, SRD is developing a more flexible strategy for comprehensive reviews. There are various trade-offs but a 'one size fits all' process is not necessary. We are working with larger survey firms with multiple offices to design a comprehensive review program that achieves SRD objectives and works best for the firm. For instance, we may be able to merge all offices into one review or we may undertake the review on a geographic basis while some large multi-office firms prefer individual office-based reviews.

Manager Spiro Sinnis has extensive management experience and will continue to improve SRD processes and achieve further efficiencies.

SRD financial reporting is based on the AOLS fiscal year which runs from November 01 to October 31. From revenues we pay the overhead and salaries of staff – manager Paul Wyman / Spiro Sinnis, admin. officer Sheila Lavina, OLS field examiner Al Worobec and assistant examiner Herman Bernardo. Revenues also cover the fees for the OLS Comprehensive Review Consultants - Phillip Hofmann, Danny Quinlan, Ernest Sperling, & Chester Stanton and Systematic Review Consultant Tom Packowski.

The SRD is funded by the sale of *Plan Submission Form Stickers*, currently at a cost of \$19 per sticker. The AOLS 2023-2024 SRD Budget estimated a \$115,000 operational deficit. However, we have delayed some projects and decreased department costs resulting in a small operational surplus of \$1,216.

For Fiscal 2024-2025 we anticipate an 8% increase in sticker sales and general expenses will increase with inflation. We are estimating an operating loss of \$38,765. The SRD has an accumulated surplus that can absorb this and some additional future operating losses. No increase in the sticker price is anticipated in the next few years.

A project that was delayed last year but will go forward this year is the use of the Provincial Survey Records Index (PSRI) website as a temporary 'cloud storage' facility for digital comprehensive review submissions. While we are pleased with the success of digital comprehensive review submissions, they do have 3 data transfer problems:

- Firms use any one of several cloud storage providers and they tend to have differing access protocols which presents a 'learning curve' for both the firm and SRD staff that often results in repeated attempts to transfer data. All firms already have access to the PSRI site so we can develop one simple protocol for data transfer.
- Firms may have used very long file names that end up exceeding the Windows limit when the files are transferred to the AOLS server which may have a longer 'path' name due to our internal directory structure. The files will not transfer properly and this results in data loss and repeated file transfers. Additionally, we have found that most firms prefer to 'ZIP' the files into one large ZIP file for simplified transfer. These long file names do not always ZIP properly. We encourage firms to use simpler file names but hope to reduce or eliminate this issue by using the PSRI as our temporary cloud storage.
- Digital comprehensive review submissions can be up to 3 Gigabytes of data. While storage capacity is not an issue, file transfer is via the internet and bandwidth is an issue. By using the PSRI, we offload bandwidth so that we do not overload the AOLS office system.

We have noted both a benefit and downside to the digital submissions. They tend to be more complete as it is relatively easy to include digital documents that were more problematic with hardcopy. The downside is that firms do not always 'filter out' irrelevant information. Our reviewers assume that if it is included in the submission, they need to look at it as part of the review. Irrelevant documents waste the reviewers time and YOUR money.

We remind firms that while the comprehensive review process requires the review of contracting documents, SRD does not need the specific financial details of a project. **Firms may redact the detailed financial information from these documents.**

The AOLS SRD Committee meets regularly with the SRD manager and it has been my experience over the past three years that the SRD Committee provides important oversight and feedback to the SRD manager and staff that improves and strengthens the operation of the department.

SRD worked with the SRD Committee on two initiatives this year related to the comprehensive review program. Currently, the program only involves the review of cadastral survey plans (funded by the sale of plan submission form stickers). Council has directed SRD to expand the program to include the review of projects by registered surveyors (geodetic, hydrographic, photogrammetric and geographic information management) and this raised the question of expansion of the program to include cadastral survey project that do not produce a plan or the 'unregulated' work of licenced members (construction layout, topographic survey, etc.).

