City of Kingston  
Report to Committee of Adjustment  
Report Number COA-20-023

To: Chair and Members of Committee of Adjustment  
From: Phillip Prell, Planner  
Date of Meeting: April 20, 2020  
Application for: Minor Variance  
File Number: D13-005-2020  
Address: 628 Johnson Street  
Owner: Janani Sivakumar  
Applicant: Heather Cirella

Council Strategic Plan Alignment:

Theme: 2. Increase housing affordability

Goal: 2.1 Pursue development of all types of housing city-wide through intensification and land use policies.

Executive Summary:

This report provides a recommendation to the Committee of Adjustment regarding an application for minor variances for the property located at 628 Johnson Street. The applicant is proposing to vary two regulations: (1) to reduce exterior side yard setbacks to accommodate a deck projection with a covered porch and (2) to increase the maximum allowable building depth to accommodate a second residential unit.

The requested minor variances are consistent with the general intent and purpose of both the City of Kingston Official Plan and Zoning By-Law Number 8499. The requested minor variances are desirable for the appropriate development or use of the land, building or structure and are minor in nature. As such, the proposed application meets all four tests under Subsection 45(1) of the Planning Act and is recommended for approval.
Recommendation:

That minor variance application, File Number D13-005-2020, for the property located at 628 Johnson Street be approved so long as the following condition(s) are fulfilled:

Before ground disturbance, archaeological clearance of the subject property is required in the form of an archeological assessment report(s) in conformity with the Ministry of Heritage, Sport, Tourism, and Culture Industries' Standards and Guidelines for Consultant Archaeologists, must be submitted to the City heritage planning staff, together with correspondence from the Ministry outlining the results of their review.

Variance Number 1: Projections into Exterior Side Yards
By-Law Number 8499: Section 5.8(c), 6.3(c)(iii) & 6.3(b)(ii)
Requirement: Projections into yards above 1.2 metres must meet setback requirements for individual zones, which is 1.8 metres along Toronto Street.
Proposed: Allow a projection into the exterior side yard that is 1.1 metres from the property line.
Variance Requested: To permit a decrease in minimum side yard requirements by 0.7 metres.

Variance Number 2: Maximum Building Depth
By-Law Number 8499: Section 6.3(g)(ii)(a)
Requirement: Average of established front and rear building lines of the two nearest permitted residential buildings on the same block on opposite sides of the building which is 12.6 metres.
Proposed: Allow a maximum building depth of 16.1 metres.
Variance Requested: To permit an increase to the maximum building depth by 3.5 metres.

Approval of the foregoing variance shall be subject to the following conditions:

1. Limitation

   That the approved variance(s) applies only to the setback requirements and building depth for 628 Johnson Street as shown on the approved drawings attached to the notice of decision.

2. No Adverse Impacts

   The owner/applicant shall demonstrate to the satisfaction of the City that there are no adverse impacts on neighbouring properties as a result of any modifications to on-site grading or drainage.
3. Building Permit Application Requirements

The owner/applicant shall provide to the Building Division a copy of the decision of the Committee of Adjustment, together with a copy of the approved drawings, when they make an application for a Building Permit.

The drawings submitted with the Building Permit application must, in the opinion of the City, conform to the general intent and description of the approved drawing(s), including any amendments and conditions approved by the Committee of Adjustment, as stated in the decision. It must be noted that additional planning approvals may be required should further zoning deficiencies be identified through the Building Permit application process.

4. Standard Archaeological Condition

In the event that deeply buried or previously undiscovered archaeological deposits are discovered in the course of development or site alteration, all work must immediately cease and the site must be secured. The Cultural Program Branch of the Ministry of Tourism, Culture and Sport (416-314-7132) and the City of Kingston’s Planning Division (613-546-4291, extension 3180) must be immediately contacted.

In the event that human remains are encountered, all work must immediately cease and the site must be secured. The Kingston Police (613-549-4660), the Registrar of Cemeteries Regulation Section of the Ontario Ministry of Consumer Business Services (416-326-8404), the Cultural Program Branch of the Ministry of Tourism, Culture and Sport (416-314-7132), and the City of Kingston’s Planning Division (613-546-4291, extension 3180) must be immediately contacted.
Authorizing Signatures:

☐

Phillip Prell, Planner

In Consultation with the following Management of the Community Services Group:

Paige Agnew, Commissioner, Community Services
Options/Discussion:

On January 31, 2020, a minor variance application was submitted by Heather Cirella, on behalf of the owner, Janani Sivakumar, with respect to the property located at 628 Johnson Street. The variances requested are to reduce exterior side yard setbacks requirements to accommodate a deck projection, with a covered porch, for access purposes and increase the maximum allowable building depth requirements to accommodate a second residential unit.

In support of the application, the applicant has submitted the following:

- Site Plan (Exhibit E);
- IBI Memorandum: Measurements (Exhibit G); and
- Servicing Brief (Exhibit H).

All submission materials are available online through the Development and Services Hub (DASH) at the following link, DASH, using “Look-up a Specific Address”. If there are multiple addresses, search one address at a time, or submission materials may also be found by searching the file number.

Site Characteristics
The subject property is designated ‘Residential’ in the Official Plan and zoned ‘One-Family and Two-Family’ in Zoning By-Law Number 8499. The subject lot is applying to reduce exterior side yard setbacks requirements to accommodate a deck projection for access purposes and increase the maximum allowable building depth requirements to accommodate a second residential unit. The property abuts other residential uses permitted within the One-Family and Two-Family ‘A’ zone in 8499.

Application
The review of an application for minor variance(s) is not a simple mathematical calculation, but rather a detailed assessment of whether the variance(s) requested, both separately and together, meet the four tests of a minor variance outlined in Subsection 45(1) of the Planning Act. The following provides this review:

Provincial Policy Statement
In addition to the four tests of a minor variance detailed above, Subsection 3(5) of the Planning Act requires that a decision in respect of the exercise of any authority that affects a planning matter shall be consistent with the Provincial Policy Statement (the PPS). The PPS provides policy direction on matters of provincial interest related to land use planning and development which are complemented by local policies addressing local interests. The application being considered is site specific to accommodate a specific proposal and does not involve any major policy considerations and as such, the proposal conforms to and is consistent with the PPS.

