



Beaverton Easement Request

Steve Jackson
Head of Networks
January 22 2024

About Durham OneNet

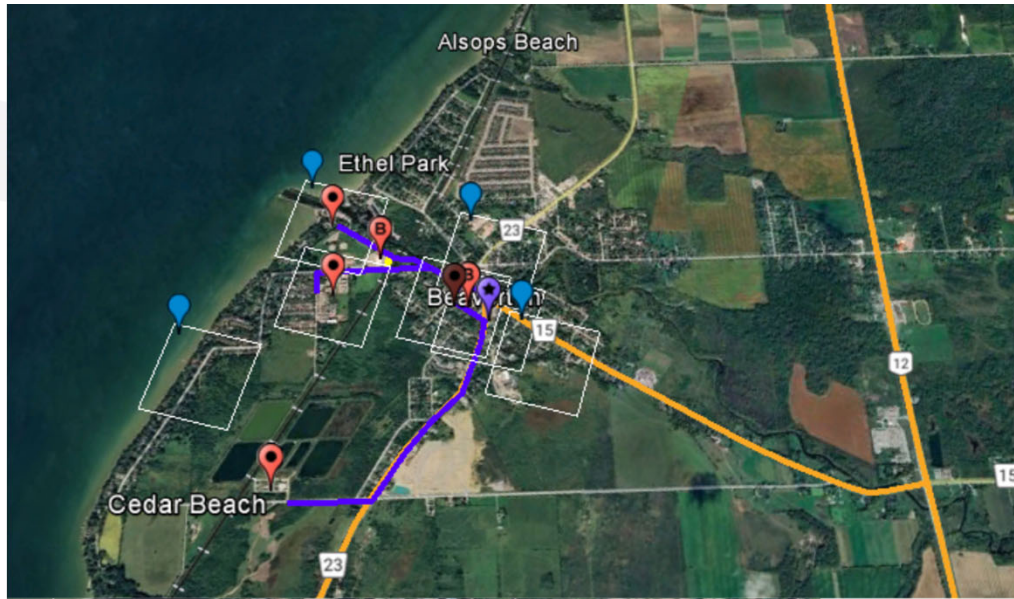
Durham OneNet (DONi) is a Municipal Services Corporation created by Durham Region in 2022. DONi's mandate is to facilitate improved internet access to underserved communities in Durham Region and provide to Regional and Municipal facilities.

Fibre optic facilities are being designed across Durham Region. Designs for the Beaverton area were started in late 2023 and construction is planned for Q4 2024.

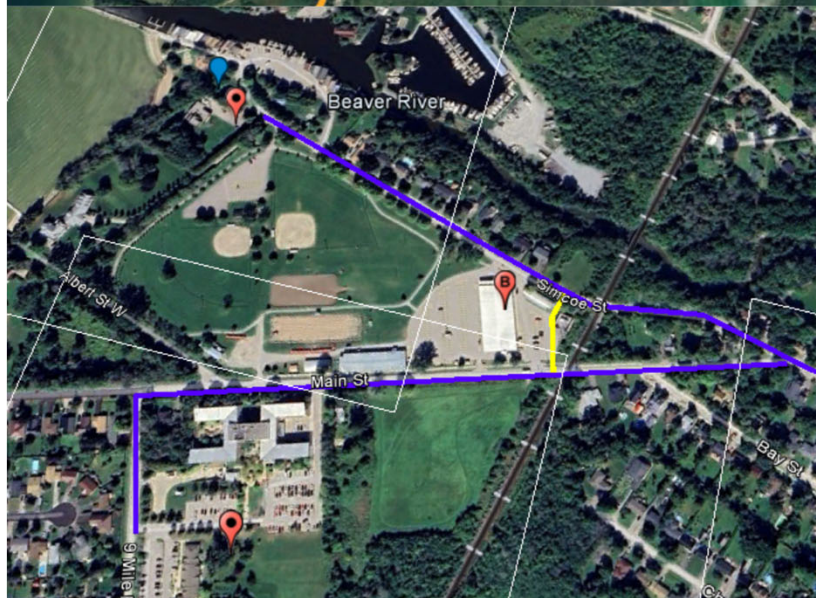
Diverse connections into Beaverton are planned, via Hwy 12 and Regional Road 23.

Durham Region retains ownership of network infrastructure built by DONi. DONi operates the network under an IRU (Indefeasible Right to Use) agreement with Durham Region.

We are requesting an easement on behalf of Durham Region of 60 metres under the Community Centre parking lot to facilitate the most cost effective topology that reaches all locations to be served. See the design drawing on slide 4 for the specific extent of the request.



