

Engineering, Parks & Environment

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Department Overview

Mission Statement

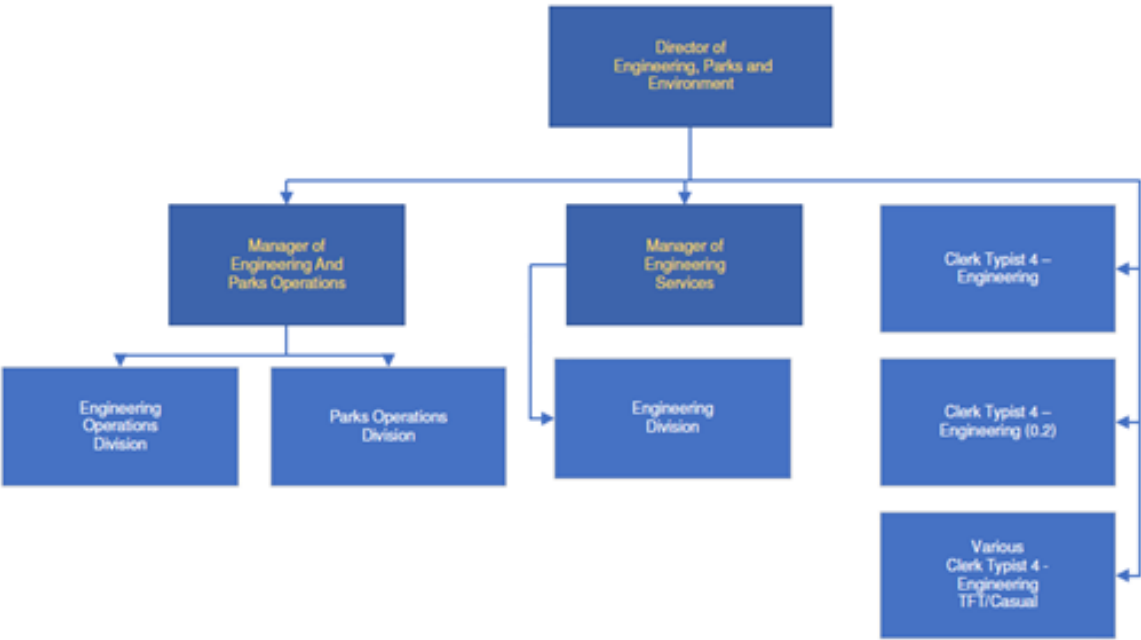
The Engineering, Parks and Environment Department is dedicated to providing high quality service to existing and future ratepayers in a timely, responsible and effective manner in the areas of:

- ✓ Parks
- ✓ Transportation
- ✓ Sanitary
- ✓ Rainwater Management
- ✓ Water
- ✓ Solid Waste
- ✓ Environment

Organizational Chart

The Engineering, Parks & Environment Department includes 8 exempt staff and 30 full time unionized staff. Including the Temporary Full-Time employees (TFT's), the department employs 38 full-time equivalent (FTE) unionized employees. The Department is separated into two Divisions – Engineering Services and Engineering & Parks Operations as outlined in the following organizational charts.