1) The general intent and purpose of the Official Plan are maintained

The subject property is designated 'Residential' in the City of Kingston Official Plan. Permitted uses in a 'Residential' area include: “detached, semi-detached or duplex
dwellings, townhouses, and apartments of various types, tenure, and density that respond to a wide range of housing needs.” The proposal to increase the allowable building depth and reduce minimum side yard requirements helps to facilitate a second residential unit while preserving compatibility with the existing neighbourhood. In addition, section 3.3.11. has multiple policies related to second residential units. The application fulfills these second residential unit requirements since the second residential unit will be located within a single detached dwelling, is not located within a constraint area or floodplain, will not be severed from the lot containing the principal residential unit, and provides for an additional parking spot in compliance with the zoning provisions in By-Law Number 8499. The subject property is considered a low density residential dwelling due to being below 37.5 units per net hectare. Please note that second residential units are not subject to density requirements or part of this density calculation. These changes conform with the existing residential areas stable policies in section 3.3.6 since there are only minor changes to the predominant pattern of the housing type and density. This satisfies the requirement for compatibility with adjacent development.

In considering whether this proposed variance is desirable, the Committee of Adjustment will have regard to the nine requirements included in Section 9.5.19 of the Official Plan. The following provides these nine requirements and an assessment of how the proposal is consistent with each.

1. The proposed development meets the intent of Section 2 Strategic Policy Direction, and all other applicable policies of this Plan;

   The proposal to allow an increase to the maximum building density and a reduction to side yard setback requirements meets the intent of Section 2 and other applicable policies of the Official Plan since the variances requested are done to support the creation of a second residential unit and fit the existing neighborhood context. This allows for intensification to occur within the urban boundary in a previously established single-detached building, while not negatively impacting the existing neighborhood character.

   Building depth limits are one mechanism to limit the over development of lands and related privacy concerns, especially within stable residential areas. 628 Johnson Street currently has one of the smallest building depths amongst neighbouring properties, and existing hedges, a neighbouring garage and a lane way appropriately buffers the addition, which mitigates privacy concerns.

   The resulting addition of a second residential unit would not constitute an over development of lands when considering the existing neighbourhood context, and fulfills the goal of increased intensification within the urban boundary while mitigating privacy concerns.

   The requested variance to allow a deck projection, with a covered porch, along Toronto Street is setback from the intersection and is requested to allow a separate entrance to the second residential unit.
2. The proposed development will be compatible with surrounding uses, buildings or structures and development standards associated with adjacent properties, and if necessary, incorporate means of alleviating adverse effects on abutting land uses as recommended in Section 2.7 of this Plan;

The proposed building depth and deck projection variances should not cause any negative impacts on abutting residential uses. Building depth limits are meant to limit over development of lands, reduce the potential for negative visual impacts on neighbouring lands and to prevent privacy and overlook concerns. Since the property is situated on the corner of Johnson and Toronto Street the main properties impacted are to the east (626 Johnson Street) and to the south (47 Toronto Street). The easterly neighbour already has a detached garage in their rear yard, which would mitigate privacy and visual impact concerns. The southern neighbour is buffered by a deep rear yard on the subject property, two proposed parking spaces and an existing lane between 628 Johnson Street and 47 Toronto Street, all of which mitigate privacy and visual impact concerns. Additionally, there are hedges that currently exist along the westerly portion of the property that buffer the change in view of the second residential unit addition for 642 Johnson Street and 52 Toronto Street. Finally, 628 Johnson Street currently has one of the smallest building depths amongst neighbouring properties, so the resulting addition of a second residential unit would not constitute an over development of lands when considering the existing neighbourhood context.

3. The ability of the site to function in an appropriate manner in terms of access, parking for vehicles and bicycles or any other matter and means of improving such function including considerations for universal accessibility;

Schedule 4 of the City of Kingston Official Plan designates Johnson Street as an Arterial Road, which supports a large amount of vehicle traffic. In addition, Johnson Street is a one-way street with eastward travelling traffic. This traffic would be absorbed by the westerly side of Toronto Street which is opposite the subject property. As a result, the deck projection would cause no visual disturbance to drivers exiting Johnson Street.

The applicant has also reconfigured their parking to satisfy the second residential unit requirement for an additional parking space by proposing to demolish the existing garage and placing two zone compliant spaces to the rear of the property, in its place, approximately 30 metres away from the intersection of Toronto and Johnson Street.

Since Toronto Street is a local street and facilitates local traffic volumes, there should be no access/exit parking concerns for residents.

4. The conformity of the proposal to any applicable urban design policies endorsed by Council, particularly if the site includes or could impact a built heritage resource or is within a Heritage District;

The proposal is not anticipated to negatively impact the streetscape or neighbourhood design as the proposed building depth is similar to other neighbouring properties, the
second residential unit is adequately buffered on all sides and the deck projection, with a covered porch, is approximately 15 metres south from the intersection. In addition, there are no abutting designated heritage buildings surrounding 628 Johnson Street. The property is not within a heritage district.

5. If the site is designated under the *Ontario Heritage Act*, the application shall be reviewed by Heritage Kingston for approval. If the property is adjacent to a designated property under the *Ontario Heritage Act* or shown as a Heritage Area feature, or is affected by the protected views shown on Schedule 9 of this Plan, then a Heritage Impact Statement may be required to assist staff to determine if the resulting development is desirable;

The subject lands are not designated under the *Ontario Heritage Act*. The site is within an area with composite archaeological potential. Archaeological clearance is required prior to ground disturbance.

6. The resulting development has adequate municipal water and sewage services within the Urban Boundary, or is capable of providing individual on-site water and sewage services outside the Urban Boundary;

The subject property is currently utilizing municipal water and sewage services within the urban boundary. The current proposal is requesting to intensify service usage by adding a second residential unit. Utilities Kingston has not raised concerns regarding the increase in services required. However, Utilities Kingston has reviewed the submitted servicing brief (Exhibit H) and has determined that a resubmission that incorporates an infield investigation is required due to inconsistencies with Utilities Kingston’s records. This is required prior to demolishing the garage in the backyard.

7. Whether the application and the cumulative impact of the proposed variances would be more appropriately addressed by a zoning amendment to the applicable zoning by-law;

The application and cumulative impact of the proposal does not warrant a zoning by-law amendment.

