



INFORMATION ONLY COUNCIL REPORT
Engineering & Public Works Division
For the June 25, 2019 Council Meeting

DATE: June 18, 2019

TO: Jim Zaffino, Chief Administrative Officer

FROM: Kyle Reese, Roads and Drainage Supervisor

RE: Draft Road Maintenance Policies and Project Status Update

STRATEGIC PRIORITY OBJECTIVE:

As per the City of West Kelowna's 2019 Priorities – Operational Plan Departmental Projects, "Road Maintenance Contract Review". This report provides Council an update to the project schedule and presents draft road and drainage maintenance policies for Council feedback.

BACKGROUND:

On April 30, 2020 the current road maintenance contract is set to expire. The City has engaged the services of Associated Engineering to assist with preparing a new road maintenance contract. The scope of this project involves reviewing the current contract, conducting a best practices review, developing policies/procedures/performance measures, developing RFP specifications and assisting with negotiation and award of a new contract. The consultant has prepared a set of draft policies attached to this report and staff are seeking Council feedback on these documents. These policies will return to Council later in 2019 for adoption.

Project Update

The overall project is progressing on schedule with the target to award a new contract in December of 2019. Table 1 below summarizes the project progress to date. Currently the project focus is on the development of draft road and drainage maintenance policies as well as guidelines and performance measures that will ultimately feed into the specifications for the new road maintenance contract.

Table 1: Project Schedule and Update

Task	Status
Initial Council presentation – Project kick off	Complete
Stakeholder consultation and staff workshop	Complete
Best Practices review	Complete
Policy Development	In progress
Draft Policy Statements	In progress
Draft operational guidelines and procedures	In progress
Draft performance measures	In progress
Develop RFP document	In progress
Call for Proposals	September/October 2019
Recommendation of Contract Award	December 2019

Draft Policies

Part of this process involves reviewing and developing a comprehensive set of road maintenance policies and operational guidelines for all services delivered by the Roads and Drainage Department. This includes activities delivered through the road maintenance contract, through other maintenance contracts and by in house staff. The goal of this activity is to have a series of documents that provide Council direction for the consistent delivery of road maintenance services regardless of the method of service delivery (i.e. in-house vs contract).

The City of West Kelowna currently has three policy documents relating to road maintenance activities as follows:

- Winter Roadway Maintenance Policy (September 2013)
- Snow Clearing Policy for Sidewalks, Walkways and Stairways (October 2014)
- Pedestrian Infrastructure Inspection and Maintenance Policy DRAFT (2015)

Upon completion of this process the existing 3 policies will be replaced with six policies incorporating all of the core services delivered by the department. These policies have grouped like activities together and are summarized below in Table 2.

Table 2: Policy Categories

Policy	Activities
Winter Road maintenance	<ul style="list-style-type: none">• Roadway snow removal• Snow and ice bonding prevention• Other snow removal (sidewalks, transit, removals etc)
Drainage maintenance	<ul style="list-style-type: none">• Ditch Maintenance• Drainage appliance maintenance (ie.catch basins etc)• Ditch maintenance• Roadside catchment appurtenance• Drainage structures• Storm retention ponds
Road surface maintenance	<ul style="list-style-type: none">• Pot hole patching• Road shoulder grading/shaping• Gravel road dust control• Road and shoulder gravelling• Road surface cleaning (sweeping)• Debris removal• Bridge deck maintenance• Structures cleaning maintenance• Cracksealing• Pedestrian sidewalks and walkways
Roadside maintenance	<ul style="list-style-type: none">• Litter collection and Graffiti removal• Vegetation control• Brush, tree and danger tree removal
Traffic maintenance	<ul style="list-style-type: none">• Sign maintenance• Traffic Management• Pavement markings and eradication• Roadside barriers• Streetlights and traffic signals
Network Management	<ul style="list-style-type: none">• Roadway Inspection and safety patrol• Communications

Draft copies of these new policies are attached to this report and staff are seeking Council feedback on them. As required, these policies will be revised based on this feedback and returned to Council for final support and adoption later in 2019. Furthermore, each of the guidelines listed within the six policies will have its own performance measures that will be compiled into a Maintenance Guidelines and Procedures manual. This operational manual will cover the tasks undertaken by the department whether that be by in-house staff or a contractor.

