

FINANCIAL MANAGEMENT COMMITTEE

*HIS WORSHIP, THE MAYOR
AND COUNCILLORS*

SUBJECT: ENGINEERING CAPITAL PROJECTS STATUS UPDATE

RECOMMENDATION:

1. THAT Council receive this report for information.

REPORT

The Financial Management Committee, at its meeting held on 2022 May 17, received and adopted the attached report providing an update on the current status of Engineering capital projects.

Respectfully submitted,

Councillor Dhaliwal
Chair

Councillor Gu
Vice Chair

Copied to:	Chief Administrative Officer Acting CFO GM Corporate Services GM Engineering GM Parks, Recreation & Cultural Services GM Planning & Development Purchasing Manager Director Engineering Projects
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TO: CHAIR AND MEMBERS
FINANCIAL MANAGEMENT COMMITTEE **DATE:** 2022 May 11

FROM: GENERAL MANAGER ENGINEERING **FILE:** 35000-01

SUBJECT: ENGINEERING CAPITAL PROJECTS STATUS UPDATE

PURPOSE: To provide an update on the current status of Engineering capital projects.

RECOMMENDATION:

1. **THAT** the Finance Management Committee forward this report to Council for information.

REPORT

1.0 INTRODUCTION

The purpose of this report is to update the Finance Management Committee and Council on the current status of 20 Engineering capital projects. Projects are selected for this report by value and/or particular interest to Council.

2.0 POLICY SECTION

Goal

- A Thriving Organization
 - Financial viability –
Maintain a financially sustainable City for the provision, renewal and enhancement of City services, facilities and assets
Practice open and transparent communication among staff, Council and the community
 - Reliable services, technology and information –
Protect the integrity and security of City information, services and assets

3.0 BACKGROUND

Engineering capital projects typically progress through the following five phases:

1. Planning – this phase includes identification of the overall scope and need for the project, acquisition of land or statutory rights-of-way, application for long-lead permits, and issuance of a Request for Proposals (RFP) for consulting services;
2. Design – in this phase conceptual designs are refined to a quality that can be issued for tender. Permits and approvals such as environmental permits, Preliminary Plan Approval (PPA), and Building Permits (BP) are obtained during this phase;
3. Tender – in this phase the project is tendered through a competitive bid process with the intent of selecting a contractor to construct the project. Contract documents and project schedule are finalized;
4. Construction – in this phase the successful contractor builds the project through to substantial completion. Engineering projects are typically constructed as per the Master Municipal Construction Documents (MMCD).
5. Closeout – this phase includes the collection of as-constructed drawings and closeout of all purchase orders.

The current status of all Engineering capital projects are available to the public at:

<https://gis.burnaby.ca/capitalworksprogram/>

To: *Financial Management Committee*
From: *General Manager Engineering*
Re: *Engineering Capital Projects Status Update*
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4.0 RECOMMENDATION

Staff recommend that the Finance Management Committee forward this report on the current status of Engineering capital projects to Council for information.



James Lota, P.Eng., MBA, MPA
GENERAL MANAGER ENGINEERING

MN/nh

Attachment

Copied to: Chief Administrative Officer
Deputy General Manager Finance
General Manager Parks, Recreation and Cultural Services
General Manager Planning and Development
General Manager Corporate Services
Purchasing Manager
Director Engineering Projects