8. The Committee of Adjustment may attach such conditions as it deems appropriate to the approval of the application for a minor variance including any reasonable requirements, recommendations of City departments, or the submission of studies as listed in Section 9.12 of this Plan that may be required to properly evaluate the application;

The Committee of Adjustment may require additional conditions as it deems appropriate to the approval of the application. Suggested conditions are listed in the recommendation above. Conditions may be added, altered or removed at the Committee’s Discretion.

9. The degree to which such approval may set an undesirable precedent for the immediate area.
April 20, 2020

The approval of the requested variances will not set a precedent for the immediate area, since each minor variance is reviewed independently and judged on its own merits and metrics.

The general intent and purpose of the Official Plan are maintained, as the proposed increase to building depth and reduction of setback regulations for the deck projection, with a covered porch, will not result in any negative impacts to adjacent properties or to the neighbourhood.

### Variance Number 1: Projections into Exterior Side Yards

**By-Law Number 8499:** Section 5.8(c), 6.3(c)(iii) & 6.3(b)(ii)

**Requirement:**
Projections into yards above 1.2 metres must meet setback requirements for individual zones, which is 1.8 metres along Toronto Street.

**Proposed:**
Allow a projection into the exterior side yard that is 1.1 metres from the property line.

**Variance Requested:**
To permit a decrease in minimum side yard requirements by 0.7 metres.

### Variance Number 2: Maximum Building Depth

**By-Law Number 8499:** Section 6.3(g)(ii)(a)

**Requirement:**
Average of established front and rear building lines of the two nearest permitted residential buildings on the same block on opposite sides of the building which is 12.6 metres.

**Proposed:**
Allow a maximum building depth of 16.1 metres.

**Variance Requested:**
To permit an increase to the maximum building depth by 3.5 metres.

2) **The general intent and purpose of the zoning by-law are maintained**

The subject property is zoned One-Family Dwelling and Two-Family Dwelling Zone 'A' in the City of Kingston Zoning By-Law Number 8499, entitled "Restricted Area (Zoning) By-Law of the Corporation of the City of Kingston", as amended. The 'A' zone permits one-family dwellings and associated second residential units.

The proposal requires two variances to the following sections in Zoning By-Law Number 8499: **Variance 1:** 5.8(c), 6.3(c)(iii) & 6.3(b)(ii) and **Variance 2:** 6.3(g)(ii)(a)

**Variance Number 1: Projections into Exterior Side Yards**

The purpose of the encroachment provisions in Zoning By-Law Number 8499 is to ensure that encroachments do not impact the overall streetscape and that there are no impacts to the visibility at intersections as a result of said encroachment. Variance Number 1 maintains the general intent and purpose of the zoning by-law since there are other porch and stair projections of a similar nature in the immediate vicinity of the subject property. This appears to be a common occurrence in the surrounding neighbourhood. In addition,
the intent and purpose are maintained since the deck projection is approximately 15 metres south from the intersection of Johnson and Toronto Street, and is located across the street from the right turn required for Johnson Street’s one-way traffic. These factors should result in no visual interference at the Johnson and Toronto intersection. Finally, the deck provides an entrance way for the future residents of the proposed second residential unit that is connected to the street.

Variance Number 2: Maximum Building Depth

The purpose of the maximum building depth provisions in Zoning By-Law Number 8499 is to mitigate potential negative visual impacts that could result from overdevelopment, which carries the potential for intrusive overlook into rear yards and the potential loss of an acceptable amount of open space. Variance Number 2 maintains the general intent and purpose of the zoning by-law since the site is appropriately buffed along the east, west and south sides of the property and still fulfills the 30 percent landscaped open space requirement for the ‘A’ zone in By-Law Number 8499. The easterly neighbour (626 Johnson Street) already has a detached garage in their rear yard, which would help mitigate privacy and visual impact concerns. The southern neighbour (47 Toronto Street) is buffered by a deep rear yard on the subject property, the two proposed parking spaces and an existing lane between 628 Johnson Street and 47 Toronto Street, all of which help mitigate privacy and visual impact concerns. Additionally, there are hedges that currently exist along the westerly portion of the property behind the main building that buffer the change in view of the second residential unit addition for 642 Johnson Street and 52 Toronto Street.

The general intent and purpose of Zoning By-Law Number 8499 are maintained.

3) The variance is minor in nature

Variance Number 1: Projections into Exterior Side Yards

The requested variance to allow a reduced exterior side yard to facilitate a deck projection is considered minor as there will be no negative visual impacts to the community character and will not impact the sightlines at the intersection of Johnson and Toronto Street. The proposed deck, with a covered porch, is not uncommon for the area so it would fit within the existing community and would be used to provide street access to the proposed second residential unit. Furthermore, Johnson Street is a one-way arterial street with eastward travelling traffic and right turns off this street would be facilitated on the side of Toronto Street opposite the subject property. In addition, the proposed deck is setback approximately 15 metres from the intersection so there should be no impacts to car sightlines to impede safe driving and turns onto Johnson Street.

Variance Number 2: Maximum Building Depth

The requested variance to allow an increase to the maximum building depth is considered minor as there will be no negative visual impacts on the neighbouring lands, no privacy
and overlook concerns, and the proposal contains similar massing to neighbouring properties. As the building is situated on a corner lot, there is a potential impact on the eastern, southern and western neighbouring properties. The easterly neighbour is buffered by a detached garage in the rear yard. The southern neighbour is buffered by a deep rear yard on the subject property, the two proposed parking spaces and an existing lane that separates the properties. There are hedges that currently exist along the westerly portion of the property that would buffer the view of the proposed second residential unit.

The proposed variances are considered minor in nature.

4) The variance is desirable for the appropriate development or use of the land, building or structure

Variance Number 1: Projections into Exterior Side Yards

The requested variance to allow a reduced exterior side yard to facilitate a deck projection, with a covered porch, is desirable for the appropriate development as deck projections that approach or surpass the lot line are common along nearby streets, such as Johnson, Toronto, Victoria and Earl Streets. As such, the proposed variance to permit a deck, with a covered porch, is appropriate and reflects the established built form of the existing neighbourhood. This layout and deck location is also appropriate since it is not anticipated to create any visual interference at the intersection of Johnson and Toronto Street, while providing street access to the proposed second residential unit.

