

**CITY OF COQUITLAM
ENGINEERING AND PUBLIC WORKS**

**CEDAR DRIVE/PARTINGTON CREEK SANITARY, DRAINAGE,
ENVIRONMENTAL AND ROAD UPGRADES - PROJECT UPDATE**

SPRING 2024



Project Goal

To provide sanitary, drainage, environmental, and road upgrades in the eastern part of the Partington Creek Neighbourhood

Project Objectives

- Construct trunk sanitary sewer facilities along Cedar Drive and extending to Upper Victoria Drive on a schedule to meet the needs of new development planned for the Partington Creek Neighbourhood.
- Construct a drainage and environmental channel in the upper section of Cedar Drive, to divert high creek flows to prevent flooding over Cedar Drive.
- Enhance the environmental conditions in Partington Creek, including the installation of riparian areas to offset the impacts from the development planned in the area, as outlined in the Partington Creek Integrated Watershed Management Plan (PCIWMP). Also, take steps to address invasive species within the construction areas.
- Upgrade the upper section of Cedar Drive as a transportation corridor to a two lane width, as well as constructing a multi-use pathway (MUP) and street lighting.

Scope

This project consists of three main components: sanitary system expansion, creek upgrades for the eastern section of Cedar Drive, and road relocation and upgrades for the eastern section of Cedar Drive.

Sanitary System Expansion

A sanitary pump station is required along Cedar Drive to pump sewage from the eastern portion of the Partington Creek Neighbourhood to the existing sewer main on Coast Meridian Road.

In addition to a pump station, a gravity sanitary main is required along Cedar Drive and north to Upper Victoria Drive, which will convey the sewage to the pump station.

The third component of this system will be a force main to convey the sewage from the new pump station to an existing, empty force main on Lower Victoria Drive. As of January 2024, these three components of the sewer system are now in place. Figure 1

shows the details of the sewage catchment area, and the sanitary system infrastructure.

Figure 1 also identifies three sections of the gravity main that will be built as part of future projects. The “future” section to the east of the pump station on Cedar Drive will happen as part of the road works in this section. The “future” section on the western portion of Cedar Drive will be built in conjunction with the road improvements on that section of Cedar Drive, which are not planned within the current 5-year capital plan.

Drainage and Environmental Enhancements

Partington Creek frequently overtops the eastern portion of Cedar Drive and causes damage to the road and creek. Cedar Drive is being relocated and raised 1.5 metres, and a drainage channel will be constructed parallel to Partington Creek. These measures will greatly mitigate the potential for flows from Partington Creek overtopping this road. The drainage channel will have capacity for increased stormwater runoff from the planned development. The drainage catchment area for Partington Creek is shown in Figure 2.

The drainage channel will be approximately 600 metres in length and 20 metres wide, and will provide a significant environmental upgrade for Partington Creek, which supports a significant salmon population. The environmental improvements will also include instream habitat works and sediment ponds at two locations. These environmental and drainage improvements were recommended as part of the Partington Creek Integrated Watershed Management Plan ([PCIWMP](#)).

To accommodate the project, land acquisition has been completed at 4300 Oliver Road, 4180 Cedar Drive, 4170 Cedar Drive, and 4196 Cedar Drive.

Much of the existing portion of Cedar Drive will need to remain to provide access to a number of the properties. As redevelopment happens, these existing accesses (and small bridges over Partington Creek) are planned to be removed or upgraded over time. Upgrades to these small bridges will improve the environmental and hydraulic conditions in Partington Creek, but this will take many years.

Invasive species (such as Japanese knot weed and Himalayan blackberry) will be removed in the areas where work is being done. In many areas of the creek, no work is planned at this time. In these locations, chemical treatment of knotweed is underway, following Provincial guidelines and regulations.

Figure 3 shows a plan view of the drainage upgrades, with Figure 4 showing a cross section in the lower section of the project and Figure 5 showing a cross section in the upper section of the project.