FINANCIAL IMPLICATIONS:

This 2019 Priorities Operational Plan Departmental Project has been supported with Council's approval of Capital Request No. C2019-02 in the amount of \$75,000.

At this point in time there is no additional financial implication for 2019. Pending Council feedback and eventual procurement results, it should be noted that there may be a possibility of additional funding required for the main road maintenance contract, services delivered by separate contracts, or to support increased services done in-house for 2020 and beyond.


Respectfully submitted,



Kyle Reese
Roads and Drainage Supervisor



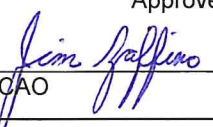
Chris Anderson
Public Works Manager



Allen Fillion
General Manager of Engineering & Public Works

Powerpoint: Yes

Attachments:
New Draft Roads and Drainage Maintenance Policies
Existing Winter Roadway Maintenance Policy
Existing Snow Clearing Policy for Sidewalks, Walkways and Stairways
Existing Pedestrian Infrastructure Inspection and Maintenance Policy DRAFT

Approved for Agenda	
 _____ CAO	<u>June 20, 2019</u> _____ Date



CITY OF WEST KELOWNA

COUNCIL POLICY MANUAL

Pages: 1 of 1
Date: 21 June 2019
Adoption Date:

SUBJECT: Winter Road Maintenance

Purpose:

To guide the winter road maintenance level of service during the winter months on the City of West Kelowna's road network.

Policy:

The City of West Kelowna shall ensure the provision of snow removal, snow and ice bonding prevention, and traction control on our roads and sidewalks. The outcome of our service will optimize road user safety, provide reliable mobility, and will strive to deliver excellent customer/citizen service. This Winter Road Maintenance Policy shall deliver this service in accordance with the classification of roadway and shall comply with the performance measures contained in the City of West Kelowna Road Maintenance Guideline and Procedures Manual.

1.1. Guidelines

This policy applies to the entire City of West Kelowna road and pedestrian network. All work will be completed as resources permit.

a. Roadway Snow Removal

To proactively monitor, anticipate, manage and respond to winter precipitation accumulations including the initial weather event, and developing compact snow and ice conditions to facilitate the safe and orderly flow of traffic.

b. Snow and Ice Bonding Prevention and Control

To proactively monitor, anticipate, manage and minimize the development of slippery conditions and restore traction.

c. Other Snow Removal and Ice Control

To remove winter accumulations from roadside, overhead, and pedestrian accessed infrastructure and restore traction.



CITY OF WEST KELOWNA

COUNCIL POLICY MANUAL

Pages: 1 of 1
Date: 21 June 2019
Adoption Date:

SUBJECT: Drainage Maintenance

Purpose:

To ensure all surface drainage is conveyed away from the travelled surface of the City of West Kelowna's road network.

Policy:

The City of West Kelowna shall ensure the provision of drainage maintenance services on all roadways, roadsides, bridges, and other municipal infrastructure under our control and management. These services shall result in unobstructed, channeled or contained drainage such that risk of damage to roads, bridges, critical infrastructure and adjacent property is minimized. This Drainage Maintenance Policy shall comply with the performance measures contained in the City of West Kelowna Road Maintenance Guideline and Procedures Manual.

1.1. Guidelines

This policy applies to the entire City of West Kelowna road and pedestrian network. All work will be completed as resources permit.

- a. Ditch Maintenance
To provide unobstructed drainage for all roadways.
- b. Drainage Appliance Maintenance
To maintain roadways that are efficiently drained, and water is channeled or contained to prevent erosion. This includes for example, culverts and trash racks.
- c. Roadside Catchment Appurtenances Maintenance
To protect roadway users and roadway infrastructure. This includes, for example catch basins.
- d. Structures Drainage Maintenance
To provide effective drainage for structures.
- e. Storm Retention Ponds
To proactively monitor the functionality of the existing storm retention ponds and anticipate seasonal changes.