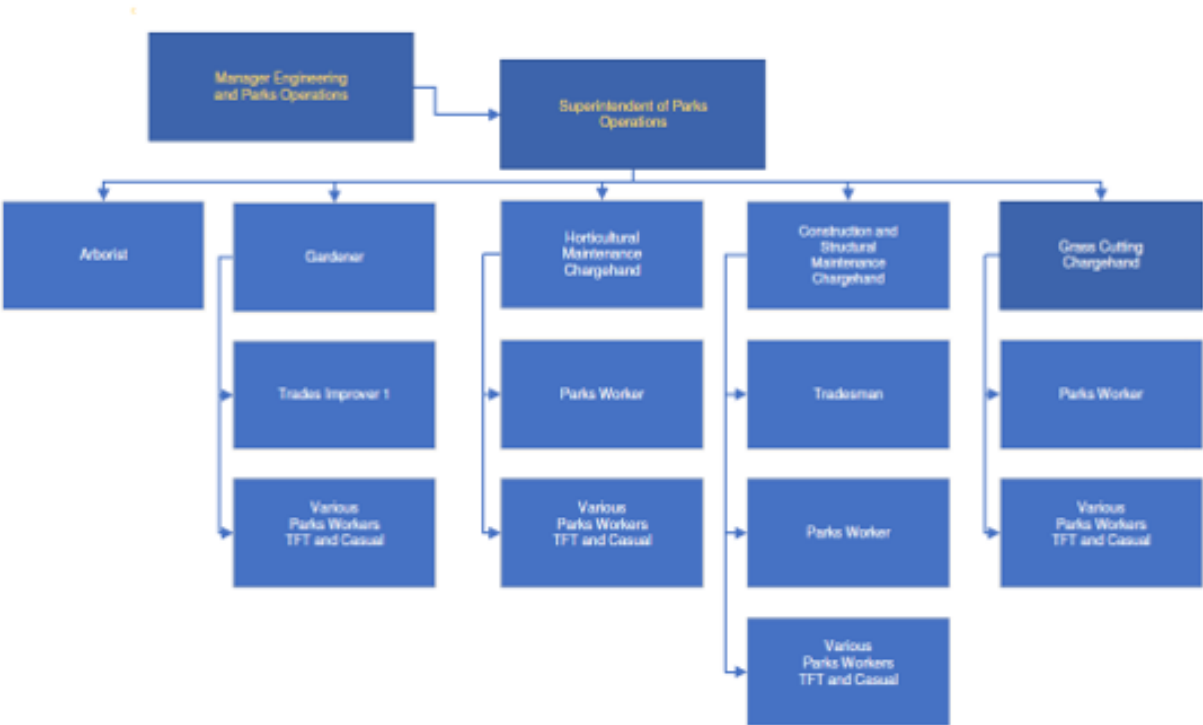
Engineering, Parks and Environment Department