Transportation Improvements

This project will provide some significant transportation improvements in the eastern portion of Cedar Drive:

- The road will be widened from approximately 5.5m wide to 8m wide, which will accommodate 2-way traffic safely. There will be no accommodation for curbside parking on this roadway as there is very low parking demand in this area.
- Street and pathway lighting will be added.
- A multi-use pathway will be added between the creek and the roadway.

An additional transportation improvement that is supported by this project is a proposed north/south roadway that will connect Victoria Drive to Cedar Drive across Partington Creek, which will be constructed by the adjacent developer. This roadway connection will rely on land development to happen, and once in place will significantly improve the road network in this area. The existing and proposed road network is shown in Figure 6, and road cross sections are shown in Figure 4 and Figure 5.

Costs and Funding

The current budget for this project is \$19M, with approximately 50% for drainage works, 45% for sanitary work, and 5% for road work. The funding is mainly from development cost charges (DCC's). The cost estimate and project budget will be refined as design and construction move forward.

Construction Progress and Phasing

The following is an outline of the construction schedule (also see Figure 3):

2021 to 2023: Preloading¹ began in early spring of 2021, and mostly consists of glacial till that was taken from nearby excavation sites in Coquitlam (which has reduced the costs and overall environmental impacts). Most of the preload and fill for the new roadway is now in place, except for a few locations.

¹ Preload is fill material that applies pressure so that settlement of compressible soils (e.g. silt) happens prior to construction of the utilities, road surface, and other features. The preload is at an elevation of approximately 2 metres higher than the final road elevation.

The sanitary sewer work, including the pump station, forcemain, and gravity sewer connection to Victoria Drive, began in 2022 and was completed at the end of 2023.

2024: The pre-load needs to be in place for the first half on 2024. Portions of the drainage/environmental channel will be constructed and portions of the pre-load will be removed.

2025/2026: The completion of the drainage/environmental channel, the roadway, the multi-use pathway, the sediment ponds, sanitary sewer and other utility construction, and other features will happen in 2025 and 2026. In-stream work can only happen in the “fish window”, which is typically between August 1st and September 15th.

Future Phase: Road Relocation and Drainage Improvements in the Lower Section of Cedar Drive: Planning for this work will need to consider other future improvements such as the Freemont Connector and improvements to the Cedar/Victoria intersection. This future phase will consist of upgrading/shifting of Cedar Drive and creating increased creek-flow capacity in Partington Creek.

The remaining section of gravity sewer on Cedar Drive will also be included in this future phase, in coordination with the road construction.

Public Engagement and Permitting

The [PCIWMP](#) was the impetus and established the scope for this project, and included a public process, and involved representatives from many groups and agencies.

Since the implementation of this project involves work within Partington Creek (which is an important fish-bearing stream), a number of environmental approvals are needed, including from the Department of Fisheries and Oceans (DFO) and a Water Sustainably Act Approval from the Province of BC. These permits are now in place.