Variance Number 2: Maximum Building Depth

The requested variance to allow an increase to the maximum building depth is desirable for the appropriate development and use of land as it will facilitate a second residential unit within the urban boundary while not causing potential negative visual impacts associated with excessive building depth. This is facilitated by a combination of existing site conditions, such as: (1) a detached garage to the east, (2) a deep rear yard on the subject property, two proposed parking spaces and an existing lane that separates the subject and southern properties, and (3) hedges that currently exist along the westerly portion of the property.

The proposed variances are desirable and appropriate development of the subject property.

Technical Review: Circulated Departments and Agencies

☒ Building Division ☒ Engineering Department ☒ Heritage (Planning Division)
☐ Finance ☒ Utilities Kingston ☒ Real Estate & Environmental Initiatives
☒ Fire & Rescue ☒ Kingston Hydro ☒ City’s Environment Division
☐ Solid Waste ☒ Parks Development ☐ Canadian National Railways
☒ Housing ☒ District Councillor ☐ Ministry of Transportation
☐ KEDCO ☐ Municipal Drainage ☐ Parks of the St. Lawrence
April 20, 2020

Technical Comments
This application was circulated to external agencies and internal departments for their review and comment and there were no comments or concerns raised that would preclude this application from moving forward. Any technical comments that are received after the publishing of this report will be included as an addendum to the Committee of Adjustment agenda.

Public Comments
At the time this report was finalized, no public comments had been received. Any public comments received after the publishing of this report will be included as an addendum to the Committee of Adjustment agenda.

Previous or Concurrent Applications
There are no concurrent or relevant historic planning applications on the subject property.

Conclusion
The requested variance(s) maintain(s) the general intent and purpose of both the City of Kingston Official Plan and Zoning By-Law Number 8499. The proposal is desirable for the appropriate development or use of the land, building or structure and the requested variance(s) are minor in nature. As such, the proposed application meets all four tests under Subsection 45(1) of the Planning Act and the application is being recommended for approval, subject to the proposed conditions.

Existing Policy/By-Law:

The proposed application was reviewed against the policies of the Province of Ontario and City of Kingston to ensure that the changes would be consistent with the Province’s and the City’s vision of development. The following documents were assessed:

Provincial
Provincial Policy Statement, 2014

Municipal
City of Kingston Official Plan
Zoning By-Law Number 8499

Notice Provisions:

A Committee of Adjustment Meeting is going to be held respecting this application on March 23, 2020. Pursuant to the requirements of the Planning Act, a notice of Statutory Public Meeting was provided by advertisement in the form of signs posted on the subject site 10 days in
advance of the meeting. In addition, notices were sent by mail to a total number of 37 property owners (according to the latest Assessment Roll) within 60 metres of the subject property and a courtesy notice was placed in The Kingston Whig-Standard.

Once a decision has been rendered by the Committee of Adjustment, a Notice of Decision will be circulated in accordance with the provisions of the *Planning Act*.

**Accessibility Considerations:**

None

**Financial Considerations:**

None

**Contacts:**

Tim Park, Manager of Development Approvals 613-546-4291 extension 3223

Phillip Prell, Planner 613-564-4291 extension 3219

**Other City of Kingston Staff Consulted:**

The application was circulated to the relevant internal departments and external agencies for review and comment. The responses to the technical circulation have been addressed in the technical review and included in this report.

**Exhibits Attached:**

- Exhibit A  Key Map
- Exhibit B  Public Notice Notification Map
- Exhibit C  Official Plan Map
- Exhibit D  Zoning By-Law Map
- Exhibit E  Site Plan
- Exhibit F  Photo
- Exhibit G  IBI Group Incorporated Memorandum: Measurements
- Exhibit H  Servicing Brief
- Exhibit I  Neighbourhood Context (2018)
Committee of Adjustment
Public Notice Notification Map

File Number: D13-005-2020
Address: 628 Johnson Street

Legend

- 60m Public Notification Boundary
- Subject Lands
- Property Boundaries
- 37 Properties in Receipt of Notice (MPAC)
COMMITTEE OF ADJUSTMENT

Official Plan, Existing Land Use

File Number: D13-005-2020
Address: 628 Johnson Street

Legend

- Subject Lands
- RESIDENTIAL

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DATE: 2020-02-04
PREPARED BY: rrochefort

Planning Services
a department of Community Services

EXHIBIT C
Report Number COA-20-023

File Number: D13-005-2020
Address: 628 Johnson Street
COMMITTEE OF ADJUSTMENT

Existing Zoning - By-law 8499, Map 30

File Number: D13-005-2020
Address: 628 Johnson Street

Legend

- Subject Lands
- Consolidated Zoning
EXISTING SINGLE DWELLING UNIT TO REMAIN
628 JOHNSON STREET

PROPOSED SECOND RESIDENTIAL UNIT

EXISTING GARAGE TO BE REMOVED

EXISTING DRIVEWAY

EXT. SIDE YARD SETBACK = 1.0M

O/H HYDRO LINE

TO DTO RONTO STREET

ZONING NOTES:
628 JOHNSON STREET
ZONING: RESIDENTIAL 'A'
LOT FRONTAGE: 12.19M
LOT AREA: 410.32 SQM
EXISTING LOT COVERAGE TOTAL: 22%
PROPOSED LOT COVERAGE TOTAL: 28%
LANDSCAPE OPEN SPACE: 62%
OVERALL BUILDING HEIGHT: 9.67M
MAX. FSR: 1.0
PROPOSED FSR: <1.0
MIN. FRONT YARD SETBACK: 2.7M
MIN. SIDE YARD SETBACK: 0.6M
MIN. ext. SIDE YARD SETBACK: 1.8M
MIN. REAR YARD SETBACK: 7.5M
MAX. BUILDING DEPTH: 12.55M
PROPOSED BUILDING DEPTH: 15.92M

