

AUDITOR GENERAL

Halifax Regional Municipality



Building Permits and Inspections Audit

September 2020

September 14, 2020

The following audit of **Building Permits and Inspections**, completed under section 50(2) of the Halifax Regional Municipality Charter, is hereby submitted to the Audit and Finance Standing Committee of Regional Council.

Respectfully,

Original signed by

Evangeline Colman-Sadd, CPA, CA
Auditor General
Halifax Regional Municipality

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Report Highlights

HRM effectively manages its building permit application and inspection processes but we could not determine if timelines to issue building permits were reasonable.

Inspections were completed as expected and checked for compliance with building code. This helps ensure public safety. There is room for improvement in developing service targets, as well as a formal mentoring plan for inspection staff.

55 of 59 files we tested had building plan reviews



Four files without plan reviews had required inspections completed. This reduces risk because inspections confirm project complied with building code.



Challenges recruiting and retaining qualified building officials

- Difficulties finding experienced building officials
- Vacancies and possible retirements
- No formal mentoring plan



Qualified building officials review building plans and perform inspections.

Should have service standards to provide public with expected processing times for building plan reviews and inspections



New permit and inspection system coming

Inspections completed as expected

- 60 files – 544 inspections
- 99% completed



- Need checks to confirm data is accurate to get full benefit of new system

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Audit Results

Overall, HRM effectively manages its building permit application and inspection processes; however, we could not determine if timelines to issue building permits were reasonable. Inspections were completed as expected and confirmed compliance with building code. This helps ensure public safety. There is room for improvement in developing service targets to give the public expected processing times, as well as developing a mentoring plan for building officials.

Subsequent Events

Audit standards (CPA Canada – CSAE 3001 Direct Engagements) require us to consider the impacts of events related the audited area up to the date of the audit report.

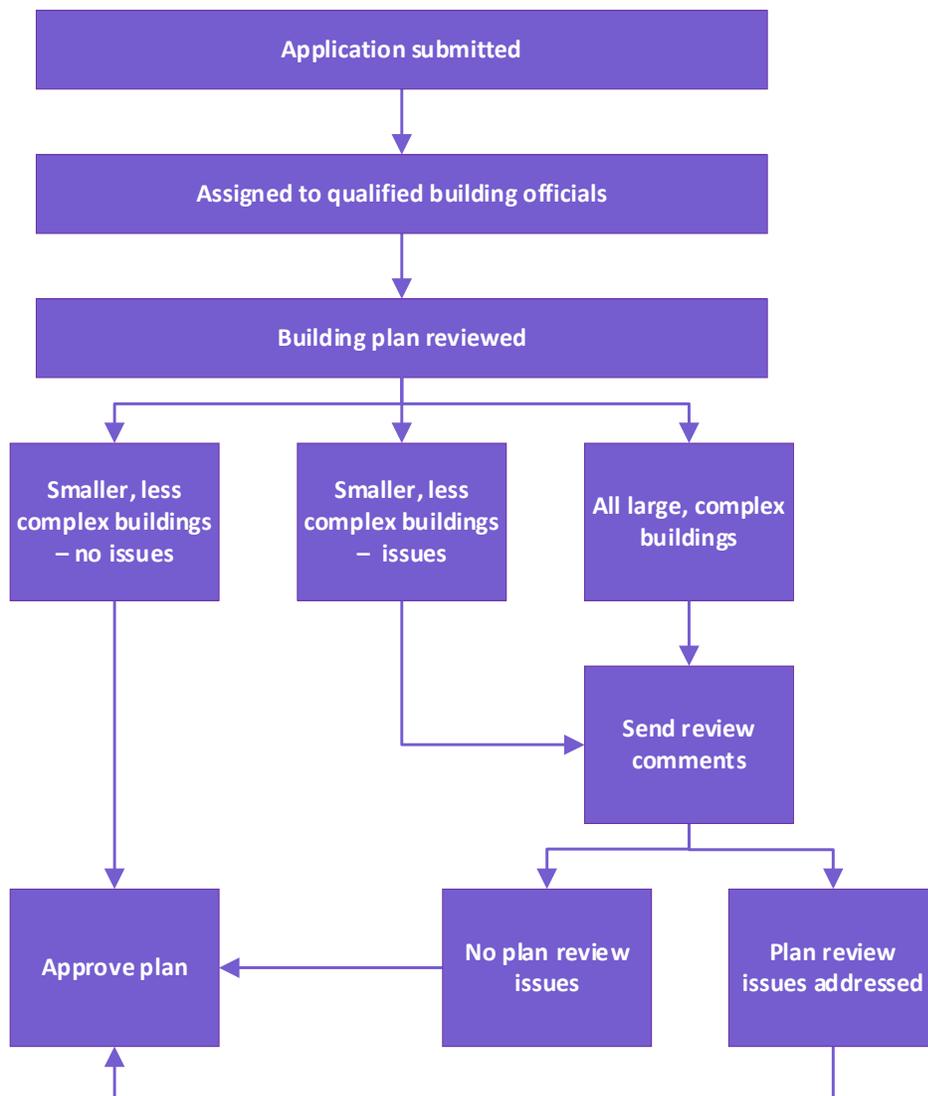
In August 2020, we became aware of a media report about a recent backlog in permit processing at HRM. We discussed the situation with management. Due to the COVID-19 pandemic and staff working away from the office, a new permit application process was created, using the HRM website and email. The new process appears to have led to inefficiencies which management told us are being addressed. Management also told us the typical increase in permit volumes has shifted to summer months, from spring, adding to the backlog.