#	Project Name	Executive Summary For Council	Project Status	Project Target Start	Project Target Finish	Tender Award Amount	Project Percent Complete	Status Update
1	3191 INF 2021 Sidewalks and Full Road Upgrades	Selected sidewalk construction locations based on prioritization (for example near schools/community centres/parks/transit, most cost effective first, network gaps, and neighbourhoods without sidewalks). Boulevard trees would also be replaced and added as necessary, in order to complete the public realm. This planned program would include new sidewalks and full road upgrades with curb & gutter.	Construction	5/3/2021	7/30/2022	\$5,558,911	65%	On track and on budget. Construction started July 2021. Works to be completed by July, 2022.
2	3214 INF 11th Avenue Combined Sewer Separation	This project is to continue combined sewer separation in the Glenbrook area as per the City's commitment towards Metro Vancouver's Integrated Liquid Waste Management Plan (ILWMP). Project is a multi-year work and consists of combined sewer separation that was a shelf-ready design along Newcombe, 11th Ave, and Cumberland. A new watermain and storm sewers will be constructed with the existing combined sewer to become a dedicated sanitary sewer.	Construction	5/3/2021	12/30/2022	\$4,498,442	20%	On track and on budget. Construction started beginning of May 2022.
3	3040 INF Marine Dr: Boundary Road to Greenall Ave.	This project is to upgrade Marine Drive from Boundary Road to Greenall Avenue. The project is currently under construction and will provide watermain and road upgrades including curb and gutter, sidewalks and improved street lighting	Construction	8/12/2021	6/30/2022	\$3,986,286	70%	On track and on budget. Construction ongoing. Substantial completion end of June 2022
4	3137 INF Rosser Avenue Road Upgrades	This project consists of 5 packages - utility upgrades and road rehabilitation in conjunction with a Metro Vancouver capital works program associated with their Douglas Road Main (DRM2) replacement project.	Construction	6/1/2019	5/30/2022	\$2,950,238	90%	On track and on budget. all years sufficient funding but short for 2021. Project to be substantially completed by end of May 2022
5	3188 INF 2021 Sidewalk Program - Package B	The scope consist of about 4km of sidewalk and 2 crosswalks. Council instructed staff to accelerate net new sidewalk construction in various locations. Boulevard trees would also be replaced and added as necessary, in order to complete the public realm.	Construction	9/1/2021	12/31/2022	\$2,610,170	35%	On track and on budget. Completion date December 2022.
6	3194 INF Wright St. Watermain & Road Upgrades	This watermain and roads package consists of project sites in the Cariboo-Armstrong neighborhood of Burnaby. The project involves replacement of existing aged watermains, hydrants and services, a limited section of new storm and sanitary sewers (sewer separation) complete with pavement rehabilitation and/or upgrade to local/collector streets. This project is intended for design by an engineering consultant(s) and construction by City forces with separate tender of roadworks as a separate tender.	Construction	1/1/2021	3/31/2023	\$2,409,366	40%	On track and on budget. Tender was posted February 14, 2022. Closed March 9, 2022. Awarded March 21, 2022.
7	3215 INF Nelson Avenue Watermain and Road Upgrades	This capital works package consists of several project sites along Nelson Avenue, from Marine Drive to Rumble Street, in the Burnaby South-Slopes area. The total project involves replacement of existing aged watermains, hydrants and services, complete with pavement rehabilitation and/or full road upgrades (curb & sidewalks, street lighting) on local/collector streets, a new Urban Trail on Nelson Av from Marine Dr to Rumble Street, east side. Interim strip roads and traffic safety improvements (wheel chair ramps, etc.) will be upgraded to urban street standard (curb, gutter & sidewalk) as part of an integrated project approach.	Tender	5/9/2022	1/1/2024	\$2,368,604	15%	On track and on budget. Watermain portion passed Council on April 25th
8	3223 FM Electric Vehicle Charging Stations	The project aims to support the City's Climate Emergency goals with GHG emissions reductions by providing new EV (Electric Vehicle) charging infrastructure for fleet vehicles stationed at the City Hall Lower Compound. The project will involve undergrounding the existing overhead power lines to the property, adding a new pad-mount transformer and service kiosk to energize up to 100 parking stalls in the Lower Compound including installation of up to 100 level 2 fleet EV Charging Station ports.	Construction	8/1/2020	6/30/2022	\$2,250,000	85%	On track and on budget. Construction was awarded July 2021. Substantial June, 2022. Supply chain issues with the Solar Panels procurement.
9	3188 INF Sidewalk Program Package A	On June 24, 2019 Council instructed staff to accelerate net new sidewalk construction at a value of \$10M per year. Boulevard trees would also be replaced and added as necessary, in order to complete the public realm.	Construction	7/1/2020	6/30/2022	\$1,811,807	95%	On track and on budget. Substantial completion reached and deficiencies to be fixed by end of June, 2022.

