## **Servicing Memo**

## Memo



#### **SUBJECT**

Preliminary Servicing Strategy 166 & 186 Ferguson Avenue North and 203 Robert Street Hamilton, Ontario

#### DATE

February 18, 2025

#### **DEPARTMENT**

Land Engineering

#### **COPIES TO**

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#### **PROJECT NUMBER**

136464

#### NAME

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This memo has been prepared to discuss the Preliminary Servicing Strategy for the on-going development application located at 166 & 186 Ferguson Avenue North and 203 Robert Street

The Hamilton Land Development team has reviewed both the topographic survey and available City record drawing information and in turn has prepared a conceptual site servicing exhibit which identifies both existing / available municipal infrastructure (storm sewer, sanitary sewer and water supply network) and a preliminary high-level servicing strategy to service the proposed development. The existing municipal infrastructure is summarized as

#### **Storm Sewers**

- 525 mm and a 600 mm storm sewer within Ferguson Avenue North which conveys flows to an existing 600 mm combined sewer.
- 600 mm storm sewer within Ferguson Avenue North which conveys flows to the existing 2.44 m x 2.44 m
- 2.44 m x 2.44 m storm sewer within the site from Ferguson Avenue North to Cathcart Street which is located within phase 1 of this project.
- An existing Y-shaped private storm service conveys flows from the adjacent commercial sites (Tim Hortons and A&W) contained within a servicing easement, located within the subject site. This service varies in size between 250 mm to 750 mm, and will need to be rerouted through the subject site to reconnect to the existing 2.44 m x 2.44 m storm sewer.

#### **Sanitary Sewers**

- 300 mm combined sewer within Ferguson Avenue.
- 1200 mm combined sewer within the subject site and will be rerouted for the development of block 6 in phase 4 of the project.
- 0.91 m x 1.22 m brick combined sewer within Cathcart Street.
- 150 mm combined sewer within Robert Street.

#### **Water Supply Network**

- 200 mm watermain within Barton Street.
- 200 mm watermain within Ferguson Avenue North
- 150 mm watermain within Robert Street

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The corresponding preliminary servicing strategy for each phase is summarized as follows:

#### Phase 1 (Blocks 1 and 2)

#### **Storm Servicing**

- 250 mm storm service at a 1.0 % slope for Block 1
- 300 mm storm service at a 1.0 % slope for Block 2
- Each service will connect to the existing 300 mm storm sewer within Ferguson Avenue North.

#### **Sanitary Servicing**

- 200 mm sanitary sewer at 1.0 % for Block 1.
- 200 mm sanitary sewer at 1.0 % for Block 2.

#### **Water Servicing**

- Two (2) 200 mm fire services per the OBC and one (1) 150 mm Domestic service for Block 1.
- Two (2) 200 mm fire services per the OBC and one (1) 150 mm Domestic service for Block 2.
- Each block connects to the existing 200mm Water main within Ferguson Avenue North.

#### Phase 2 (Blocks 3 and 4)

As previously mentioned, an existing Y-shaped private storm service, which conveys flows from the adjacent commercial site (Tim Hortons and A&W) and the subject site will need to be rerouted, dedicated as a new municipal sewer and reconnected to the existing 2.44 m x 2.44 m storm sewer located within Phase 1. This proposed storm sewer will require a municipal easement. Further discussions with the City will be required.

#### Storm Sewer

- 300 mm storm service at a 1.0 % slope for Block 3
- 300 mm storm service at a 1.0 % slope for Block 4

#### Sanitary Servicing

- 200 mm sanitary service at 2.00 % slope for Block 3.
- 200 mm sanitary service at 2.00 % slope for Block 4.
- Each service line will ultimately connect to the existing 300 mm combined sewer within Ferguson Avenue North.

#### Water Supply Network

- Two (2) 200 mm fire services per OBC for Block 3.
- One (1) 150 mm domestic service for Block 3.
- Two (2) 200 mm fire services per the OBC for Block 4.
- One (1) 150 mm domestic service for Block 4.
- · Each block will connect to the existing 200 mm water main within Ferguson Avenue North.

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#### Phase 3 (Block 5)

#### Storm Sewer

- 300 mm storm service at a 1.0 % slope.
- Block 5 will connect to the rerouted 750 mm municipal storm sewer as mentioned above.

- 200 mm sanitary service at a 2.00 % slope.
- Block 5 will connect to the existing 1200 mm combined sewer that traverses the existing site.

#### **Water Supply Network**

In this phase a proposed 200 mm water main<sup>1</sup> will be extended from Barton Street by connecting to the existing 200 mm water main. The new water main will be installed adjacent to the existing 1200 mm combined sewer within the site access south to Phase limits of Phase 3 and Phase 4 and contained within a servicing easement.

- Two (2) 200 mm fire services per the OBC.
- One (1) 150 mm domestic service.
- Water services for each block will connect to proposed 200 mm water main as mentioned above.

### Phase 4 (Blocks 6 and 7)

#### Storm Sewer

- 300 mm storm service at a 1.0 % slope for Block 6.
- 300 mm storm service at a 1.0 % slope for Block 7.
- Each block will connect to the relocated 750 mm storm sewer mentioned in phase 2.

#### Sanitary Sewer

To provide sanitary servicing to the subject site, the existing 1200 mm combined sewers within the site will be relocated 7.5 meters to the west and be located within a 12.5 m municipal easement as discussed with the City of Hamilton. This relocation is also required to permit Blocks 6 to be constructed.

- 200 mm sanitary sewer at 2.0 % for Block 6.
- 200 mm sanitary sewer at 2.0 % for Block 7.
- Each block will connect to the relocated 1200 mm combined sewer.
- · Additionally, the sanitary service connection for Phase 3 will be reinstated to the relocated 1200 mm combined sewer.

### **Water Supply Network**

- Two (2) 200 mm fire services per the OBC for Block 6.
- One (1) 150 mm domestic service for Block 6.
- Two (2) 200 mm fire services per the OBC for Block 7.
- One (1) 150 mm domestic service for Block 7.
- Water services for each block will connect to the newly extended 200 mm water main<sup>1</sup> mentioned in phase 3 servicing strategy.

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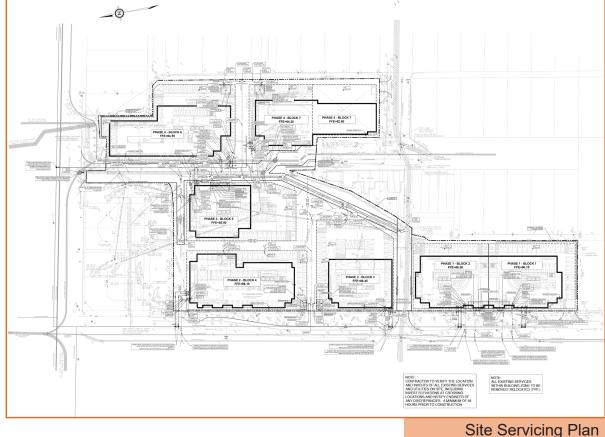
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Kindly Note that this servicing memo is based on the conceptual master servicing plan provided which may change due to comments from the City of Hamilton and detailed design review.

ARCADIS PROFESSIONAL SERVICES (CANADA) INC.

Imad Qneibi, P.Eng, Associate, Project Manager Land Engineering

Enc. SS-01 Conceptual Site Servicing Drawing.



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<sup>&</sup>lt;sup>1</sup> New municipal water main size to be verified.