During our audit, we could not determine if timelines to issue building permits were reasonable because Planning and Development does not have measurable service standards. Recommendation Two in this report addresses the need to develop and publicly report service standards.

Since the audit did not conclude on the reasonability of permit processing timelines, we determined this situation does not impact our conclusions on the original audit scope. Therefore, we did not evaluate the current situation or management’s response.

Required Inspections Completed, Most Plan Reviews Done

Building Standards Plan Review Process



As necessary, building plans are reviewed by other divisions in the Planning and Development Business Unit and by Halifax Water.

Qualified building officials complete plan reviews and inspections

We expected building officials to complete building plan reviews, which help confirm plans are consistent with applicable National Building Code of Canada requirements. We found evidence plan reviews were completed for 55 of 59 files we examined. Management could not confirm or provide evidence plan reviews occurred on four of the 59 files; the building officials responsible for these files are no longer with the division so we could not follow up further. However, the risk from the lack of plan reviews is offset because inspections associated with these files were completed as expected.

There is room for improvement in records management. Seven files were missing completed plan review checklists. We were able to use alternate evidence to confirm file reviews were completed in these cases.

Building officials are expected to check that buildings are constructed based on the approved plans. Since plans must be consistent with the National Building Code, this helps ensure public safety. For the 60 building files we examined, building officials completed inspection checklists in most instances. We expected to see 544 inspections performed. We found 99% were completed. Fifteen inspection checklists were not on file. We were able to use alternate evidence to confirm inspections were performed for nine of the 15. There was no evidence the remaining six inspections (1%) were done.

HRM's Building By-law requires letters from professional engineers and architects for certain large, complex buildings. These letters certify buildings are designed and built to minimum Building Code standards.

Twenty-seven of the 30 large, complex building files we sampled included at least one of these letters. For those files without letters, building officials provided reasonable explanations for why they were not required.

After construction, where applicable, professional engineers and architects provide final letters confirming the construction is consistent with the design. For the most part, the files we tested had required final letters on file. One file of 27 was missing one of its final letters.

Design Commitment Letters in HRM's Building By-law

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The by-law describes when the following inspection commitment design letters are required from professional engineers and architects.

- Structural design letter
- Mechanical design letter
- Electrical design letter
- Fire Suppression system design letter

Building officials in the Building Standards division are responsible to review submitted building plans and perform required inspections. We found all qualified building officials employed between 2016 and 2019 had the necessary training from the Nova Scotia Building Officials Association.

Qualified building officials were assigned to review plans or perform inspections for all 60 files we sampled.

We found plan reviews were assigned to building officials based on experience. Staff told us geographical area and staff availability are also considered. Inspections for small, less complex buildings were randomly assigned to the next available inspector. Inspections for large, more complex buildings were generally assigned to the same building official who reviewed the plan.

We assessed whether there were any patterns of the same building official repeatedly performing plan reviews for the same developer or applicant. There were no patterns of concern in our 2015 to 2019 analysis.

Standard process for building permit applications and inspections

In 2019, the Building Standards division developed a manual which includes building permit and inspection processes. This is an improvement from our April 2018 follow-up of our July 2015 review of HRM's Building Standards – Permits and Inspections.

Service Standards Not Established

The Building Standards division does not have service standards to provide the public with expected turnaround times for processing most building permit applications and performing inspections.

We reviewed the processing time for 60 building permit applications. However, we could not determine if the timelines were reasonable without established service standards.