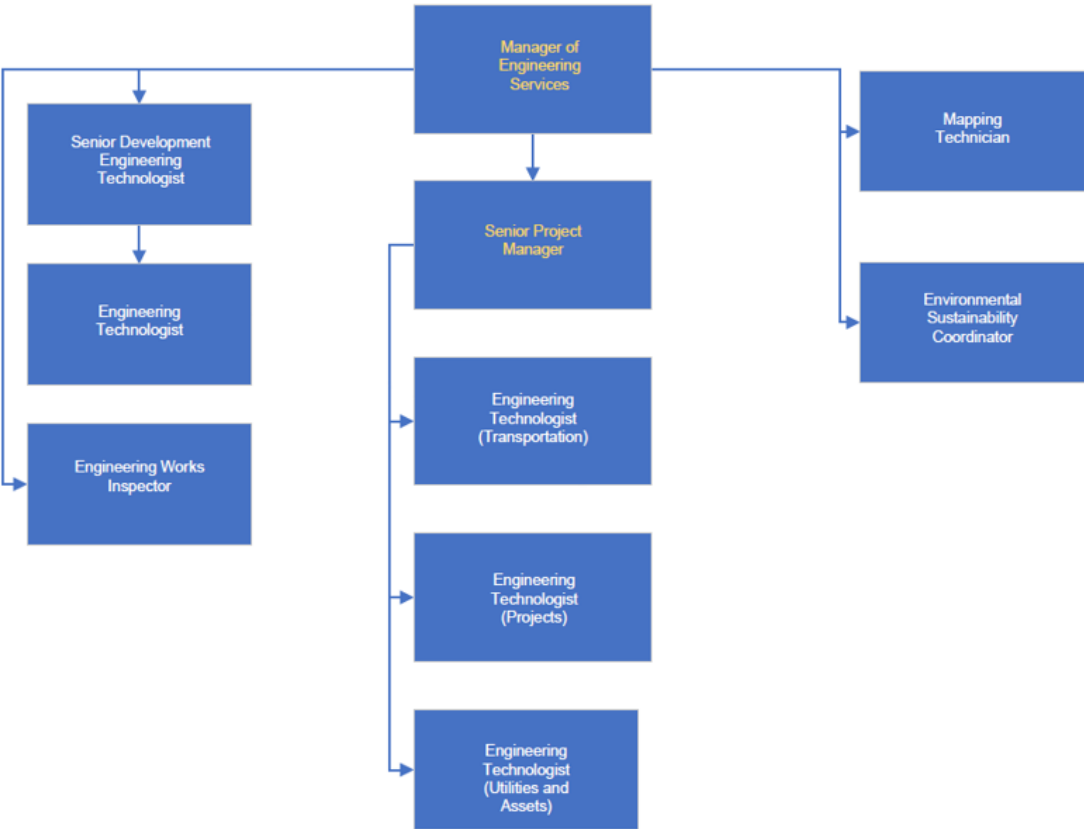
Parks Operation Division



Engineering Operations Division



Engineering Services Division



Services

The Engineering, Parks and Environment Department (Department) is committed to ensuring that the residents of the City of Langley can rely upon high quality infrastructure services including drinking water, sanitary sewer collection, rainwater collection and discharge, curbside solid waste collection as well as an efficient multi-modal transportation network. The City's parks and green spaces as well as the network of trails are important components in making the City a desirable place to live.

Comprised of two divisions, namely Engineering Services and Engineering & Parks Operations the Department is responsible for the planning, delivery and maintenance of municipal infrastructure as well as corporate initiatives as directed by Council.

Due to the nature of the works, the Department have significant interactions with residents and businesses and strive to provide excellent customer service and present a business-friendly approach.

Engineering Services Division

- Oversee the development of multiple master planning initiatives for all service areas. Anticipate future needs and develop long-range objectives, plans and programs for all classes of municipal infrastructure.
- Utilizing the various master plans, develop and prioritize capital projects for consideration in the City's long range Capital Program. Develop project justifications including a concise scope of work and budget estimates.
- Ensure the annual capital plan is executed on schedule and within approved budgets.
- Process subdivision & development applications, encroachment agreements, rights-of-way agreements, Highway Use Permits, Hydrant Use Permits, and Film Permits.
- Provide environmental protection through education and public programs.
- Process public complaints and requests for service.
- Manage the City's Asset Management Program in a cost-effective manner over the asset's lifecycle and plan for their replacement. Perform GIS mapping, record keeping, construction inspections.
- Provide technical support and information to other departments.
- Responsible for policy and planning for the department.
- Liaison with various other governments and prepare grant funding applications:
 - TransLink (public transit, trucks, cycling, infrastructure grants, roads)
 - Metro Vancouver (liquid waste, water, solid waste, land use)
 - Province (transportation, environment, health)
 - Canada (transportation, environment, fisheries)
 - Fraser Health Authority
- Manage curbside solid waste contract.
- Manage the contracts for transit shelters as well as benches.

Engineering and Parks Operations Division

The Engineering and Parks Division is comprised of two sections; Engineering Operations, and Parks Operations.

Engineering Operations

- Administer and supervise the functions and activities of Engineering Operations.
- Respond promptly and courteously to public complaints and requests for service.
- Manage capital projects.
- Perform maintenance and repair services for the road network including:
 - Street sweeping; sidewalks; snow clearing; signs; asphalt maintenance; streetlights; traffic signals; pavement marking; boulevard maintenance
- Construct, maintain, operate and repair water, sanitary sewer and drainage infrastructure including:
 - Mains; service connections; fire hydrants; sample stations; water reservoir; pump stations; catch basins; culverts; ditches; valves; pressure control valves
- Respond to spills and contamination of watercourses.
- Maintain, repair and replace City fleet vehicles and equipment except for Fire vehicles.
- Supports community events.

Parks Operations

- Administer and supervise the functions and activities of Parks Operations.
- Respond promptly and courteously to public complaints and requests for service.
- Manage capital projects.
- Construct and maintain parks, nature trails lagoons, various athletic courts, sports fields, bike parks, water parks and playground equipment.
- Grass cutting; tree plantings; flower plantings; boulevard maintenance; hanging baskets; Christmas lights; garbage (boulevard & park); watering; sports field maintenance; trails maintenance, snow removal.
- Maintain parks washrooms, playground equipment, picnic facilities, Sendall Greenhouse and various parks structures.
- Supports community events.