GENERAL NOTES:
1. DO NOT SCALE DRAWING
2. THIS DRAWING IS NOT TO BE REPRODUCED UNLESS PROPER WRITTEN CONSENT IS OBTAINED FROM HMD DRAFTING & DESIGN
3. ALL DIMENSIONS TO BE VERIFIED PRIOR TO CONSTRUCTION
4. ALL WORK SHOULD BE IN STRICT ACCORDANCE WITH THE 2012 ONTARIO BUILDING CODE & LOCAL MUNICIPAL BY-LAWS
5. THESE PLANS MAY BE ALTERED DUE TO ON-SITE CONDITIONS NOT FORESEEN PRIOR TO CONSTRUCTION
6. AFTER PERMIT IS OBTAINED ANY CHANGES MADE BY OWNER OR CONTRACTOR WILL BE THEIR RESPONSIBILITY AND HMD DRAFTING & DESIGN WILL NOT BE RESPONSIBLE
7. BEFORE BEGINNING ANY WORK IF CONTRACTOR FINDS ANY DISCREPANCIES NOTIFY HMD DRAFTING & DESIGN TO RECTIFY A SOLUTION
8. THESE PLANS FORM THE BASES FOR PERMIT ISSUANCE AND ANY DEVIATIONS FROM THESE PLANS AND DETAILS, INCLUDING THE VENTILATION SYSTEM, HEATING SYSTEM, WOODSTOVE, FIREPLACE, DECKS, BALCONIES, AND FINISHED BASEMENTS, WILL REQUIRE REVISED DRAWINGS AND CLEARANCE BY THE BUILDING DEPARTMENT.
Memorandum

To/Attention: Phillip Prell, M.Pl
From: Tracy Tucker
Date: February 7, 2020
Project No: 123833
cc: Ms. Heather Cirella

Subject: Minor Variance Application 628 Johnson Street, Kingston

Further to your correspondence with Ms. Heather Cirella of HMD Drafting & Design regarding the proposed variances with respect to the lands located at 628 Johnson Street, we can provide the following information. The requested variances were based on the information provided within the Pre-Application document for the subject lands, as well as our own measurements and investigations, which we found to be inconsistent on some points. Based on our review, modifications to the requested variances are being sought.

We will no longer be requesting variances for existing conditions, and have also updated some of the variance requests based on certain revised measurements.

The current by-law requirements for front and exterior side yards are calculated based on averages of the neighbouring dwellings “fronting on the same street (6.3(b)ii). The subject lands are a corner lot. As such, in the case of the front yard average, the lands at 626 Johnson Street (east) and 642 Johnson Street (west, opposite Toronto Street) were reviewed. The lands at 47 Toronto (south) and 629 Johnson Street (north, opposite Johnson Street) were reviewed for the exterior side yard average.

For the calculation of required building depth, the by-law requirement is similar, but has one key distinction in that it refers to measuring the depth of the buildings on the “nearest lots on the same block on opposite sides of the subject building” [6.3(g)(ii)(1)(a)]. Based on a discussion with Staff, this is understood to mean the lot at 626 Johnson Street and the lot at 47 Toronto Street.

We are requesting that the variances ultimately to be granted for the proposed dwelling include a small allowance for construction error (reasonable “rounding”), which is typical practice in our experience. Further, our experience with the City of Kingston is that variances are typically based on measurements to one decimal place rather than two, as construction accuracy is not precise to two decimal places.

We note that for the measurements provided below, we have relied on the measurement tool available in KMaps as we only have survey information for the subject lands.

**Front Yard Setback:** 3.06m (existing), whereas the average of the two adjacent dwellings (not including steps or eaves) is required.

626 Johnson Street – 2.6m from Johnson Street
642 Johnson Street – 2.8m from Johnson Street

Based on these existing setbacks of buildings on either side, the average is 2.7m. Therefore, this variance is not required and we have updated our Planning Opinion Letter to this effect.
Front Porch Projection: 2.86m from the building, 0.19m from the lot line, whereas, a porch is permitted to project into a front yard 2.5m from the building, but not closer than 3.5m from the front lot line.

Given that the existing front yard is 3.06m, it would not be possible to have a projection into the front yard. The proposed projection relief is two-fold: the first being an increase from 2.5m to 2.86m for the permitted projection from the building face, and the second being to permit the projection to be no more than 0.19m to the property line. In this instance, the projection is existing, and therefore is technical in nature to recognize the existing location of the front porch and steps. In our experience, these variances are not strictly required as they are unchanging and unaffected by the proposed addition, but we have requested them out of an abundance of caution. Our Planning Opinion Letter has been updated accordingly.

The proposed projections are typical of the neighbourhood and similar projections can be seen on the lands located at 624, 626, 629, 642, & 644 Johnson Street, as well as 45, 48, & 53 Toronto Street.

Exterior Side Yard Setback (Toronto Street frontage): 2.8m (proposed), whereas the average of the two adjacent dwellings is required.

47 Toronto Street – 3.6m from Toronto Street
629 Johnson Street – 0m to Toronto Street
Average: 1.8m

Therefore the variance to the exterior side yard is not required. Our Planning Opinion Letter has been updated accordingly.

Exterior Side Yard Porch Projection: 1.8m from the building, whereas, because the porch is more than 1.2m above grade, the permitted projection is the required minimum exterior side yard setback.

Variance required: -0.72m projection into the required exterior side yard of 1.8m.

The minimum required exterior side yard is 1.8 m, and the proposed porch is to project to 1.08m from the exterior lot line, therefore the porch requires a variance of -0.72m. The requested variance from the exterior side yard setback is not anticipated to negatively impact the sight lines to the intersection as the proposed projection is well set back from the intersection.

Maximum Building Depth: 16.0m proposed, whereas the permitted maximum is the average distance between the established front building lines and the established rear building lines of the two nearest residential buildings on the nearest lots on the same block on opposite side of the subject building.

626 Johnson Street – 8.6m deep
47 Toronto Street – 16.5m deep

The subject lands are located on a corner lot, so the average on the same block, on opposite sides of the dwelling is based on the lots to the east and to the south. Given this, resulting in an average depth of 12.55 m.

Variance Required: Maximum building depth proposed is 16.0m, whereas, 12.55m is permitted based on the adjacent lands to the east within the same block. The requested variance would see an increase of 3.45m to the maximum building depth based on the average.

Planning Rationale: The purpose of the maximum building depth is to ensure that the subject lands are not over developed and that development will not impact the adjacent lands, with respect to shadow and overlook in the rear yard. The lands to the east of the subject lands, which would be
most impacted by the proposed increase have a detached garage in the rear yard which would abut the proposed addition. As such, there are no anticipated impacts on the adjacent lands as a result of the increase to the building depth. Further the lands at 624 Johnson Street and 629 Johnson Street both contain deeper buildings than the proposed addition and so the proposed addition is not inconsistent with what is found in the immediate area.