CITY OF WEST KELOWNA

COUNCIL POLICY MANUAL

Pages: 1 of 1
Date: 21 June 2019
Adoption Date:

SUBJECT: Surface Maintenance

Purpose:

To provide oversight and guidance on the level of service for the surface maintenance of the City of West Kelowna's entire road and pedestrian network.

Policy:

The City of West Kelowna shall ensure the provision of surface maintenance services on all roadways, bridges, and other municipal infrastructure under its control and management. These services shall result in smooth, even, and stable hard surface, dirt, and gravel roadways along with all bridge decks to ensure consistency with the proper alignment and cross-section for the given classification of roadway. The additional result of surface maintenance services is an impermeable surface that resists water penetration and structural damage and promotes the efficient movement of goods and services on the transportation network contributing to a healthy, expanding economy.

The City of West Kelowna shall ensure that the roadway and bridge surfaces are kept in a clean and unobstructed condition resulting in safe travel surfaces where loose material and debris are removed from the travel surface within the appropriate response times for the given classification of roadway. The frequency of these services shall take into consideration the multi-purpose of our municipal infrastructure to accommodate varied events throughout the year. This Surface Maintenance Policy shall comply with the performance measures contained in the City of West Kelowna Road Maintenance Guideline and Procedures Manual.

1.1. Guidelines

This policy applies to the entire City of West Kelowna road and pedestrian network. All work will be completed as resources permit.

- a. Pot Hole Patching
To provide a smooth, stable, sealed surface on roadways and bicycle / pedestrian paths.
- b. Roadway and Shoulder Grading and Reshaping
To provide safe, smooth, stable, compacted and free draining dirt and gravel roadways and shoulders.

- c. Dust Control
To minimize the impact of dust for roadway users, adjacent properties, and watercourses on dirt and gravel roadways
- d. Roadway and Shoulder Graveling
To provide strengthened, uniform, smooth, compacted and free draining dirt and gravel roadways and shoulders.
- e. Roadway Surface Cleaning
To provide safe, clean surface conditions, and facilitate free drainage. This includes sweeping as an example.
- f. Debris Removal
To provide roadways free of debris.
- g. Bridge Deck Maintenance
To provide safe, uniform, smooth, stable, free draining and durable surfaces on bridge decks.
- h. Structures cleaning maintenance
To provide safe and clean structures.
- i. Cracksealing or crack filling maintenance
To provide for a stable and sealed asphalt surface.
- j. Pedestrian Sidewalks and Walkways
To provide and maintain accessibility for the pedestrian and roadway users.



CITY OF WEST KELOWNA

COUNCIL POLICY MANUAL

Pages: 1 of 1
Date: 21 June 2019
Adoption Date:

SUBJECT: Roadside Maintenance

Purpose:

To provide oversight and guidance on the level of service for the surface maintenance of the City of West Kelowna's roadway boulevards.

Policy:

The City of West Kelowna shall ensure the provision of roadside maintenance services for all roadways and bridges under its control and management. These services shall result in roadways and bridges that are clean and tidy and free of unsightliness and vandalism. These services shall also result in roadways and bridges that are free of vegetation that has the potential to impede visibility of the roadway user and restrict drainage.

The outcome of this service reflects our pride in the function, condition, and appearance of our transportation infrastructure. This Roadside Maintenance Policy shall comply with the performance measures contained in the City of West Kelowna Road Maintenance Guideline and Procedures Manual.

1.1 Guidelines

This policy applies to road dedications, from the back of curb or edge of pavement to property line inclusive of raised medians. All work will be completed as resources permit.

- a. Litter collection and graffiti removal
To keep roadways clean and tidy.
- b. Vegetation control
To improve visibility and facilitate drainage.
- c. Brush, tree, and danger tree removal.
To improve visibility, safety, facilitate drainage, and provide access to structures.