Customers

- Citizens and business owners of the City of Langley
- Mayor and Council
- City staff
- Contractors and builders
- Consultants
- Developers
- Senior Governments (Metro Vancouver, SCBCTA, Federal and Provincial Governments)
- Utility Companies (BC Hydro, TELUS, Fortis, Rogers and Shaw Cable)
- TransLink
- Other Municipalities
- Special Interest Groups
- Sports Users

2024 Highlights & Achievements:

Engineering Services Division

- Capital Projects Awarded (Construction into 2025):
 - Fraser One Way Utility and Public Realm project.
 - Douglas Park Washroom and Utilities project in conjunction with Parks Operations.
- Significant Capital Projects Completed:
 - Michaud Crescent Bicycle Facility, Road Improvement and Watermain Replacement project
 - 56 Avenue Utility and Paving project
 - 202 Street/46 Avenue Area Watermain, Pavement and Traffic Calming project
 - New Signal and Sidewalk Extension project at 45A Avenue/208 Street
 - 196A Street Storm Sewer Replacement project
 - McBurney Plaza redevelopment in conjunction with Parks Operations
 - Sidewalk Improvements – 205 Street and 48 Avenue
 - Installation of Pre-emptive Signals (7 intersections)
- Advanced the update of the Strategic Transportation Plan (Transport 2050).
- Awarded Public Parking Strategy Study.
- Awarded the Solid Waste Management contract.
- Adopted the Urban Forestry Management Strategy.
- Processed subdivision & development applications in conjunction with Development Services.
- Entered into the City's first Latecomer Agreement.
- Processed 38 Film Permits (Down 5% from 2023).
- Upgraded the GIS server software to support online mapping applications.
- Negotiated project scope and technical items related to the Surrey-Langley SkyTrain project.

Engineering and Parks Operations Division

Engineering Operations

- Responded to 1282 Requests for Service.
- Capital Projects and Equipment Replacements:
 - New Regular Cab Ford 350 with salter and plow
 - Tractor and snow removal attachments
 - Tender and supervision of the demolition of four building demolitions
 - Install GPS on City Vehicles
 - Replaced 256 small and intermediate water meters and 30 large water meters.
 - Completed the annual I&I Program covering 15% of the city
 - Annual CCTV Program and completed sewer point excavation repairs
 - Nicomekl River maintenance works
- Utilities Construction:
 - Responded to and repaired 7 watermain breaks and 4 water service leaks

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- Completed 23 service renewals and disconnects
 - Completed 5 watermain tie-ins
 - Smoke tested 15% of the City's sewer utility and repaired inflow and infiltration deficiencies identified during smoke testing
 - Tested and inspected all City-owned backflow preventers
 - Completed the re-building of 260 of the City's fire hydrants and completed a pressure test & leak check on the remaining 50%.
 - Completed the annual uni-directional watermain flushing program for 50% of the City's water system and flushed all 125 dead end watermains twice
 - Completed the annual catch basin cleaning program of the catch basins
 - Completed 150 annual outfall inspections
 - Roads and Traffic:
 - Cleaned 25% of the signs in the city
 - Completed 20 new sign order requests
 - Performed traffic signal maintenance on all 48 of our signalized intersections
 - Completed annual line painting program and road marking repairs
 - Responded to 118 reports of potholes
 - Approximately 800 square meters of asphalt patching on 198 St, 208 St and 200 St