Revised Variance Request:

<table>
<thead>
<tr>
<th>Required/Permitted</th>
<th>Proposed</th>
<th>Extent of Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Front Yard</td>
<td>Average of the two adjacent dwellings: 626 Johnson – 2.6m 642 Johnson – 2.8m Average: 2.7m</td>
<td>3.06m (existing)</td>
</tr>
<tr>
<td>Maximum Front Yard Projection (0.6m to 1.2m in height)</td>
<td>2.5m from the building face, but no closer than 3.5m to the lot line</td>
<td>2.9m from the building face, but no closer than 0.1m to the lot line</td>
</tr>
<tr>
<td>Minimum Exterior Side Yard</td>
<td>Average of the two adjacent dwellings: 47 Toronto – 3.5m 629 Johnson – 0.0m Average: 1.8m</td>
<td>2.8m</td>
</tr>
<tr>
<td>Maximum Exterior Side Yard Projection (&gt;1.2m from grade)</td>
<td>Required yard setback 1.8m</td>
<td>1.08 m</td>
</tr>
<tr>
<td>Maximum Building Depth</td>
<td>The average distance between the established front building lines and the established rear building lines of the two nearest residential buildings on the nearest lots on the same block on opposite side of the subject building is permitted. 626 Johnson – 8.6m 47 Toronto Street – 16.5m Average: 12.55m</td>
<td>16.0m</td>
</tr>
</tbody>
</table>
Servicing Brief

628 Johnson Street. Kingston, ON
### Document Control Page

<table>
<thead>
<tr>
<th>CLIENT:</th>
<th>Sasi Kunaratnam</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROJECT NAME:</td>
<td>628 Johnson Street - Conversion to Two Units</td>
</tr>
<tr>
<td>REPORT TITLE:</td>
<td>Servicing Brief</td>
</tr>
<tr>
<td>IBI REFERENCE:</td>
<td>123834</td>
</tr>
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<td>1</td>
</tr>
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</tr>
<tr>
<td>ORIGINATOR:</td>
<td>Corey Alderman, P.Eng.</td>
</tr>
<tr>
<td>REVIEWER:</td>
<td>Bill Thomas, M.Eng., P.Eng.</td>
</tr>
<tr>
<td>AUTHORIZATION:</td>
<td>Bill Thomas</td>
</tr>
<tr>
<td>CIRCULATION LIST:</td>
<td></td>
</tr>
<tr>
<td>HISTORY:</td>
<td>1: 2020-01-31 - Issued for Minor Variance</td>
</tr>
</tbody>
</table>
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   2.2 Proposed Water Servicing ....................................................................................... 2

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1 Introduction

IBI Group was retained by Sasi Kunaratnam to prepare a Servicing Brief for the proposed site redevelopment at 628 Johnson Street, Kingston, ON.

The purpose of this brief report is to identify the estimated servicing requirements for the proposed site redevelopment. This will include the total estimated domestic water demand and estimated peak sanitary flow generated by the redevelopment for consideration by local authorities for available municipal water and sewer servicing capacity. This brief report will also include an outline of the availability of utility services in the area of the proposed redevelopment.

The proposed redevelopment will include the following:

- Addition of a second residential dwelling unit (6 bedrooms) to the property;
- Demolition of the existing detached garage; and
- Reconfiguration of parking to include two parking spaces with access from Toronto Street.

The subject site consists of approximately 0.04 ha, located at the corner of Johnson Street and Toronto Street, in Kingston, ON. The site currently consists of a 5 bedroom single family dwelling and detached garage. The site is bounded by Johnson Street to the north, Toronto Street to the west, and residential lots to the south and east.
The subject site’s approximate legal description is:

LOT 9 AND PART OF LOT 10
REGISTERED PLAN NO. B-29
CITY OF KINGSTON
COUNTY OF FRONTENAC

2 Water Servicing

2.1 Existing Water Servicing

The existing dwelling at 628 Johnson Street is believed to be serviced by a 25 mm service line that connects to a municipal watermain (200 mm diameter DI) located west of the property along Toronto Street. The location, material, size, and elevation of the existing watermain was estimated using the record drawings provided by the City of Kingston and GIS information provided by Utilities Kingston (see Appendix A).

Hydrant flow test results (see Appendix B) were provided by Utilities Kingston for hydrant #544, #553 and #554. Hydrant #553 is closest to the subject site and is located on the north-west corner of the intersection at Johnson Street and Toronto Street. Based on the hydrant flow test results, Hydrant #553 operates at a static pressure of 359 kPa (52 psi). The data provided also indicates that an available fire flow of 89 L/s with a residual pressure of 138 kPa (20 psi) is available for fire flow conditions. Hydrant #544 is located a block to the east at Johnson Street and Victoria Street, and Hydrant #554 is located a block to the south at Toronto Street and Earl Street. Based on the hydrant flow tests, Hydrants #544 and #554 have available flow rates of 51 L/s and 351 L/s respectively, with a residual pressure of 138 kPa (20 psi).

2.2 Proposed Water Servicing

In order to determine the water demand for the proposed redevelopment, a fixture count calculation was prepared in accordance with the Ontario Building Code (OBC) and is included in Appendix B. The proposed two-unit dwelling is not anticipated to be sprinklered. All calculations for existing and proposed water services have therefore been based on the requirements to supply strictly domestic water to the proposed redevelopment.

The total fixture unit count and corresponding water service size for the proposed redevelopment is summarized in Table 1 below.

<table>
<thead>
<tr>
<th>FIXTURE UNITS</th>
<th>EXISTING SERVICE SIZE</th>
<th>PROPOSED SERVICE SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redevelopment (Conversion to Two Units)</td>
<td>33</td>
<td>25 mm (assumed)</td>
</tr>
</tbody>
</table>

Table 1: Domestic Water Service Sizing

As per Table A-7.6.3.1.(2), of the Ontario Building Code, the assumed existing 25mm (1”) water service is sufficient for providing the domestic water demand to the proposed redevelopment of the site to include two dwelling units. If the existing service is determined to be smaller than 25 mm, the existing service shall be decommissioned and abandoned at the main to the satisfaction of Utilities Kingston, and a new service lateral shall be installed with a minimum size of 25 mm.

Prior to the disconnection of an existing water service, a notification at least 48 hours in advance shall be provided to Utilities Kingston.
Refer to Appendix D for the proposed site servicing drawing (C-200).