CITY OF WEST KELOWNA

COUNCIL POLICY MANUAL

Pages: 1 of 1
Date: 21 June 2019
Adoption Date:

SUBJECT: Traffic Maintenance

Purpose:

To provide oversight and guidance on the level of service required to maintain safety and traffic control on the City of West Kelowna's roadway network.

Policy:

The City of West Kelowna shall ensure the provision of traffic maintenance services resulting in the safe operation of the roadway network while maintaining the orderly flow of traffic. These traffic maintenance services shall also result in the protection of workers and road users during maintenance and repair activities and will protect road users from roadside hazards. This Traffic Maintenance Policy shall comply with the performance measures contained in the City of West Kelowna Road Maintenance Guideline and Procedures Manual.

1.1 Guidelines

This policy applies to the entire City of West Kelowna road and pedestrian network. All work will be completed as resources permit.

- a. Sign Maintenance
To regulate and facilitate the safe and orderly flow of traffic.
- b. Traffic Management
To keep roadway users safe, protect roadway workers and minimize traffic delays.
- c. Pavement Markings and Eradication
To facilitate the continuous, safe and orderly flow of traffic.
- d. Roadside Barriers
To protect roadway users from roadside hazards.
- e. Street Light Illumination Maintenance
To provide safety for pedestrian and vehicle movement on roadways and maintain the existing inventory of City of West Kelowna owned street lights in a functioning manner of operation.



CITY OF WEST KELOWNA

COUNCIL POLICY MANUAL

Pages: 1 of 1
Date: 21 June 2019
Adoption Date:

SUBJECT: Network Management Maintenance

Purpose:

To guide the management of the road maintenance and communication of achievements, safety concerns, conditions and ongoing routine maintenance activities within the City of West Kelowna's road network system. Provide fiscal assurance that the road network budgets are achieving optimal performance and service levels.

Policy:

The City of West Kelowna shall ensure the provision of network management services resulting in the protection of the public from traffic incidents and other severe events. The City of West Kelowna shall ensure that roadways are inspected on a regular basis and any potential unsafe conditions are identified and corrective action is taken in a timely manner.

The City of West Kelowna shall ensure that procedures are established to ensure efficient and effective communication among the public, identified stakeholders, and the City of West Kelowna. All communication with the public and the stakeholders will enforce our commitment to a high quality of service to our customers/citizens thereby demonstrating our community dedication. This Network Management Policy shall comply with the performance measures contained in the City of West Kelowna Road Maintenance Guideline and Procedures Manual.

1.1. Guidelines

This policy applies to the entire City of West Kelowna road and pedestrian network. All work will be completed as resources permit.

- a. Roadway Inspection and Safety Patrol
To monitor conditions and develop a comprehensive knowledge of roadway conditions to support a work identification and planning program.
- b. Communications
To communicate effectively and in a timely manner with the public, stakeholders, and the City of West Kelowna.



DISTRICT OF WEST KELOWNA COUNCIL POLICY MANUAL

Approval Date: October 14, 2014

SUBJECT: Winter Roadway Maintenance Policy

Policy Statement:

To ensure that the District of West Kelowna's roadway system is maintained in an effective manner during winter conditions to optimize road user safety and mobility.

The District of West Kelowna currently delivers its winter roadway maintenance through a 5 year contract with an external service provider. As such this policy should be reviewed and amended as required concurrently with any new contract.

Purpose:

To set reasonable and affordable winter maintenance service levels to support a safe, economical, and reliable roadway system for all road users.

Definitions:

- Accumulation* means the vertical amount of snow that builds up during a snow event;
- Arterial Road* means a high mobility road that moves traffic around the District at higher speeds;
- Collector Road* means a medium mobility road that connects local roads to arterial roads;
- Cycling Time* means the time it takes plows to complete a complete circuit of the District's roadway network;
- Freezing Event* means freezing rain or sleet;
- Local Road* means a low speed road that provides access to the land;
- Roadside* means the shoulder and ditch portions of the roadway; and
- Snow Event* means a snowfall.