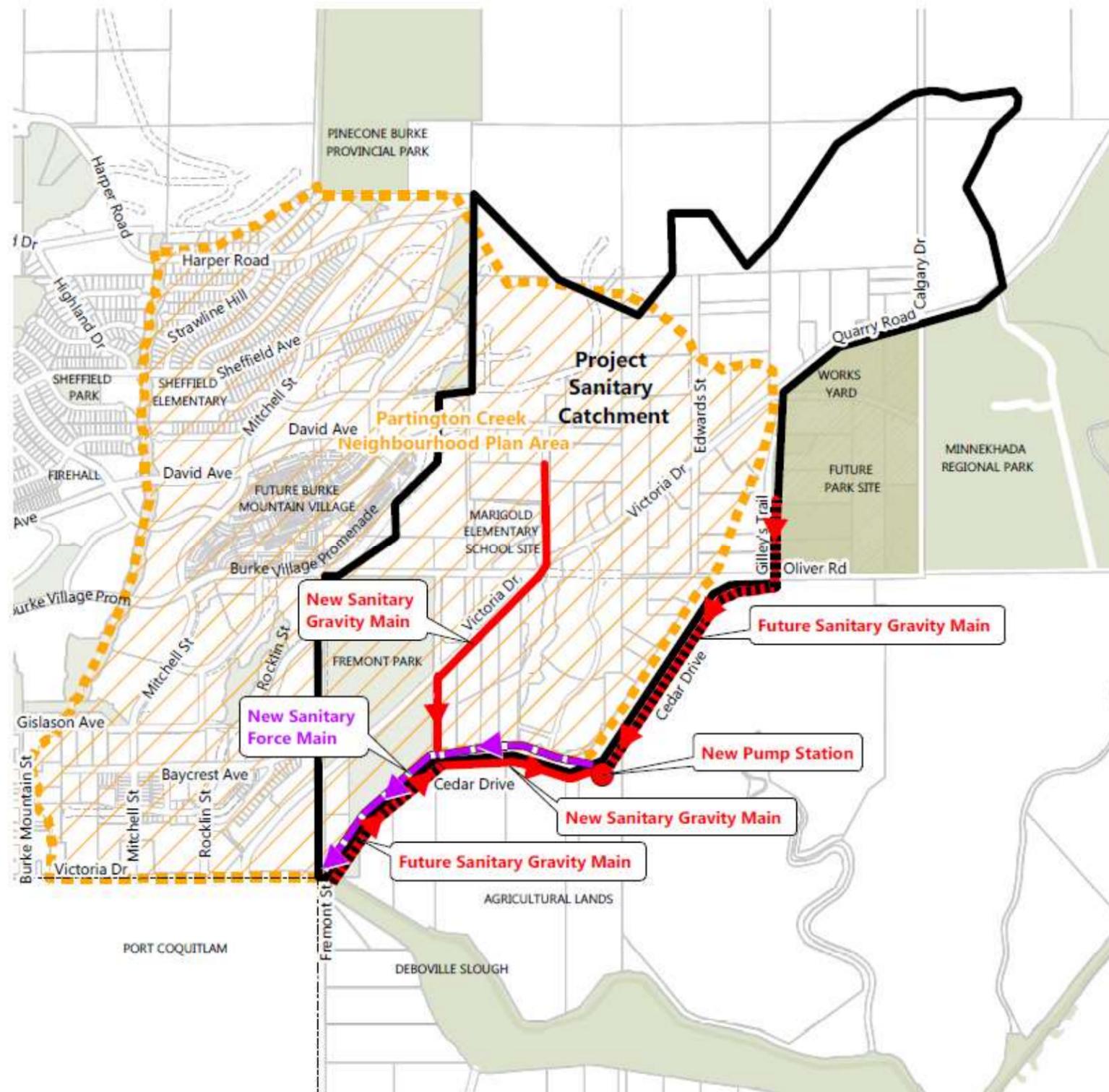
This project has included a lot of archeological work, and the [Archeological report](#) is included on our webpage. The archeological work and reporting involved consultation with a number of indigenous people.

Other stakeholders for this project include the residents and property owners from the area, the local development community, and local environmental interest.

An online information session took place in April 2021, to provide an overview of the detailed design. Other methods will also be used to keep stakeholders informed including:

- Project signs on site, with contact information.
- Presentation to the Sustainability and Environmental Advisory Committee, spring 2021.
- A project web page has been set up: www.coquitlam.ca/cedardrive
- Project update emails during construction, to stakeholders who want this communication.

