



City of Richmond

Report to Committee

To: Public Works and Transportation Committee

Date: January 26, 2026

From: Milton Chan, P.Eng.
Director, Engineering

File: 10-6000-01/2025-01
Vol

Re: Artificial Turf in City Boulevards

Staff Recommendation

That the report titled "Artificial Turf in City Boulevards" dated January 26, 2026, from the Director, Engineering, be received for information.

Milton Chan, P.Eng.
Director, Engineering
(604-276-4377)

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Public Works	<input checked="" type="checkbox"/>	
Parks Services	<input checked="" type="checkbox"/>	
Climate and Environment	<input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO

Staff Report

Origin

Staff receive a few requests per year from homeowners asking to allow artificial turf as a substitute for natural planting in City owned boulevards fronting their property. Current City bylaws, including the Boulevard Maintenance Bylaw 7174 and Regulation of Material on Highways Bylaw 10226, do not permit the installation of artificial turf in City boulevards. In addition, staff receive a few complaints per year regarding unauthorized installation of artificial turf in City boulevards. These cases typically trigger a progressive bylaw enforcement approach involving education, request for voluntary compliance, and, if necessary, formal enforcement actions.

This report provides a preliminary review on the implications of allowing artificial turf in City boulevards.

This report supports Council's Strategic Plan 2022-2026 Focus Area #3 A Safe and Prepared Community:

Community safety and preparedness through effective planning, strategic partnerships and proactive programs.

3.4 Ensure civic infrastructure, assets and resources are effectively maintained and continue to meet the needs of the community as it grows.

This report supports Council's Strategic Plan 2022-2026 Focus Area #5 A Leader in Environmental Sustainability:

Leadership in environmental sustainability through innovative, sustainable and proactive solutions that mitigate climate change and other environmental impacts.

5.3 Encourage waste reduction and sustainable choices in the City and community.

Background

City boulevards are defined as the area between private property and the road. City boulevards are multifunctional spaces for essential infrastructure, both underground (sanitary sewers, watermains, storm sewers, conduits) and above ground (sidewalks, pathways, hydrants, lighting and street trees). They provide opportunities for landscaping, managing stormwater runoff, and creating a safety buffer between pedestrians, cyclists, and vehicular traffic.

The current City bylaws prohibiting the installation of items in City boulevards are the Boulevard Maintenance Bylaw 7174 and Regulation of Material on Highways Bylaw 10226. These bylaws specifically prohibit property owners from placing any hard surfaces on the boulevard immediately fronting their property. While artificial turf is not specifically listed in the bylaws, it falls under the category of prohibited hard landscaping, along with items such as rock, gravel, landscape ties, rails, asphalt, bricks, and concrete structures and figurines.

Permitted plantings in boulevards include grass, trees, shrubs and flower beds. Landscaping, excluding City owned trees, is the fronting home owner's responsibility to maintain.

The residents that have requested permission to install artificial turf in City boulevards cite perceived benefits including lower maintenance, eliminating mowing, watering, or fertilizing, year-round green appearance, resistance to pests like chafer beetles, and potential long-term cost savings compared to natural grass.

Analysis

Artificial turf varies in design, performance, and environmental impact. Key factors include:

- **Material & Installation:** Different synthetic materials and installation methods affect permeability and recyclability.
- **Durability & Aesthetics:** Lifespan, maintenance needs, and visual quality differ; some products fade, flatten, or degrade over time.
- **Maintenance Requirements:** Artificial turf does not require mowing or irrigation. However, regular cleaning is needed to remove debris and prevent odours from animal waste.

Staff have conducted a preliminary review, including a review of neighbouring municipalities, to determine potential impacts to the City arising from allowing artificial turf in City boulevards.

Municipal Infrastructure

The presence of artificial turf in City boulevards can impact the day-to-day operations of various municipal infrastructure.

- **Access to Infrastructure:** Artificial turf can impede access to City infrastructure and private utilities (TELUS, FortisBC, etc.), complicating new installations, operations, repairs and inspections, and may obscure critical access points such as manholes, valves, and junction boxes.
- **Drainage Impacts:** Artificial turf can reduce infiltration and increase stormwater runoff.
- **Boulevard Trees:** Artificial turf in City boulevards can negatively affect the health and longevity of adjacent trees.

Environmental Impacts

Allowing artificial turf on City boulevards raises environmental concerns, including:

- **Heat Island Effect:** Artificial turf retains more heat than grass, harming tree roots and organisms.
- **Loss of Biodiversity:** Replaces natural habitat for beneficial insects, pollinators, birds and other wildlife, conflicting with the City's ecological connectivity goals.
- **Material Degradation and Recyclability:** Breakdown of fibres and infill can pollute waterways and harm aquatic life. Synthetic turf currently has limited or no ability for recycling, increasing landfill waste.

Alignment with Existing City Strategies

The preliminary review identified that artificial turf has minimal alignment and significant contradictions with City strategies.

- Ecological Network Management Strategy: Artificial turf disrupts habitat and ecological corridors, reducing biodiversity and stormwater infiltration.
- Circular City Strategy: Artificial turf is typically made from synthetic materials with limited or no ability for recycling, which contradicts circular economy principles and increases landfill waste at end-of-life.
- Integrated Rainwater Resource Management Strategy: Artificial turf does not support water detention, water quality treatment and green infrastructure objectives.

Review of Artificial Turf Regulations in Other Local Cities

A preliminary scan of neighbouring municipalities' bylaws is summarized below.

- Conditional Acceptance (Burnaby, Coquitlam and Surrey): Installation of artificial turf is allowed under a specific set of conditions, include providing maintenance and replacement at the owner's expense, ensuring the turf is permeable, and obtaining approval from a City engineer on a case-by-case basis.
- Not Permitted (Maple Ridge, Nanaimo, New Westminister, Port Moody, Vancouver and White Rock): The installation of artificial turf in City boulevards is not permitted and natural landscaping is encouraged.

Financial Impact

None.

Conclusion

Maintaining the prohibition on artificial turf in City boulevards best protects the City's interests by supporting operational, environmental, and sustainability objectives; and aligns with City strategies for environmental management, rainwater management, and the circular economy. Artificial turf in City boulevards introduces potential infrastructure access issues, as well as raises environmental and sustainability concerns. Natural planting provides key benefits such as biodiversity and mitigating heat island effects.

As staff are made aware of unauthorized installation of artificial turf in City boulevards, they will continue with the progressive bylaw enforcement approach involving education, request for voluntary compliance, and, if necessary, formal enforcement actions.



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