Policy:

The District of West Kelowna will remove loose snow, slush, compact snow and ice from roadways and sidewalks to protect roadway users from situations that are unsafe, and to ensure that the resources required to perform the maintenance services are available and deployed in a manner which anticipates and responds in advance of adverse winter driving conditions.

Loose snow, slush, and ice will be removed on the full width of the travelled lanes, ensuring that accumulations remain below the Maximum Allowable Accumulations shown in the table below:

Plowing Requirement	Maximum Allowable Accumulations (cm)			
	Arterial Roads	Collector Roads	Local Roads	Rural Roads (Gravel)
One lane in each direction	6	10	15	25
All other lanes	16	20	n/a	n/a

Regardless of the Maximum Allowable Accumulation, plow cycle times will continue to meet the following timeframes during a snow event:

Plowing Requirement	Maximum Allowable Cycle Times (Hours)			
	Arterial Roads	Collector Roads	Local Roads	Rural Roads (Gravel)
Snow and broken compact snow	2	6	8	n/a

Complete removal of slush from roadway surfaces on all travelled lanes within 2 days of the end of the last measurable snowfall.

Should extended periods of extreme cold make it impossible to comply with the Maximum Allowable Cycle Times for compact snow and ice, the District will ensure that unsafe conditions are remedied, including but not limited to, alleviating roughness and slippery surfaces using abrasives and de-icing materials. Snow and ice will be pushed beyond the shoulder edge according to the times in the following table, which establishes the allowable time from the end of the last snow or freezing event:

Plowing Requirement	Maximum Allowable Cycle Times (Days)		
	Arterial Roads	Collector Roads	Local Roads
Extreme cold conditions	6	10	24

The District will apply winter abrasives and/or chemicals to minimize the development of slippery surface conditions on roadways and to facilitate the removal of snow, compact snow and ice, as appropriate for the location. The time to restore traction, from the time the deficiency is detected by or reported to the District, will be per the following table:

Condition	By Roadway Classification in Hours			
	Arterial Roads	Collector Roads	Local Roads	Rural Roads (Gravel)
From beginning and or during snowfall event on hills over 5% gradient (one lane each direction)	1.5	2	4	n/a
From beginning and or during snowfall event on curves under 60 kilometres per hour	1.5	2	4	n/a
From beginning and or during snowfall event in school zones & intersections	2	3	6	n/a
From beginning and or during snowfall event in all other locations	3	4	8	n/a
Freezing rain at all locations	3	5	6	n/a
Black ice at all locations	3	5	6	n/a
After snowfall on all hills	8	24	48	n/a
After snowfall on all curves	8	24	48	n/a
After snowfall on all other locations	36	72	As required	n/a
When slippery surfaces are encountered during patrol at all locations	Immediate	Immediate	Immediate	n/a

Previous Revision/s: N/A



DISTRICT OF WEST KELOWNA

COUNCIL POLICY MANUAL

Pages: 1 of 2

Approval Date: October 14, 2014

SUBJECT: SNOW CLEARING POLICY FOR SIDEWALKS, WALKWAYS, AND STAIRWAYS

Policy Statement:

This Policy addresses snow clearing for sidewalks, walkways, and stairways. In accordance with the Good Neighbour Bylaw, residences and businesses shall be responsible for clearing snow from sidewalks and walkways bordering their property within 24 hours of any accumulation of snow and/or ice. The District will be responsible for maintaining the exempted sidewalks listed in the Good Neighbour Bylaw.

On an annual basis, the sidewalk, walkway, and stairway priority classification shall be reassessed by staff, and revisions made where warranted. Following the street priority classification review, a map will be prepared reflecting the revised priorities.

Purpose:

To address the snow accumulation hazard for pedestrian traffic on sidewalks, walkways and stairways.

Procedure:

Emphasis on snow clearing operations shall generally be in order of the assigned classifications priority as noted below. When necessary, the order of priority for the service may be altered.