FIGURE 1



Sanitary Sewer Expansion

Legend

- Project Sanitary Catchment Boundary
- Partington Creek Neighbourhood Plan Area
- New Sanitary Pump Station
- New Sanitary Force Main
- New Sanitary Gravity Main
- Future Sanitary Gravity Main

0 125 250 500 750 Meters



FIGURE 2

Proposed Partington Creek Improvements

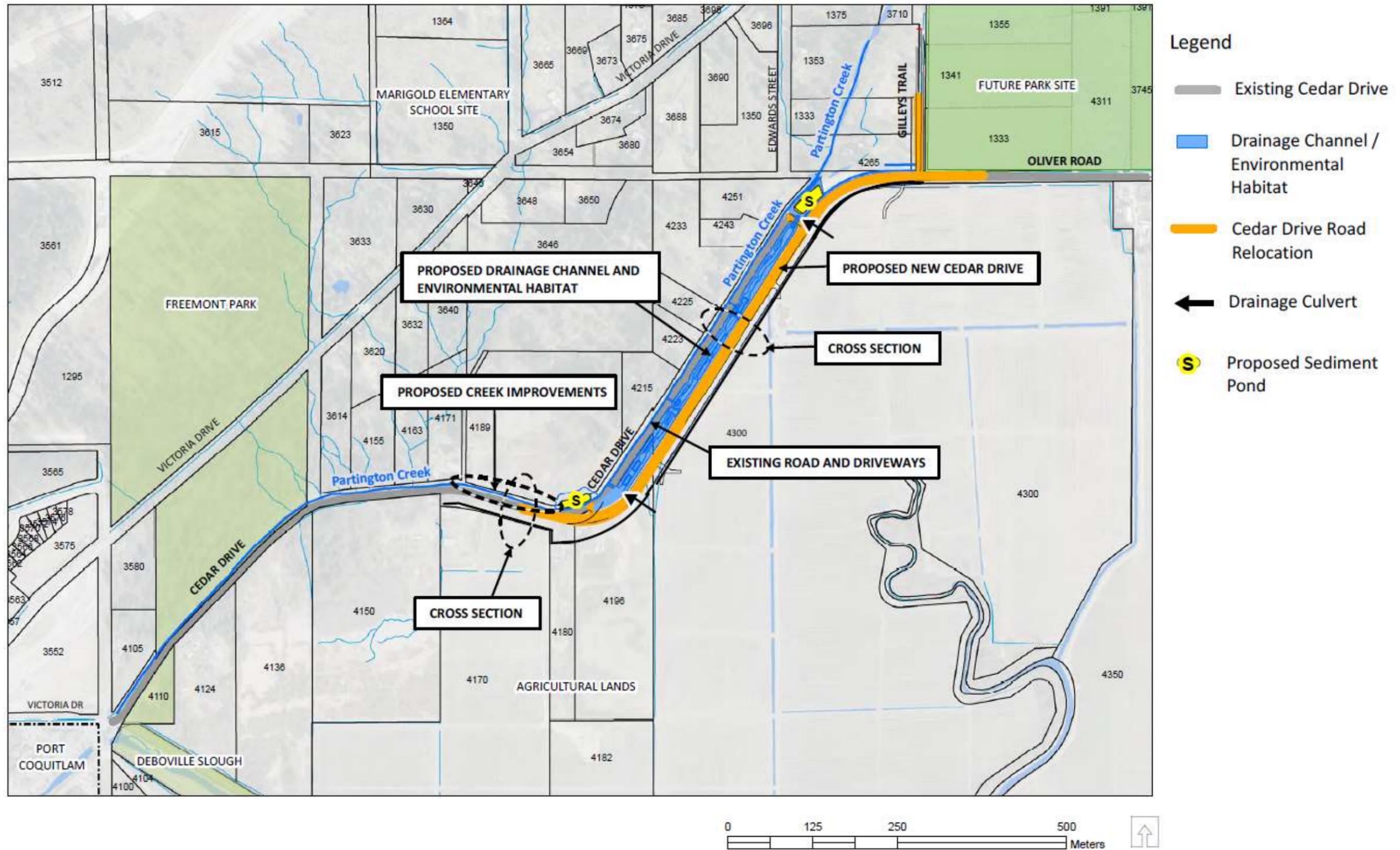


FIGURE 3

Project Schedule 2021 - 2026

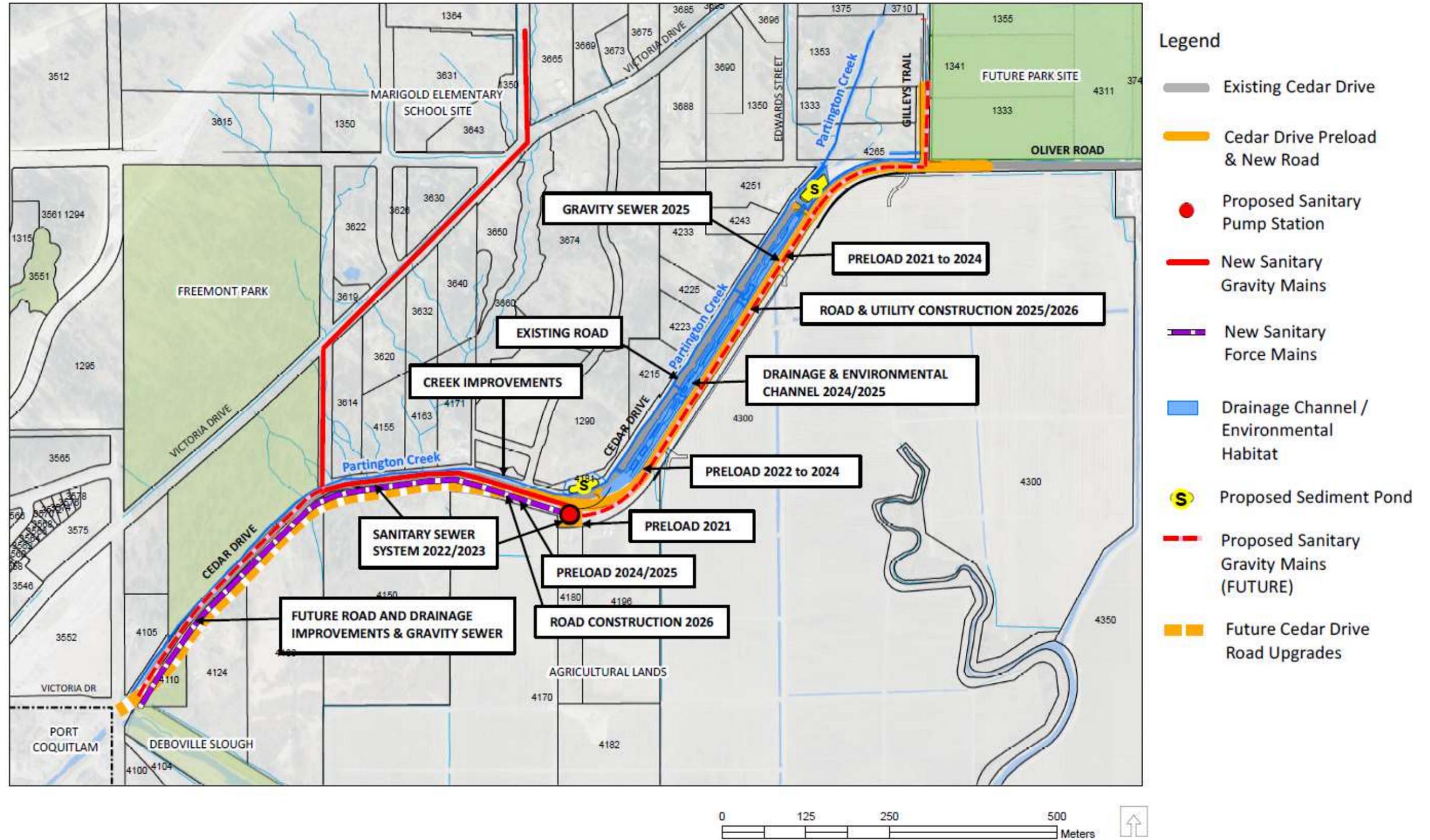
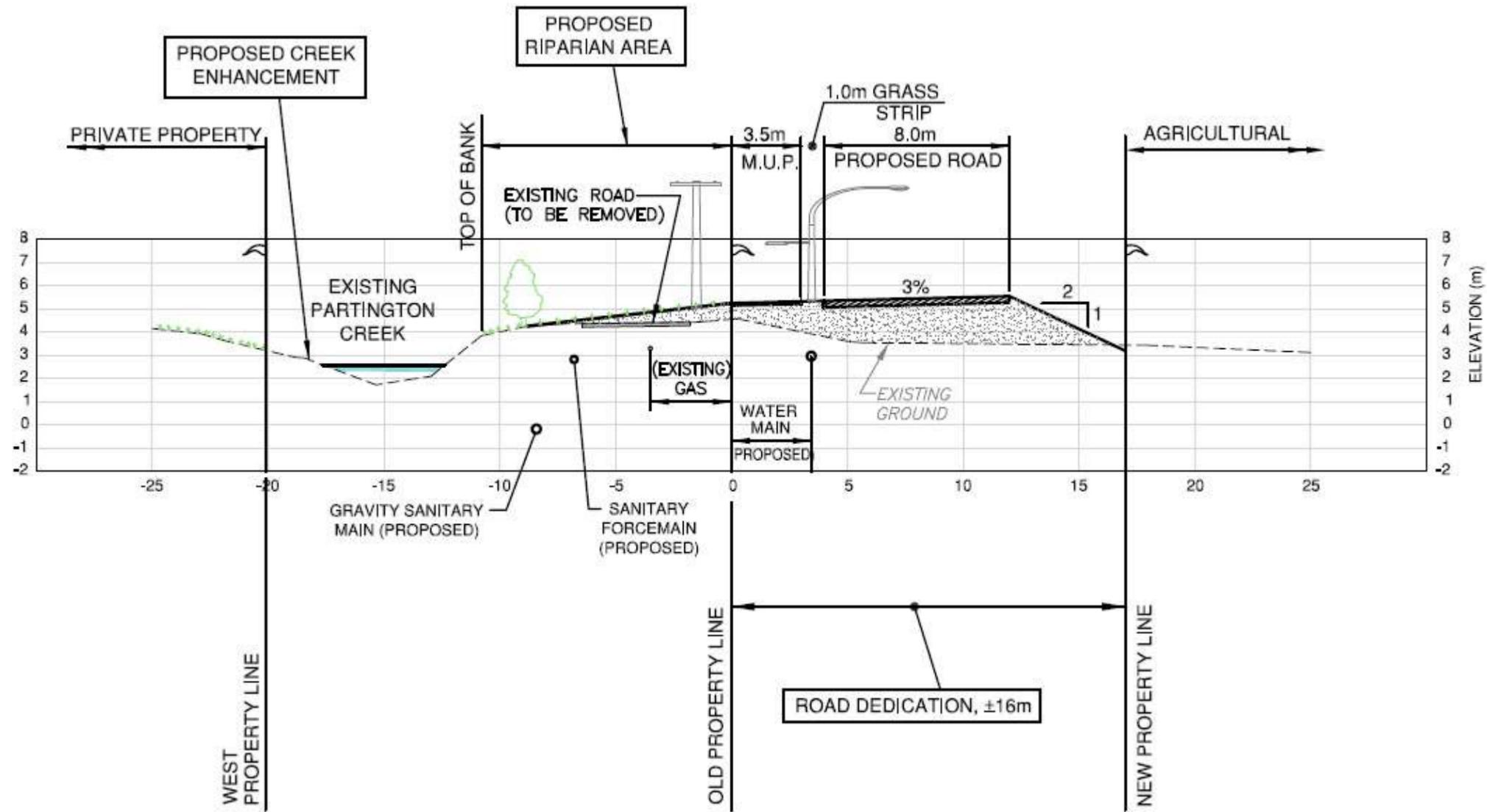