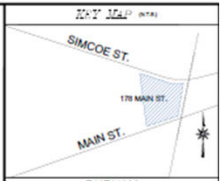
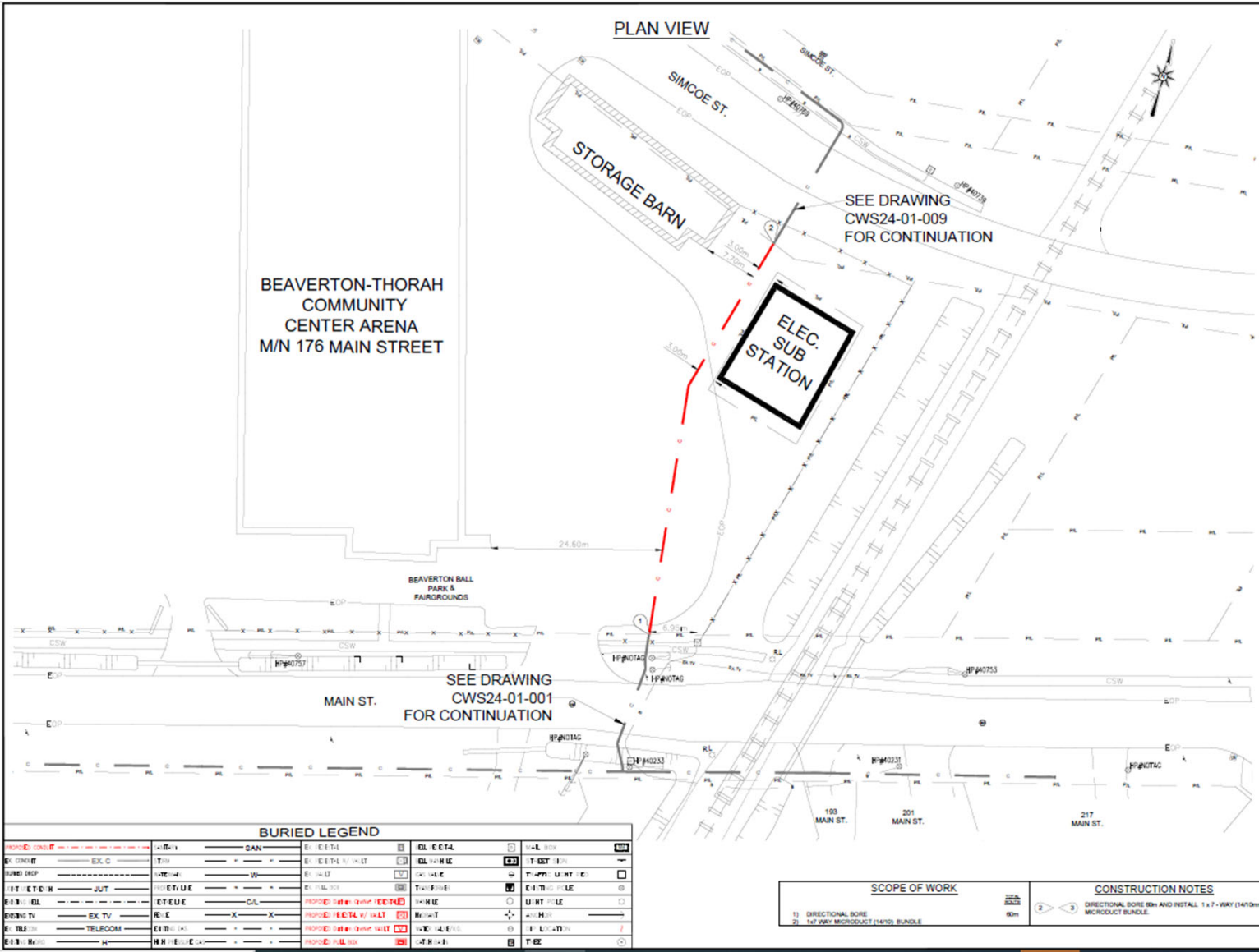
Connections into Beaverton via Hwy 12 and RR 23.
Hwy 12 route continues north to Gamebridge



Connecting to Regional facilities in Beaverton requires crossing the CN rail tracks at Simcoe and/or Main St.

Rail crossings can cost between \$50K to \$150K to meet the permitting, construction and settlement monitoring requirements of the railway company.

Placing conduit on Municipal property allows all facilities to be connected with a single rail crossing. It also saves approximately 150 metres of construction.