- Priority 1:** Sidewalks/Walkways/Stairways surrounding District owned property, Good Neighbour Bylaw exempt sidewalks on arterial and collector roads, Rapidbus transit exchanges.
- Priority 2:** Selected District Sidewalks/Walkways/Stairways, Good Neighbour Bylaw exempt sidewalks on local roads, transit shelters.
- Priority 3:** Other District Sidewalks/Walkways/Stairways and transit bus stops.

Should any walkways or staircases be deemed hazardous to pedestrian use, staff reserves the right to close them for the season or as needed until such a time that the hazard has passed.

Notwithstanding the snow removal requirements of the Good Neighbour Bylaw for residences and businesses, staff may provide an in-kind service to clean sidewalks fronting residences or businesses after a snowfall event. Such in-kind service will only be provided if the District has the resources available to do the work, and under the condition that there is no expectation created that the District is obligated to provide the service during future snowfall events. Sidewalks may not necessarily be plowed to bare concrete.

All inquiries will be will be handled by staff during normal working hours and a call-in number will be provided for after hours, weekends, and holidays.

Complaints of an emergent nature are to be transmitted to appropriate field personnel for action.



CITY OF WEST KELOWNA

COUNCIL POLICY MANUAL

Pages: 1 of 1

Date:

Adoption Date:

SUBJECT: Pedestrian Infrastructure Inspection and Maintenance Policy

Purpose:

The purpose of this policy is to provide the Engineering and Public Works Department with a rating tool to assess the condition of the pedestrian infrastructure (public sidewalks, walkways, and stairways) within the municipality in order to identify, repair and/or mitigate any defects or hazards and to establish priorities for repairs according to the resources available.

Policy:

Sidewalks & Walkways

The procedure for sidewalk and walkway inspections is as follows;

1. All sidewalks and walkways (including wheel chair ramps) within the City shall be inspected on a five year cycle depending on the area of their location as per attached Schedule "A".
2. The results of the sidewalk and walkway inspections shall be recorded on the "Sidewalk and Walkway Inspection Form", attached as Schedule "B". As technology and resources allow, the inspections may also be completed with a tablet or other digital means.
3. All defects or hazards identified shall be classified on a maximum 3 point rating scale:
 1. Major Defect – requiring immediate repair/not serviceable
 2. Moderate Defect – serviceable/monitor
 3. Minor Defect – no effect on service
4. The inspection shall include checking for the specific hazards and defects as set out in Table No.1 of this policy.
5. Upon completion of the area inspections for the given year, all inspections forms are filed.

Stairways

The City is responsible for many stairways throughout the municipality. These stairways may form part of the sidewalk and walkway system, may be located at a City owned facility or may be situated in a subdivision walkway or park trail.

The type of stair construction ranges from concrete, timber and allan block, to stone and log. Each stairway will be assessed as to structural integrity, uniformity of rise/run per flight and for any trip hazards similar to the sidewalk and walkway assessment. Handrails attached to stairways should also be assessed for hazards and sturdiness.

The procedure for stairway inspections is as follows;

1. All stairways within the City shall be inspected on a five year cycle depending on the area of their location as per attached Schedule "A".
2. The results of the stairway inspections shall be recorded on the "Stairway Inspection Form", attached as Schedule "B". As technology and resources allow, the inspections may also be completed with a tablet or other digital means.
3. All defects or hazards identified shall be classified on a maximum 3 point rating scale:
 1. Major Defect – requiring immediate repair/not serviceable
 2. Moderate Defect – serviceable/monitor
 3. Minor Defect – no effect on service
4. The inspection shall include checking for the specific hazards and defects as set out in Table No.2 of this policy.
5. Upon completion of the area inspections for the given year, all inspections forms are filed.

Sidewalk/Walkway/Stairway Replacement and Repair

All defects classified as Level 1 (Major Defect) shall be scheduled for repair as quickly as possible and, if necessary, marked for public notice immediately.

All defects and hazards classified as Level 2 (Moderate Defect) shall be placed on a list for possible repair if required and also if resources allow. Level 2 defects are considered serviceable.

All defects and hazards classified as Level 3 (Minor Defect) shall be documented and reviewed on the next scheduled inspection.