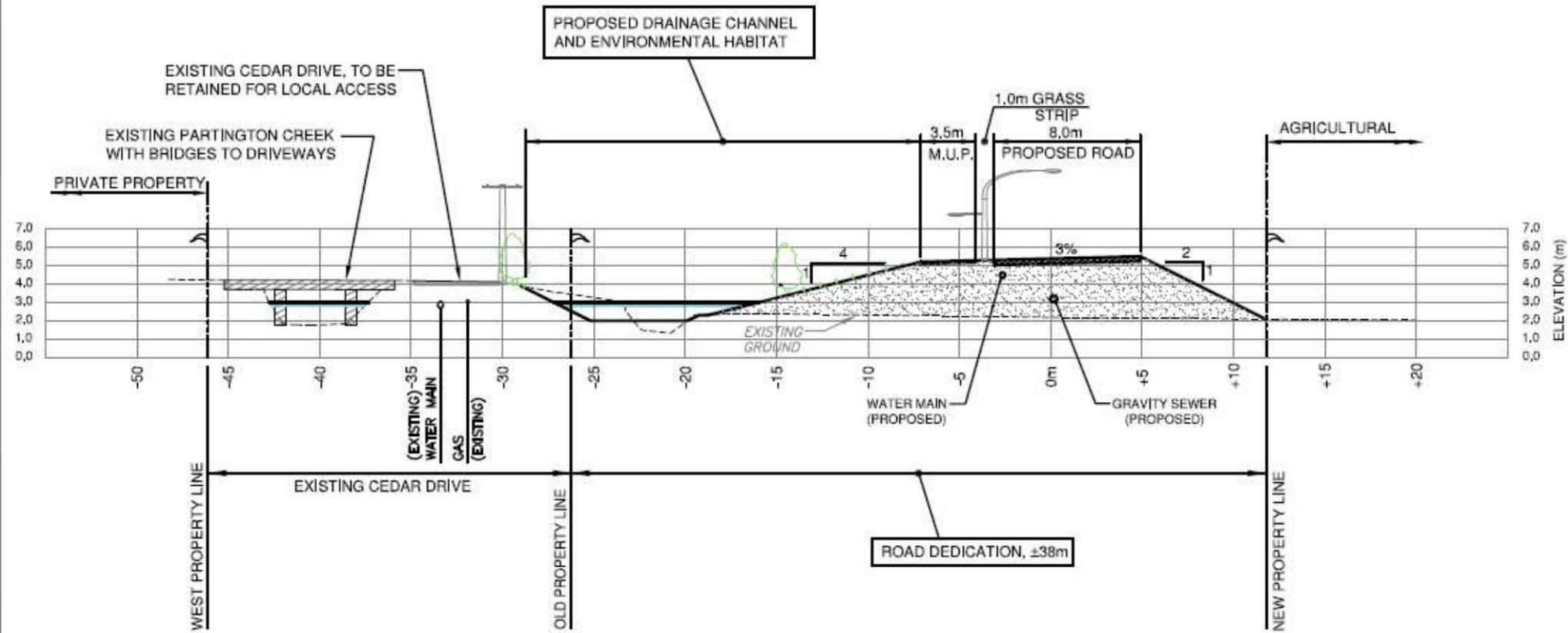
FIGURE 4



PROPOSED X-SECTION - LOWER SECTION

FILE:20Partington01165541K6

FIGURE 5



PROPOSED X-SECTION - UPPER SECTION

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Road Network in Cedar Drive Area

FIGURE 6