Building official qualifications and key responsibilities

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Building officials obtain their training from Nova Scotia Building Officials Association

- Level 1 building officials perform plan reviews and inspections for small and less complex buildings
- Level 2 building officials perform building plan reviews and final inspections for all buildings, including medium to large size and complex buildings

Fifty-eight of 60 applications reviewed were assigned to a building official for review within three business days of the division receiving the application. The remaining two files were assigned within five to nine business days.

The table below shows the time from the date the application was assigned to a building official to complete an initial plan review and approval.

Sample Results – Time for Building Official Review

Time (business days)	Plan Review Completed			
	Smaller, Less Complex Files		Larger, More Complex Files	
	Initial	Final	Initial	Final
0 to 15	30	25	25	17
16 to 30	0	4	2	3
31 to 60	0	1	3	8
61 to 90	0	0	0	2
Total	30	30	30	30

The audit examined 30 less complex files and 30 more complex files. Where applicable, the time from initial to final plan review included waiting to receive additional information from applicants.

Accurate data is needed for performance measurement and to assist with program management. Staff told us the date used in the system for when the building official starts the review is not accurate. This means management does not know how long building officials take to complete their reviews, or how long a plan awaits review once assigned to a building official. We are aware the system used to record building permits and inspections is outdated and understand Planning and Development is implementing a replacement system. Some of the benefits of a new system will be lost if accurate information is not entered.

Recommendation 1

As Planning and Development implements the new building permit and inspection system, management should develop checks to confirm accurate data is entered.

Management Response

HRM concurs with this recommendation. Accurate data entry is critical in managing end to end customer service and in the reporting of performance metrics. Work on this is underway as the implementation of the new permit and licensing software system sees the use of minimal free-form data fields, thereby greatly reducing the incidence of entry errors. These changes will be augmented with ad hoc reporting in the system to ensure proper attention to accurate data entry. The target for the implementation of all recommendations is the end of fiscal 20/21.

We also looked at how long it takes from application submission to permit issue. The time to issue a permit includes plan review by other divisions in Planning and Development and by Halifax Water, if required. Where applicable, the time to issue permit also included waiting to receive additional information from applicants. As noted earlier, we could not determine if the timelines were reasonable because Planning and Development has not established service standards.

Time to Issue Building Permit

Time (business days)	Smaller, Less Complex Files	Larger, More Complex Files
0 to 15	19	10
16 to 30	8	6
31 to 60	2	8
61 to 90	0	5
Over 90	0	1
Total	29*	30

*We tested 30 small, less complex files. However, one did not require a building permit.

Management told us they expect inspections to be performed within two business days from when a request is made. We found all 60 inspection requests examined to be consistent with this.

Inspection Process



The Division’s only documented service standard applies to plan review turnaround time for large and complex buildings if an applicant requests a pre-application meeting. None of the thirty complex files we tested went through this process. Management does not monitor if this service standard is met. It is important the actual results are monitored and evaluated against standards.

Recommendation 2

Planning and Development should develop measurable service standards for building plan review and inspection processes, and regularly monitor and report results. Service standards and results should be publicly available.

Management Response

HRM concurs with this recommendation. Planning and Development currently has internal KPI measures but have not reported results publicly due to the limitations of the current permitting software system to produce accurate data. Once the new permit and licensing software is implemented, Planning and Development, through in-system benchmarking and dashboarding, will be able to publish this information publicly with confidence. Planning and Development also commits to reviewing and publishing Service Standards in alignment with the Corporate Policy Office's restart of the HRM Service Standards project. The target for the implementation of all recommendations is the end of fiscal 20/21.

Challenges Recruiting and Retaining Qualified Building Officials

Staffing concerns could impact ability to complete work

Management told us they have challenges staffing the Building Standards division. Vacancies increase the risk of delays completing work in a timely manner.

As of July 2020, the department had 35 full-time equivalent positions; three were vacant (one assistant building official and two level 1 building officials).

Seven of eight building standards staff we interviewed had concerns about staffing challenges.

- Five building officials left to become fire inspectors at Halifax Regional Fire and Emergency in May 2019. There is a risk additional staff may leave.
- Six experienced building officials and one supervisor are eligible to retire. Six more staff are eligible to retire within the next five years; this includes the building standards manager and the supervisor coordinating large, complex buildings.
- Management told us it is difficult to hire building officials and it takes time to train new officials.

In June 2019, HRM management and the union representing building officials developed a staff retention strategy; they agreed to allow building official staff to voluntarily increase their work week from 35 to 40 hours, to match the work week of a fire inspector.