As repairs are completed, the date of repair and who did the repair are to be entered on the inspection form in the appropriate field. The form is then to be turned in to the appropriate supervisor and forwarded for filing. Records will be kept in accordance with Local Government Management Association guidelines.

If any defects or hazards on sidewalks, walkways or stairways are reported outside of the regularly scheduled inspections, either by a member of the public or an employee of the City, the reported defect or hazard shall be inspected by a member of the Engineering and Public Works Department as soon as possible as per Schedule "B" or "C" and repaired in accordance with the classification as described above.

Repair of Damaged Property

In some cases, sidewalk, walkway, and stairway maintenance or repair operations may cause property damage even under the best of circumstances and care on the part of maintenance crews. The types of damage are typically found within the public right-of-way. The City shall repair/replace sod damaged by sidewalk maintenance. Other damage within the public right-of-way is the responsibility of the property owner including, but not limited to, privately owned trees, shrubs, brushes, landscaping materials, decorative rock, and lawn/landscaping irrigation systems.

Table No.1: For Sidewalks, Walkways and Wheelchair Ramps

Hazard Type	Definition	Hazard Rating	Repair Method
Cracks Seperations Holes	Crack in sidewalk panel, no deflection	1. More than 2.5 cm 2. 1.25 – 2.5 cm 3. Less than 1.25 cm	Remove and Replace Fill Nothing
Heaves and Settlements	Any change in elevation wether it's a crack or joint	1. More than 2.5 cm 2. 1.25 – 2.5 cm 3. Less than 1.25 cm	Remove and Replace Grind Nothing
Deflections	Where one or two panels have either heaved or settled and no change in elevation at the joint or crack	1. More than 2.5 cm over 1.5 meters 3. Less than 2.5 cm over 1.5 meters	Remove and Replace Nothing
Filets	Any section within the sidewalk that is smaller than the neighboring panels	1. More than 2.5 cm 3. Less than 2.5 cm	Remove and Replace Nothing
Scaling	Top layer of concrete is failing leaving the appearance of exposed aggregate.	1. More than 2.5 cm 2. 1.25 – 2.5 cm 3. Less than 1.25	Remove and Replace Prep and Fill Nothing
Obstacles	Items such as: - Rebar sticking out - Intruding vegetation - Utility boxes	1. More than 2.5 cm projecting or depressed 2. 1.25 – 2.5 cm projecting or depressed 3. Less than 1.25 cm	Repair to Eliminate Hazard Repair to blend hazard to grade Grind or Fill

Table No.2: For Public Staircases

Hazard Type	Definition	Hazard Rating	Repair Method
Obstacles	Damaged, missing or rotten risers or treads	1.in all cases	Replace riser or tread
Heaves and Settlements	Any change in elevation or subsidence	1.more than 2.5 cm 2.1.25 – 2.5 cm 3.less than 1.25 cm	Replace tread Repair affected feature Nothing
Uniformity	Varying rise/run between landings	1.Each tread and riser is of diferent dimension 2.One stair is different	Repalce as budget permits Mark/paint or otherwise highlite the feature



City of West Kelowna

Road Maintenance Policy Development – Draft Policies

Heather Robertson, ASCT

Senior Project Manager

June 25, 2019

Strategic Priority Review

-
- **Vision:** ...works in partnership with the community and others...
 - **Mission:** plan for the future while taking care of (infrastructure) today...
 - **2019 Priorities:** focus on community safety, focus on relationships.
 - **2020-2022 Priorities:** focus on community safety, focus on economic growth.



Maintaining the City of West Kelowna's Road Network assists in meeting Council's Strategic Goals:

Community Safety:

- Transportation Safety
- Accessibility
- Reduces MVI's



Community Visioning and Involvement:

- Regular and Current Information on Road Conditions is reported
- Residents have the ability to report issues and concerns

Economic Growth:

- Business and industry transport goods freely and efficiently.
- Inherently, pride of doing business in the City.