With regard to the work of 'registered' surveyors, the SRD Committee reached out to some registered members to help develop an initial review program but were unsuccessful to date so this process is still ongoing.

SRD used a 'survey monkey' questionnaire to poll the membership regarding the expansion of the comprehensive review program into work by cadastral survey firms. The opinion of the majority of those who replied to the poll was that the current program was sufficient and that we should not expand the program. Based on the questionnaire, it appears the current program does review about 65% of all the work currently performed by licensed surveyors and nearly 100% of that work that is regulated. It was noted that there may be some usefulness in the review of construction layout work. The SRD Committee reviewed and discussed this issue at some length, including comment from members of AOLS Insurance Advisory. It has been decided to leave the comprehensive review program for licensed (cadastral) survey firms as is. Part of the rationale was:

- Construction layout clients are largely corporations who can best determine their needs and protect themselves if errors are made by licensed surveyors,
- There are no 'enforceable' regulations that SRD can use to evaluate this work,
- The cost and resources of expanding the program far outweigh the perceived benefits to protect the public interest in this regard.

In addition to the Comprehensive Reviews for firms every 5 years (funded by sticker fees), SRD also undertakes reviews requested by the Registrar for firms the Registrar is monitoring for business and/or survey practice improvement. **Firms pay separately for these reviews.** SRD uses a fee schedule for these reviews that is approved by Council that was updated in February 2024 by Council Motion 24.155.

Registrar's Referral Comprehensive Review SRD FEES - PER PROJECT (Taxes Not Included)			
Review	Field Inspection	Office Visit	Total
\$1,500	\$300	\$500	\$2,300

To provide fair notice to firms of this cost increase, this new fee guideline will be phased in over this calendar year.

We select the firms for the 5-year Comprehensive Review cycle and the plans for the Systematic Reviews using the calendar year in keeping with our legislation. Please note that the Comprehensive Reviews start with a field inspection of at least one plan under review for each firm. To minimize costs, we normally start these inspections in the spring and may not complete the Comprehensive Reviews until March of the following year.

Please take the time to provide all the relevant data for the Comprehensive Reviews. The consultants can only base their reviews on the material provided. If materials are not provided, the consultant can only assume it does not exist or was not used for the project. When survey firms provide data after the initial review, it may take the consultant several hours to redo the review incorporating this new data. AOLS Council By-Law 94-3 provides that SRD may charge a fee of \$500.00 to recover costs for the 'late' submission of requested review materials.

For the 2024 year, the SRD opened 34 new Comprehensive Reviews plus 2 Review files requested by the AOLS Registrar in years prior to 2024. Two firms either relinquished their Certificate of Authorization (C of A) or were merged into other survey firms so their Reviews were closed. At the writing of this report (January 20, 2025) we have completed the reviews of 22 (61%) survey firms consisting of a total of 105 projects.

Referrals

Reviews are rated using a 'demerit' point system. Demerit points exceeding an average of 25 per project are considered 'sub-standard' and may be referred to the Registrar. Of the 22 completed comprehensive reviews, no review has been referred to the AOLS Registrar for 'sub-standard' work. By comparison, 10% of firms were referred in 2022 and 1% in 2023.

In the past, firms referred to the registrar had demerit points per project indicating substantial non-compliance with regulations and best practices.

The following is aggregated data from the current and past comprehensive review data. The incomplete 2024 data (as noted above) will be updated in the 2025 Annual SRD Report.

The data is the percentage of firms and projects reviewed that were cited for non-compliance with respect to the Issue Cited. This data provides insight into the profession's compliance with statute and best practice.