3 Sanitary Sewer Servicing

3.1 Existing Sanitary Sewer Servicing

The existing dwelling at 628 Johnson Street is currently serviced by a 150 mm diameter service lateral from a 200 mm diameter sanitary sewer main located along Toronto Street. The location, size, and elevation of the existing sanitary service and main along Toronto Street was estimated using the record drawings provided by the City of Kingston and GIS information provided by Utilities Kingston (see Appendix A).

The estimated total capacity of the existing sanitary main along Toronto Street in the vicinity of the proposed redevelopment is 29 L/s. This capacity was estimated based on the pipe size and slope inferred from the record drawings provided by the City of Kingston (Appendix A). Capacity calculations are included in Appendix C.

For capacity of the existing sanitary sewer lateral, the existing service is assumed to be installed at 2%. The record drawings provided by the City of Kingston indicate the existing service size is 150 mm. The size and slope should be confirmed prior to construction. The capacity of a 150 mm service installed at a minimum of 2% is 21.5 L/s.

3.2 Proposed Sanitary Sewer Servicing

Calculations were conducted to determine the estimated peak sanitary flows from the existing dwelling and the proposed conversion to two units (see Sanitary Sewer Design Sheet in Appendix C). The estimated peak sanitary flows are summarized in Table 2 below.

<table>
<thead>
<tr>
<th></th>
<th>ESTIMATED PEAK SANITARY FLOW (L/S)</th>
<th>EXISTING SERVICE SIZE</th>
<th>REQUIRED SERVICE SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Dwelling</td>
<td>0.17</td>
<td>150 mm*</td>
<td>&lt; 150 mm</td>
</tr>
<tr>
<td>Conversion to Two Units</td>
<td>0.37</td>
<td>150 mm*</td>
<td>&lt; 150 mm</td>
</tr>
</tbody>
</table>

Table 2: Estimated Peak Sanitary Flows
* Based on Record Drawings

Based on the estimated peak sanitary flows, the existing 150 mm diameter service lateral is believed to have sufficient capacity to service the proposed redevelopment.

A total peak sanitary flow of 0.37 L/s is expected from the proposed site redevelopment. The increase in sanitary flow generated by the redevelopment is not anticipated to cause any capacity issues downstream of the development site, however we request that Utilities Kingston verifies the additional capacity is available in their existing infrastructure. It has been assumed that sufficient capacity is available for the proposed redevelopment and that no sewer infrastructure upgrades should be required.

Refer to Appendix D for the proposed site servicing drawing (C-200).
4 Utilities

4.1 Hydro

The current electrical service provider in the area of the proposed redevelopment is Utilities Kingston (Kingston Hydro). Existing above ground hydro is available along both Johnson Street and Toronto Street. The existing dwelling is serviced via these lines. Design of electrical servicing and coordination with Kingston Hydro shall be completed by others.

4.2 Gas

The current gas service provider in the area of the proposed redevelopment is Utilities Kingston. Existing gas mains are available along both Johnson Street and Toronto Street. The existing dwelling is serviced from Johnson Street. Design of gas servicing and coordination with Utilities Kingston shall be completed by others. The owner will need to submit a “Natural Gas Load Summary” to Utilities Kingston in order to determine service sizing for the proposed redevelopment.

4.3 Telephone

The telephone service provider in the area of the proposed redevelopment site is Bell Canada. It has been noted that Bell Canada has utility infrastructure in this area. Design of telephone servicing and coordination with Bell Canada shall be completed by others.

4.4 Cable

The cable TV provider in the area of the proposed redevelopment site is Cogeco. It has been noted that Cogeco has utility infrastructure in this area. Design and coordination with Cogeco shall be completed by others.

5 Conclusion

The proposed site redevelopment is in an area with well-developed municipal infrastructure. The existing municipal infrastructure is assumed to have sufficient capacity to service the proposed redevelopment. Utilities Kingston shall verify that the water and sanitary services outlined in this brief report can be accommodated by the existing municipal infrastructure. In our opinion, the redevelopment will not significantly impact the capacity of the existing utilities and will not require an upgrade to the existing municipal infrastructure. The proposed redevelopment shall be serviced with existing water and sanitary sewer service connections to existing municipal infrastructure, but may require a water service size upgrade if the existing service diameter is smaller than 25 mm.

The material in this report reflects IBI Group’s judgement in light of the information available to it at the time of preparation and completion of this report. Should the above information not be accurate or current or change, it will be necessary to reconfirm the findings of this report. Any use which a Third Party makes of this report, or any reliance or decisions to be made based on it for other than its intended purpose, are the responsibility of such Third Party. IBI Group accepts no responsibility for damages, if any, suffered by any Third Party as a result of decisions made or actions based on this report.
6 References


Appendix A – Record Drawings

1. Existing Topographic Survey
2. Existing Plan & Profiles – City of Kingston
3. GIS Map – Utilities Kingston
Appendix B - Water

1. Fixture Counts
2. OBC Table A-7.6.3.1
3. Hydrant Flow Test – Utilities Kingston
## Table 7.6.3.2.A

<table>
<thead>
<tr>
<th>Item#</th>
<th>Fixture</th>
<th>OBC</th>
<th>Table 7.6.3.2.A</th>
<th>Basement</th>
<th>First Floor</th>
<th>Second Floor</th>
<th>Total Fixtures</th>
<th>Total Hydraulic Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td>W.C.</td>
<td>2.2</td>
<td></td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>20</td>
<td>Lav</td>
<td>1</td>
<td></td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Bath</td>
<td>1.4</td>
<td></td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>23</td>
<td>Shr</td>
<td>1.4</td>
<td></td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>K.S.</td>
<td>2</td>
<td></td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>14</td>
<td>D.W.</td>
<td>1.4</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>CL.W.</td>
<td>1.4</td>
<td></td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2.8</td>
</tr>
<tr>
<td>14</td>
<td>L.S.</td>
<td>1.4</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>HB</td>
<td>2.5</td>
<td></td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

### Notes:
- Refer to Table A-7.6.3.1.(2) (Ontario Building Code, Appendix A)
- Static Pressure on Hydrant #553: 52 psi
- Distance from Water Main to Building: approx. ±30.0 m

### Legend:
- W.C. - Water Closet
- K.S. - Kitchen Sink
- Lav - Lavatory
- D.W. - Dish Washer
- Bath - Bathtub
- CL.W. - Clothes Washer
- Shr - Shower
- HB - House Bib
- L.S. - Laundry Sink