No formal mentoring plan

Building Standards does not have a formal mentoring plan to ensure all staff receive adequate on-the-job experience. Five out of eight building standards staff we interviewed told us work experience is key to performing the role.

Assistant building officials are training to become qualified building officials. We found that a small number (17 of 544 or 3%) of inspections were performed by assistant building officials mentored by qualified building officials. There were no instances of level 2 building officials mentoring level 1 staff on complex and larger buildings in the files we tested. Five of eight staff we interviewed told us the division’s training and mentoring could be improved. The eight staff are a mix of assistant building officials and experienced building officials.

It is important for staff to gain experience to take on more complex work so that division responsibilities can still be carried out if experienced staff leave. Management told us the current mentoring program for staff to gain experience is informal. Given the concerns management identified attracting and retaining qualified staff, we expected management to have a formal process that allows staff to learn from the more experienced building officials during plan reviews and inspections.

Recommendation 3

Planning and Development should develop a formal mentoring plan and document how staff will obtain practical experience to perform their current role and more complex work.

Management Response

HRM concurs with this recommendation. It should be noted that not all employees will seek advancement to the Building Official 2 position. While all employees are encouraged to attain a Q2 level of qualification and to pursue more senior roles, it is up to the individual to pursue more senior positions. Planning and Development will develop and document a formalized training program to mentor and train new employees from the entry-level Assistant Building Official position to the intermediate and senior Building Official 1 and Building Official 2 positions, respectively. The target for the implementation of all recommendations is the end of fiscal 20/21.

Background

Building Standards is a division in the Building and Compliance section of Planning and Development. The division is responsible in part for reviewing building plans, issuing permits, and performing inspections on various types of buildings.

Building plan reviews and inspections are to be performed by qualified building officials. These officials are responsible for ensuring legislative requirements are met, including the Nova Scotia Building Code Act.

Building officials take courses through the Nova Scotia Building Officials Association. The type of work HRM building officials perform is based on their qualification level.

Building Official Responsibilities

Building Category	Required Qualifications to Perform	Building Types (New Construction and Renovations)
Smaller, Less Complex	Level 1 or 2 – HRM Building Official 1 or 2	Housing and small buildings
Larger, More Complex	Level 2 – HRM Building Official 2	All buildings

HRM also has assistant building officials who are training to be qualified building officials. They may be mentored by building officials but cannot perform plan reviews or inspections on their own.

HRM's building permit fee revenue for fiscal-year 2019-20 was \$4.8 million (2018-19 – \$5.2 million).

The permitting and licensing system is outdated. We identified system issues in our 2018 audit – Management of Development Approvals. Management told us plans for implementing a new system are underway, with certain aspects planned for fall 2020.

About the Audit

We completed a performance audit of the management of building permit applications and inspections.

The purpose of the audit was to determine whether HRM effectively manages building permit application and inspection processes to ensure public safety through compliance with applicable regulations and policies. Our role is to express an independent audit opinion of this area.

The objective of the audit was to determine if HRM effectively manages its building permit application and inspection processes.

We developed the criteria for this audit. These were discussed with, and accepted as appropriate by, management of Building Standards.

1. Building permit plans should be reviewed by qualified building officials to ensure consistency with applicable regulations, by-laws and policies.
2. Building officials should perform requested inspections and check construction to approved plans, applicable regulations and policies.
3. Building plan review and inspection processes should be timely.
4. Staff training needs should be identified and planned.
5. Service targets should be established and monitored.

Our audit period focused on building inspections assessed as passed or completed in 2019, and the associated plan reviews. Information from outside the audit period was considered as necessary.

Our audit approach included: interviews with management and staff in Planning and Development; review of legislation, acts, by-laws and guidelines; and review of building permit application and inspection files and other relevant documentation on a sample basis.

This audit was conducted in accordance with the Canadian Standard on Assurance Engagements (CSAE) 3001 Direct Engagements published by the Chartered Professional Accountants of Canada.

We apply CPA Canada's Canadian Standard on Quality Control 1. Our staff comply with the independence and ethical requirements of the Chartered Professional Accountants of Nova Scotia Code of Conduct.

Appendix 1 – Recommendations and Management Responses

Recommendation 1

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Contact Information

Office of the Auditor General
Halifax Regional Municipality
33 Alderney Drive, Suite 620
Dartmouth, NS, B2Y 2N4

Phone: 902 490 8407

Email: auditorgeneral@halifax.ca

Website: www.hrmauditorgeneral.ca

Twitter: [@Halifax AG](https://twitter.com/HalifaxAG)