Parks Operations

- Responded to 1445 Requests for Service
 - 292 for abandoned garbage
 - 81 for tree pruning and 56 for tree removal
 - 19 vandalism related requests
- Capital works
 - City Park field upgrade and high mast poles at Barbour Daimond
 - Improvements at Douglas Park Community Garden include additional garden beds and plots, resurfaced pathways and new fencing.
 - Infield restoration at Conder Baseball.
 - Purchased and installed new Christmas decorations.
 - McBurney Plaza decking replacement and south end pedestrian conversion Trail upgrades East of 200th Street bridge re-culvert, 250 m of repaving and flood plain restoration, and headwall installation at 201A duckpond
 - 206A pedestrian bridge replacement and entrance remediation
 - Uplands Dog off Leash Park pathway additions, tree planting and west side fencing alterations
 - Portage Park southern floodplain clearing and tree isolation pruning
 - Brydon Park reforestation project with clearing and native planting
 - Duncan Way and Glover - Logan creek lot clearing and revegetation
 - Hunter Park cedar tree microbial applications for mature tree retention
 - The building demolitions and site grading of the Urban Plaza was completed along with the installation of water connections for mister and drinking fountain.
 - Twenty-three replacement trees were planted and twenty-nine trees added through development.
- Horticulture Maintenance
 - Ordered, installed, watered and maintained 158 hanging baskets

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- Annual flower bed planting and maintenance
 - Irrigation system maintenance and boulevard planting installations
 - Sendal greenhouse cleaning and planting
 - Topdressing, aerating, fertilizing and overseeding of 30.4 acres of turf
 - Weekly sports court maintenance and blowing
 - Water, weed and maintain 106 planters on Glover Road
 - Grass Cutting
 - Weekly to biweekly mowing of all playing fields
 - Parks grass cutting and line trimming
 - Blackberry and brush removal bordering parks space
 - Arboriculture Maintenance
 - Water and maintain 264 newly planted trees twice per week
 - Structural tree pruning for all downtown core and development planted trees
 - Resistagraph testing of mature trees and installation of various arboriculture bracing/bolting for retention
 - Hazardous tree removals and light exposure pruning through Sendall Gardens
 - 68 tree risk assessments
 - Development application and project review concerning arboriculture
 - Construction and Structural Maintenance
 - Completed monthly playground inspections
 - Annual trail maintenance
 - Small foot bridge and arbor board replacements
 - Facility and washroom repairs
 - Painting of washrooms and hard surface pressure washing
 - Water park maintenance and startup

Significant Issues and Trends

- Skytrain design review and coordination of construction activities continue to ramp up. Significant staff time has already been and will continue to be allocated in support of this initiative.
- The demand for housing is still on the rise as is costs associated with providing that housing. Reducing process times for development applications will continue to be a priority.
- Increased density within the City have resulted in traffic related pressures.
- A significant portion of City's infrastructure is reaching the end of its useful life, creating increased need for resources dedicated to capital asset renewal.
- The increase in the amount of garbage related to homelessness and illegal dumping puts a strain on departmental resources.
- Planning for the Operations Centre building replacement
- Responding to climate change and providing resiliency in all aspects of engineering, from design to construction and maintenance.

2025 Strategies & Action Plans

Engineering Services

#	PRIORITY ITEM	WHO	WHEN
	Build Climate Resiliency		
1	Preparation of a Tree Protection Bylaw	RO	Q4
2	Develop tree inventory for all City streets, parks and environmental areas – in conjunction with Parks Operations	DP/RO/ TM	Q4
	Provide Reliable Municipal Infrastructure		
3	Implement the 2025 Capital Program	DP/RO/ TM	Q4
4	Collect and Review Asset Management Data to Refine and Develop the 10 Year Capital Program	DP/RO/ TM	Q3
5	Update the City's Design Criteria Manual standards and specifications	RO	Q3
	Achieve Organizational Excellence		
6	Process review of development workflows in conjunction with Development Services	DP/RO/ TM	Q4
7	Develop a guide to engineering servicing for Small Scale Multi-Unit Housing (SSMUH) applications	RO	Q3
	Strengthen Communication and Public Engagement		
8	Develop a process for communication on capital projects	DP/RO	Q4
9	Transition GIS workflows to ArcGIS Pro to support on-line mapping services	RO	Q3