Relationships:

- | | |
|---------------------------|-----------------------|
| • Public | • Emergency Services |
| • Council and City Dep'ts | • Bus Transport |
| • Regional District | • BC Transit |
| • BC MoTI Contractor | • School District #23 |
| • West Bank First Nation | • Tour Providers |
| • Local Business | • Government Agencies |



Health, Homelessness and Housing:

- Promotes active transportation
- Provides cost effective opportunity for recreation
- Support Emergency response times
- Connects neighborhood's



Maintenance System Outcomes:

- Safety
- Asset Preservation
- User Comfort
- Aesthetics



Identify Business Units and Policy Statements

Draft - Road Maintenance Policies

- | | |
|----------------------------|-------------------------|
| 1. Winter Road Maintenance | 4. Roadside Maintenance |
| 2. Drainage Maintenance | 5. Traffic Maintenance |
| 3. Surface Maintenance | 6. Network Management |

Purpose:

- Specific reason (or action) for the policy.

Policy:

- Council policy statement that describes in a broad way the reason for the maintenance policy and how the City will meet the “purpose”, aligning with the Strategic Priorities.



Guidelines

Guidelines:

- Pulling in the specific road maintenance activity category the initial guideline is developed.
- For each guideline the purpose for it is described.



Winter Road Maintenance Policy

Roadway Snow Removal

Snow and Ice Bonding Prevention and Control

Other Snow Removal and Ice Control



Drainage Maintenance Policy

Ditches

Drainage Appliances

Roadside Catchment Appurtenances

Structures Drainage

Storm Retention Ponds



Surface Maintenance Policy

Pot Hole Patching

Debris Removal

Roadway and Shoulder Grading and

Bridge Decks

Reshaping

Structures Cleaning

Dust Control

Crack Sealing or Crack Filling

Roadway and Shoulder Graveling

Pedestrian Sidewalks and Walkways

Roadway Surface Cleaning



Roadside Maintenance Policy

Litter Collection and Graffiti Removal

Vegetation Control

Brush, Tree, and Danger Tree Removal



Traffic Maintenance Policy

Signage

Traffic Management

Pavement Markings and Eradication

Roadside Barriers

Street Light Illumination



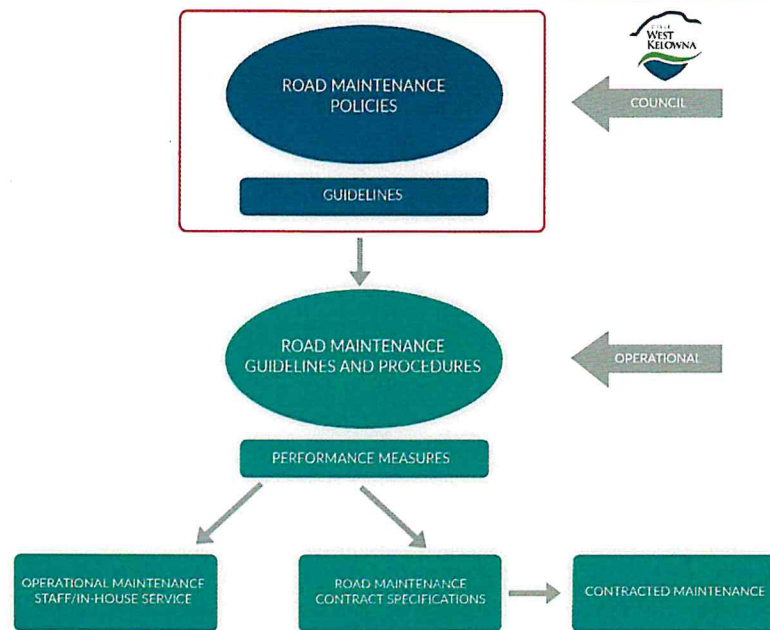
Network Management Maintenance Policy

Roadway Inspection and Safety Patrol

Communications

A large rectangular area with a light gray background and a green horizontal band across the middle. The word 'Summary' is written in white on the green band.

Summary



Next Steps:

- *Receive Council input*
- *Policy review and comments*
- *Finalize Policies*
- *Present for Council Adoption*



Thank you