Research (Data for Years 2022 to 2023 is Final, 2024 Data is 'to date' as noted above)

<u>Issue Cited</u>	<u>% of Firms (2022)</u>	<u>% of Projects (2022)</u>	<u>% of Firms (2023)</u>	<u>% of Projects (2023)</u>	<u>% of Firms (2024)</u>	<u>% of Projects (2024)</u>
Documentary Evidence	66 %	40 %	67 %	45 %	27.3	8.6
Survey Records	46 %	35 %	49 %	34 %	13.6	7.6
Water Boundaries					27.3	9.5

Research issues were generally related to registry office and field note research. These issues showed improvement in 2024 over prior years but remain persistent and AOLS firms should continue to address the problems. Our review of projects with water boundaries indicates that firms need to pay better attention to researching the nature of water boundaries to determine both the legal status, if the water body is regulated or if the boundary has been modified.

Field Survey (Data for Years 2022 to 2023 is Final, 2024 Data is 'to date' as noted above)

Issue Cited	% of Firms (2022)	% of Projects (2022)	% of Firms (2023)	% of Projects (2023)	% of Firms (2024)	% of Projects (2024)
Best Evidence	68 %	33 %	42 %	16 %	31.8	7.6
Integration	56 %	25 %	24 %	11 %	50.0	22.9
Field Procedure	100 %	95 %	98 %	87 %	81.8	67.6
Measurement Verification	85 %	74 %	73 %	55 %	54.5	39.0
Quality Assurance	83 %	73 %	62 %	50 %	59.1	26.7
Interests in Title (Easements, etc.)	32 %	10 %	20 %	5 %	22.7	4.8
Monumentation One-in-Four	37 %	13 %	33 %	8 %	59.1	19.0

The modest improvement noted for 2023 has been partially sustained but these issues are persistent and AOLS firms are not sufficiently addressing the problems.

Plans (Data for Years 2022 to 2023 is Final, 2024 Data is 'to date' as noted above)

Issue Cited	% of Firms (2022)	% of Projects (2022)	% of Firms (2023)	% of Projects (2023)	% of Firms (2024)	% of Projects (2024)
Best Evidence (Plans)					4.5	1.0
Error of Closure	34 %	20 %	36 %	15 %	13.6	4.8
Interests in Title (Easements, etc.)	34 %	9 %	44 %	13 %	22.7	6.7
Fences (hedges, etc.) Plans	59 %	25 %	44 %	25 %	22.7	6.7
Plan Clarity	42 %	17 %	20 %	10 %	4.5	1.0
Method of Survey	39 %	15 %	49 %	16 %	40.9	10.5
Evidence	46 %	15 %	56 %	21 %	40.9	11.4
Identify Roads, Railways, Waterways	44 %	12 %	49 %	16 %	22.7	7.6

Improvements in 2024 are noted, but these issues are persistent and AOLS firms should continue to address the problems.

Reports (Data for Years 202 to 2023 is Final, 2024 Data is 'to date' as noted above)

Issue Cited	% of Firms (2022)	% of Projects (2022)	% of Firms (2023)	% of Projects (2023)	% of Firms (2024)	% of Projects (2024)
Client Engagement	46 %	23 %	24 %	12 %	18.2	5.7
Report to Client	81 %	61 %	64 %	46 %	31.8	16.2

Issues were often related to lack of contracts, project estimates and final reports. Improvements in 2024 are noted, but AOLS firms are not sufficiently addressing the problems.

From 2022 to 2024, the SRD has found that field survey issues are the most cited and survey firms need to focus on staff training to improve field note recording and field survey procedures.

As part of the comprehensive review, we conduct an 'office visit' to discuss the draft review report. SRD reviewers have found that 'in person' office visits are more productive, however we also offer the use of 'Zoom' technology for office visits. This facilitates the attendance of firm staff located in different offices.

The Comprehensive Review process concludes with an invitation to the survey firm to take part in an opinion survey regarding their experience with the process. These opinion surveys are confidential. The surveys are sent to the **SRD Committee** where they are reviewed and tabulated. Matters of particular importance are raised by the Committee at the regular meetings held between the SRD Committee and the SRD Manager. We encourage you to take part in the opinion survey as part of your Comprehensive Review. Your comments and suggestions help improve our processes.