Engineering and Parks Operations

#	PRIORITY ITEM	WHO	WHEN
	Build Climate Resiliency		
10	LGCAP – Dog Waste Pilot Project Implementation	DP/TM	Q2
11	Tree Inventory – assist Engineering Services	TM	Q
	Provide Reliable Municipal Infrastructure		
12	Review status of Asset Management initiative and determine next steps	DP/TM	Q3
13	Develop Pavement Management Strategy and Funding	TM	Q3
14	Implement Water Meter Reading Program	TM	Q3
15	Evaluate Cross Connection Program and Existing Practices to Develop Strategy	TM	Q4
	Achieve Organizational Excellence		
16	Review Safety Practices and Develop Departmental Program including Training and Safe Work Practices	TM	Q4
17	Review Existing Levels of Service in Parks and Engineering and Evaluate the Impacts of Amendments, along with Implications	TM	Q4
	Strengthen Communication and Public Engagement		
18	Review the LOS for Responding to Calls for Service	TM	Q4

Financial Plan Summary & Highlights

Departmental Summary (by Division/Major Service Area)

	2021	2022	2023	2024	2025
<u>Operating Expenses</u>	Budget	Budget	Budget	Budget	Budget
<i>Engineering Operations</i>					
Common Services	\$823,490	\$1,020,210	\$1,286,730	\$1,427,730	\$1,450,350
Operations Centre	\$600,020	\$602,690	\$632,500	\$686,630	\$692,840
Road & Parking Maintenance	\$934,725	\$949,625	\$975,095	\$968,395	\$1,006,080
Major Municipal Roads	\$286,015	\$286,670	\$290,910	\$295,480	\$297,310
Traffic Services	\$318,630	\$336,700	\$348,050	\$378,030	\$382,060
Street Light Maintenance	\$272,200	\$276,450	\$277,510	\$264,450	\$265,090
Public Works Other	\$146,020	\$147,190	\$169,690	\$173,350	\$199,160
Vehicle Charge Out Allocation	-\$148,480	-\$95,000	-\$91,000	-\$104,980	-\$48,000
	\$3,232,620	\$3,524,535	\$3,889,485	\$4,089,085	\$4,244,890
<i>Garbage & Recycling</i>					
Garbage Collection	\$715,160	\$777,090	\$819,130	\$888,660	\$1,250,960
	\$715,160	\$777,090	\$819,130	\$888,660	\$1,250,960
<i>Parks Operation</i>					
Parks Management	\$242,300	\$250,970	\$308,030	\$299,860	\$303,740
Park Maintenance	\$1,133,940	\$1,154,720	\$1,182,850	\$1,227,385	\$1,252,770
Boulevard Maintenance	\$498,325	\$525,705	\$635,775	\$659,780	\$664,020
City Image Maintenance	\$332,430	\$366,570	\$507,150	\$514,280	\$537,130
Other Parks Costs	\$134,650	\$135,930	\$129,300	\$145,240	\$178,100
Vehicle Charge Out Allocation	-\$24,885	-\$100,000	-\$152,500	\$10,660	-\$75,000
	\$2,316,760	\$2,333,895	\$2,610,605	\$2,857,205	\$2,860,760
<i>Sewer & Drainage Operations</i>					
Administration & Billing	\$859,370	\$915,410	\$984,600	\$1,088,230	\$1,092,710
Sewer System Operation	\$798,710	\$1,055,040	\$1,093,140	\$1,153,540	\$1,162,660
Sewer Treatment & Disposal	\$2,103,560	\$2,070,630	\$2,280,970	\$2,916,500	\$4,290,590
	\$3,761,640	\$4,041,080	\$4,358,710	\$5,158,270	\$6,545,960
<i>Water System Operation</i>					
Administration & Billing	\$1,036,180	\$1,105,290	\$1,187,370	\$1,310,280	\$1,314,440
Water System Operation	\$735,360	\$788,190	\$803,510	\$806,210	\$815,300
Water Purchase	\$2,883,690	\$3,226,770	\$3,197,810	\$3,740,170	\$4,185,640
	\$4,655,230	\$5,120,250	\$5,188,690	\$5,856,660	\$6,315,380
Net Operating Expenses	\$14,681,410	\$15,796,850	\$16,866,620	\$18,849,880	\$21,217,950
\$ Change from previous year	\$115,045	\$1,115,440	\$1,069,770	\$1,983,260	\$2,368,070
% Change	1%	7.6%	6.8%	11.8%	12.6%
<u>Staffing Level</u>					
Full Time Equivalent Positions (FTE)	42.8	44.2	48.4	48.2	49.1