TOWN OF PEACE RIVER ALBERTA

POLICY

Approval Date: **Motion:**	May 10, 2021 MOTION-21-05-203	**Policy Number:**	P-41-35-B
Supersedes:	P-23-35-A		
Title:	Hydrant Testing and Maintenance Policy		

Purpose

To provide a Policy governing fire hydrant flow testing, inspection, maintenance and marking.

Related Documents

- National Fire Code – Alberta Edition 2019 ed
- NFPA 25 "Water-Based Fire Protection Systems" 2020 ed
- NFPA 291 "Recommended Practice for Fire Flow Testing and Marking of Hydrants" 2019 ed

Policy

This Policy will ensure that all hydrants are in good working condition for any emergency situation that may arise.

1. General

1.1. Hydrants are part of the Town of Peace River water distribution system for the purposes of fire protection and water main flushing.

1.2. Fire hydrant flow testing and marking shall conform to NFPA 291 "Recommended Practice for Fire Flow Testing and Marking of Hydrants".

1.3. The Director of Engineering and Infrastructure will be responsible for establishing a master schedule for fire hydrant flow testing, inspection, and maintenance. A record of all testing, inspection and maintenance shall be recorded on the 'Hydrant Maintenance Inspection Report' (Schedule A). This record shall be maintained by Public Works and be made available to all other departments.

1.4. The Director of Engineering and Infrastructure, as part of the departmental annual report, will review the master schedule and associated reports so as to confirm that all required work was performed as specified.

2. Flow Testing

2.1. A fire hydrant flow test conforming to NFPA 291 "Recommended Practice for Fire Flow Testing and Marking of Hydrants" shall be conducted every 5 years.

3. Inspection

3.1. Fire hydrants shall be inspected annually and after each operation. Specific inspection items shall include:

3.1.1. Accessibility (3 meters to the front, 1.5 meters on other 3 sides);
3.1.2. Water or ice in barrel indicating faulty drain, leaky hydrant valve or high groundwater
3.1.3. Improper drainage from barrel;
3.1.4. Leaks in outlets or at top of hydrant;
3.1.5. Cracks in hydrant barrel;
3.1.6. Tightness of outlet caps;
3.1.7. Worn outlet threads;
3.1.8. Worn hydrant operating nut; and
3.1.9. Correct outlet size/type.

3.2. Any deficiencies noted in the inspection shall be immediately reported to the public works department.

3.3. Fire hydrants shall be flushed at least annually to verify operation, address repairs, and verify reliability.

4. Maintenance

4.1. Fire hydrants shall be lubricated annually to ensure that all stems, caps, plugs and threads are in proper operating condition.

4.2. Fire hydrants shall be kept free of snow, ice or other materials and protected against mechanical damage so that free access is ensured.

4.3. Fire hydrants shall have their barrels filled with an approved antifreeze every fall as applicable to ensure they do not freeze during winter. Any fire hydrant barrel containing water shall be pumped out prior to being filled with antifreeze.

4.4. The use of any fire hydrant during sub-zero temperatures shall be immediately reported to the public works department to ensure that antifreeze can be re-applied.

5. Marking

5.1. For rapid identification at night, all paints used for the marking of fire hydrants shall be of a reflective type.

5.2. The barrels of all public fire hydrants shall be painted yellow.

5.3. The tops and nozzle caps of all public fire hydrants shall be painted with the capacity-indicating colour scheme identified in Table 1.

5.4. Fire hydrants which have plugged drains due to high groundwater levels are to be marked "DOES NOT DRAIN" to ensure that the public works department is immediately notified of their use.

5.5. All "Out of Service" hydrants will be marked with an "out of service" bag complete with locking mechanism to identify the hydrant. Alternatively, an approved "out of service mark secured by the bonnet cap may be used. When the hydrant is returned to service, the bag or marker will be removed.

Table 1

Class	Colour	Capacity
AA	Light Blue	5700 L/min or Greater
A	Green	3800-5699 L/min
B	Orange	1900-3799 L/min
C	Red	Less than 1900 L/min

6. Private Hydrants

6.1. The barrels of all private fire hydrants should be painted red.

6.2. The tops and nozzle caps of all private fire hydrants should be painted with the capacity-indicating colour scheme identified in Table 1.

6.3. The owner of the private fire hydrant is responsible for all required maintenance and testing as per the National Fire Code – Alberta Edition.

Schedules

Schedule A, the *'Hydrant Maintenance Inspection Report'* forms part of this Policy.

Thomas Tarpey, Mayor

Christopher J. Parker, CAO

TOWN OF PEACE RIVER ALBERTA

HYDRANT MAINTENANCE INSPECTION REPORT
P-41-35-B Schedule A

Hydrant Number	
Location	
Hydrant Make & Model	
Location	

Year	**2021**		**2022**		**2023**		**2024**		**2025**	
Components	**OK**	**Defective**	**OK**	**Defective**	**OK**	**Defective**	**OK**	**Defective**	**OK**	**Defective**
Height										
Correct Direction										
Paint										
Markings										
Caps										
Nozzles (Size/Type)										
Nozzles (Condition)										
Operating Nut										
Barrel										
Drain Valve										
Service Done	**Y**	**N**	**Y**	**N**	**Y**	**N**	**Y**	**N**	**Y**	**N**
Stem Lubricated										
Accessibility										
Threads Serviced										
Caps Cleaned/Serv.										
Ease of Operation										
Isolation Valve										
Leaks Repaired										
Drainage										
Antifreezed										
Date										
Inspected By										

Comments	
2021	
2022	
2023	
2024	
2025	