#	Project Name	Executive Summary For Council	Project Status	Project Target Start	Project Target Finish	Tender Award Amount	Project Percent Complete	Status Update
10	3197 2020 Major Traffic Management Projects Package 1	Major Traffic Management Project program provides enhancements in traffic safety and/or operations. This project includes intersection improvements to conduit installation. Cardston/Government, Enterprise/Lake City, Canada Way/Elwell, Byrne/Market Crossing, Byrne/Marine Way, Moscrop/Barker and 200m of MUP	Construction	6/22/2020	5/31/2022	\$1,662,199	99%	On track and on budget. Project completed end of May 2022.
11	3010 INF SCADA Water & Sewer Pump Station Controls Upgrades	This project includes upgrade or replace existing water and sewer pump station RTU's and PLC's as part of the City's ongoing infrastructure renewal program of 51 SCADA stations	Construction	6/22/2020	6/1/2023	\$1,561,526	35%	On track and on budget. The 3 year SCADA program 2021-2023 being delivered per plan.
12	3199 Streetlight Pole Replacements	This project is to replace 150 aging street light poles in various locations part of the streetlight pole replacement program	Design	5/11/2022	12/30/2022	\$1,300,000	20%	Minimal spending due to Contract awarded in May. Construction expected to be completed by the end of 2022.
13	3195 INF Thorne Ave Roadworks & Utilities	Scope of work involves offsite improvements for the development at 6000 Thorne Avenue. Improvements will be completed on road works, street lighting, sanitary sewer, storm sewer, and watermain to provide site services to this development. Previous work and preloading was performed by Matcon. Final Thorne Avenue roadworks and utilities are being completed by Jack Cewe.	Construction	8/13/2020	6/30/2022	\$1,217,643	95%	On track and on budget. Outstanding work from BC Hydro to be completed by end of June 2022.
14	3168 INF Sunset PRV	Investigate, design and construct a replacement for the existing Sunset PRV, located at Sunset and Boundary Road, as part of the City's ongoing infrastructure renewal program. Include replacement of 250m of CI watermain on Sunset, with a new 300mm DI main from Boundary to Smith as part of the upgrade. PRV replacement is envisaged to improve service to Burnaby Hospital.	Construction	3/1/2021	6/30/2022	\$1,178,000	75%	On track and on budget. Project was delayed due to supply chain issues for pipes and kiosk delivery to site. Substantial expected mid June, 2022.
15	3035 INF Imperial & Patterson Left Turn Bays	To improve traffic flow and safety, intersection improvements at Imperial St and Patterson Avenue involving the addition of eastbound and westbound left turn bays are required.	Construction	8/31/2021	6/30/2022	\$1,078,117	90%	On track and on budget. Project was delayed due to supply chain issues for pipes and kiosk delivery to site. Substantial expected mid June, 2022.
16	3183 INF 2021 Culvert Rehabilitation Program	The City has completed an inventory review and general visual inspections of culverts throughout the City. Sixteen (16) culverts were prioritized for rehabilitation or replacement within the one to five year horizon due to the results from the general visual inspections.	Construction	7/15/2021	5/30/2022	\$1,025,102	90%	On track and on budget. Construction started July 2021. Due to weather/supply delays, substantial completion (including landscaping) expected by May 2022.
17	3198 Streetlight Service Panels Package 1	This project is to replace Streetlight Service Panels in various locations throughout the city.	Construction	9/1/2021	7/31/2022	\$655,450	65%	On track and on budget. delay in material and supply arrival. Majority of the construction will take place in summer/fall 2022
18	3239 INF Kincaid Street Watermain, Roadworks, and PRVs	Construct new 150mm & 250mm mains along Douglas Road (Woodsworth to Canada Wy) to facilitate expansion of the Kincaid Zone into the Central Valley Zone. Transfer existing services fronting Douglas Road to new 150mm main (Kincaid Zone). 'Close' existing valve at Woodsworth and Douglas Rd., to complete zone boundary change.	Tender	6/30/2022	12/31/2022		10%	On track and on budget. Tender closing mid May 2022.
19	3224 INF Fortis Patullo Gas Line Replacement	This Fortis project is an expedited project due to the MOTI replacement of the Patullo Bridge. Fortis currently is planning to re-route their transmission line off of the old bridge and into Burnaby. Staff are coordinating City upgrades if possible with Fortis.	Construction	5/1/2021	12/31/2022		25%	On track and on budget. MUP design is being finalized and reviewed by external stakeholders. Construction will be starting in the next few weeks along Lakefield Drive from Nursery to Reigate. The area along 4th avenue is past 90% design and will be finalized by the end of May.
20	3031 INF Broadway Improvements Bainbridge to Underhill	Road upgrades on Broadway (Bainbridge Av to Underhill Av) will be upgraded with widened pavement, urban trail, sidewalks, and treed boulevards to improve the street for all users. Storm sewers and watermain requiring condition or capacity upgrades in this section will also be addressed in this project. Installation of the City's IT network conduit will also be completed along the full length of the project.	Construction	8/4/2020	7/30/2022	\$8,628,241	85%	Overspent (Resolve by reallocation) due to Unknown 3rd party utilities found during construction caused multiple design changes and construction change orders. This also resulted in one delay claim.