At the writing of this report, the SRD has completed 100% of the Systematic Reviews for 2024. All plans that were reviewed were prepared or signed by the surveyor in 2024 so are reflective of our professions current work.

Systematic Plan Review Statistics – Number (Percentage) of Plans Cited for Non-Compliance			
Item	Year 2022	Year 2023	Year 2024
Total Number of Plans Reviewed	250	238	262
Plans NO Issues Noted		118 (49.6%)	132 (50.4%)
Total Number of Issues Noted		168	192
Written Response Required	19 (7.6%)	21 (8.8%)	10 (3.8%)
Bearing Comparison Issues	22 (8.8%)	30 (12.6%)	20 (7.6%)
Method of Survey Issues	21 (8.4%)	27 (11.3%)	33 (12.6%)
No Plan Submission Form Sticker		4 (1.7%)	5 (1.9%)
Missing PINs		5 (2.1%)	12 (4.6%)
Schedule Errors		4 (1.7%)	7 (2.7%)
Inadequate / Missing Monumentation		11 (4.6%)	8 (3.1%)
Lot / Concession Errors			4 (1.5%)
Topographic Detail Issues	7 (2.8%)	15 (6.3%)	15 (5.7%)
Incorrect / Incomplete Integration Data		11 (4.6%)	21 (8.0%)
Drafting Errors		40 (16.8%)	53 (20.2%)

Note: Blank Cells for Any Year are data that is not available.

These deficiencies indicate a need for improvement in the quality of plans prepared by surveyors. In 2024 only about 50% of plans reviewed fully met regulatory compliance. **Firms that utilize plan check lists and that have robust plan preparation procedures produce plans with few or no deficiencies.** In a few instances, it appeared that the signed plan was not checked. Plan checking procedures need to be more rigorously followed to reduce the number of avoidable errors.

Plan ‘Schedule’ errors remain a concern, as the consequences of mistakes in the Schedule can have major implications for the Client and General Public. Surveyors must check and double check the Schedule to ensure that the Schedule matches the plan, and the plan matches the Schedule.

Errors in integration data remain persistently high. The 21 integration errors observed in 2024 could have been easily avoided had the plan checking procedure simply included the step of inverting between the integration coordinates and comparing the results with dimensions shown on the plan.

We note that approximately 1% of the plans registered or deposited in the Land Registration System for the past 2 years do not have the required Plan Submission Form number (sticker number) entered in the 'one line' certificate that is placed below the Surveyor's Certificate. This appears to be a simple oversight. We suggest that surveyors add this to their plan check list so that the sticker number is added at the time of plan creation.

Both the Systematic and Comprehensive Reviews are undertaken by our consultants who base their comments on common law & court decisions, provincial statutes & regulations, and AOLS by-laws & best practices. To assist surveyors and their staff, much of this information is available on the AOLS website. Additionally, there are many checklists prepared by the AOLS Professional Standards Committee available on the AOLS website (*section on Survey Practice under Best Practices*), including a construction survey checklist.

Another resource is the AOLS 'Cybrary' (website library) that was created by the AERC for Articling Students but is a valuable source of general information, statutes, expert advice and case law to renew the knowledge of seasoned surveyors on a wide range of topics - General Boundary Retracement, Research, Descriptions, Easements, Water Boundaries, Roads, Adverse Possession, Spatial Reference, Mining Act, Condominium Act and the Planning Act.

And yet a third resource is the AOLS website 'Media' section containing digital versions of the 2010 – 2023 *Ontario Professional Surveyor (OPS)* magazine, the regularly emailed '*In Sight*' and '*Expert Insights*' which are digital articles that formerly would have been published in the OPS magazine.

The study and review of this material is applicable for CPD points and will assist firms and surveyors in improving the quality of their surveys and compliance with statute and best practice.

Respectfully,

Paul C. Wyman OLS

Outgoing Manager, AOLS Survey Review Department