DURHAM

GENERAL NOTES

THE LOCATION OF POLE LINES, CONDUITS, NETWORKS, SERVICES AND OTHER UTILITIES ARE SHOWN FOR INFORMATION ONLY. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO EXISTING UTILITIES.

THE CONTRACTOR SHALL OBTAIN THE NECESSARY ROAD OCCUPANCY PERMITS AS REQUIRED.

CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE DURHAM STANDARD SPECIFICATIONS FOR UTILITIES AND STRUCTURES.

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE DURHAM STANDARD SPECIFICATIONS FOR UTILITIES AND STRUCTURES.

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RECORD OF INSPECTION

AS CONSTRUCTED

<input type="checkbox"/> AERIAL INSTALLATION	<input type="checkbox"/> BURIED INSTALLATION
DATE: _____	TIME: _____
BY: _____	BY: _____
BY: _____	BY: _____

OF INSPECTOR APPROVED:

_____-E_____

DURHAM OneNet

Cablewave

UTILITY SERVICES

NO.	DATE	DESCRIPTION	BY
1	2024-01-10	INSTALLATION	CCM

CONSTRUCTION DRAWING

PROJECT: BEAVERTON-THORAH COMMUNITY CENTRE

ADDRESS: 176 MAIN STREET, TOWN OF BEAVERTON, DURHAM, ONTARIO

PROJECT/CONTRACT NO.: CWS24-01-002

DATE: JANUARY 19, 2024

SCALE: 1:500

DESIGNED BY: STEVE JACKSON

CHECKED BY: (416) 543-1001

DATE: JANUARY 19, 2024

SCALE: 1:500

SHEET NO.: 3 OF 3

BURIED LEGEND

PROPOSED CONDUIT	EXISTING CONDUIT	EXISTING TELEPHONE	EXISTING WATER	EXISTING GAS	EXISTING CABLE	EXISTING LIGHTNING	EXISTING POWER	EXISTING TELEVISION	EXISTING FIBRE OPTIC	EXISTING OTHER
PROPOSED 1.5" DIA. MICRODUCT (4/8) BUNDLE	PROPOSED 1.5" DIA. MICRODUCT (4/8) BUNDLE	PROPOSED 1.5" DIA. MICRODUCT (4/8) BUNDLE	PROPOSED 1.5" DIA. MICRODUCT (4/8) BUNDLE	PROPOSED 1.5" DIA. MICRODUCT (4/8) BUNDLE	PROPOSED 1.5" DIA. MICRODUCT (4/8) BUNDLE	PROPOSED 1.5" DIA. MICRODUCT (4/8) BUNDLE	PROPOSED 1.5" DIA. MICRODUCT (4/8) BUNDLE	PROPOSED 1.5" DIA. MICRODUCT (4/8) BUNDLE	PROPOSED 1.5" DIA. MICRODUCT (4/8) BUNDLE	PROPOSED 1.5" DIA. MICRODUCT (4/8) BUNDLE

SCOPE OF WORK

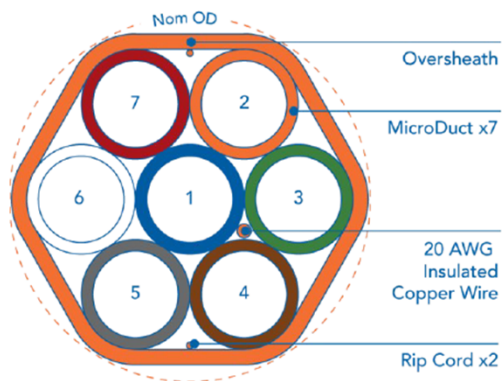
1) DIRECTIONAL BORE

2) 1.5" DIA. MICRODUCT (4/8) BUNDLE

CONSTRUCTION NOTES

1) DIRECTIONAL BORE 80m AND INSTALL 1 x 7-WAY (14/10mm) MICRODUCT BUNDLE.

- Construction within Beaverton will be via directional drilling, the least intrusive means of installing buried facilities. “Drill pits” will be required in the municipal right of way at either end of the easement, but the parking lot itself will not need to be disrupted.
- The infrastructure installed will be a High Density Polyethelene (HDPE) 45mm diameter 7-way conduit with a 144 strand fibre optic cable in the centre microduct. Six microducts are available for future requirements.



- The expected lifespan of the HDPE conduit is >100 years and no access will be required on township property after construction.
- Fibre optic cable has no known expiration date, but its’ useful life is typically in excess of 25 years.