### Design:
- CA

### Checked:
- BT

### Dwg Reference:
- HMD Drafting & Design
  - File Ref: 123834
  - Date: 2020-01-28
  - Sheets: A2 - A4
  - Sept 2019

### Exhibits:
- Exhibit H
  - Report Number COA-20-023
## Table A-7.6.3.1.
### Pipe Size Based on the Number of Fixtures Units Served

<table>
<thead>
<tr>
<th>Water Service, inches</th>
<th>Water Distribution System, inches</th>
<th>Maximum Allowable Length, m</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td>24</td>
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<tr>
<td>24</td>
<td>30</td>
<td>46</td>
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<td>46</td>
<td></td>
<td>61</td>
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<td>61</td>
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<td>76</td>
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<td>76</td>
<td>91</td>
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<td>91</td>
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<td>122</td>
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<td></td>
<td>244</td>
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<td>244</td>
<td>274</td>
<td>305</td>
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</tbody>
</table>

### Pressure Range

<table>
<thead>
<tr>
<th>Number of Fixture Units Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 to 310 kPa (30 to 45 psi)</td>
</tr>
<tr>
<td>242</td>
</tr>
</tbody>
</table>

### 311 to 413 kPa (46 to 60 psi)

<table>
<thead>
<tr>
<th>Number of Fixture Units Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>311 to 413 kPa (46 to 60 psi)</td>
</tr>
<tr>
<td>36</td>
</tr>
</tbody>
</table>

### Over 413 kPa (60 psi)

<table>
<thead>
<tr>
<th>Number of Fixture Units Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 413 kPa (60 psi)</td>
</tr>
<tr>
<td>611</td>
</tr>
</tbody>
</table>

**Notes to Table A-7.6.3.1.:**

1. Where total fixture unit values exceed those given in this Table, the system must be designed according to a detailed engineering design method.

---

Page 96  Appendix A • Volume 2 242
### Table 7.6.3.2.A.
Sizing of Water Distribution Systems
Forming Part of Sentences 7.6.3.2.(1) to (3) and 7.6.3.4.(2), (3) and (5)

<table>
<thead>
<tr>
<th>Fixture or Device</th>
<th>Minimum Size of Supply Pipe, in.</th>
<th>Private Use Hydraulic Load, fixture units</th>
<th>Public Use Hydraulic Load, fixture units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cold</td>
<td>Hot</td>
<td>Total</td>
</tr>
<tr>
<td>Bathroom group with 6 LPF flush tank&lt;sup&gt;(3)&lt;/sup&gt;</td>
<td>N/A</td>
<td>2.7</td>
<td>1.5</td>
</tr>
<tr>
<td>Bathroom group with greater than 6 LPF flush tank&lt;sup&gt;(3)&lt;/sup&gt;</td>
<td>N/A</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Bathroom group with more than 3 fixtures</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bathtub with or without shower head</td>
<td>1/2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Bathtub with 3/4 in. spout</td>
<td>3/4</td>
<td>7.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Bedpan washer</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bidet</td>
<td>3/8</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Clothes washer, 3.5 kg</td>
<td>1/2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Clothes washer, 6.8 kg</td>
<td>1/2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Clothes washer, commercial&lt;sup&gt;(5)&lt;/sup&gt;</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dental lavatory</td>
<td>3/8</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dental unit, cuspidor</td>
<td>3/8</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dishwasher, commercial&lt;sup&gt;(5)&lt;/sup&gt;</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dishwasher, domestic</td>
<td>3/8</td>
<td>-</td>
<td>1.4</td>
</tr>
<tr>
<td>Drinking fountain or water cooler</td>
<td>3/8</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hose bibb</td>
<td>1/2</td>
<td>2.5</td>
<td>-</td>
</tr>
<tr>
<td>Hose bibb</td>
<td>3/4</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Hose bibb, combination hot and cold</td>
<td>1/2</td>
<td>1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>Lavatory, 8.3 L/min or less</td>
<td>3/8</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Lavatory, greater than 8.3 L/min</td>
<td>3/8</td>
<td>0.75</td>
<td>0.75</td>
</tr>
<tr>
<td>Shower head, 9.5 L/min or less per head</td>
<td>1/2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Shower head, greater than 9.5 L/min per head</td>
<td>1/2</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Shower, spray, multi-head, fixture unit per head</td>
<td>(9)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sink, bar</td>
<td>3/8</td>
<td>0.75</td>
<td>0.75</td>
</tr>
<tr>
<td>Sink, clinic service faucet</td>
<td>1/2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sink, clinic service with direct flush valve</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sink, kitchen, commercial, per faucet</td>
<td>1/2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sink, kitchen, domestic, 8.3 L/min or less</td>
<td>3/8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sink, kitchen, domestic, greater than 8.3 L/min</td>
<td>3/8</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Sink, laboritory</td>
<td>3/8</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sink, laundry (1 or 2 compartments)</td>
<td>3/8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sink, service or mop basin</td>
<td>1/2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sink, washup, per faucet</td>
<td>1/2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Column 1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
### Table 7.6.3.2.A. (Cont’d)

#### Sizing of Water Distribution Systems

Forming Part of Sentences 7.6.3.2(1) to (3) and 7.6.3.4(2), (3) and (5)

<table>
<thead>
<tr>
<th>Fixture or Device</th>
<th>Minimum Size of Supply Pipe, in.</th>
<th>Private Use Hydraulic Load, fixture units</th>
<th>Public Use Hydraulic Load, fixture units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Cold</td>
<td>Hot</td>
</tr>
<tr>
<td>Urinal, with direct flush valve</td>
<td>3/4</td>
<td>(8)</td>
<td>-</td>
</tr>
<tr>
<td>Urinal, with flush tank</td>
<td>3/8</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Urinal, with self-closing metering valve</td>
<td>1/2</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Water closet, 6 LPF or less with flush tank</td>
<td>3/8</td>
<td>2.2</td>
<td>-</td>
</tr>
<tr>
<td>Water closet, greater than 6 LPF with flush tank</td>
<td>3/8</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Water closet, with direct flush valve</td>
<td>1</td>
<td>(6)</td>
<td>-</td>
</tr>
<tr>
<td>Column 1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**Notes to Table 7.6.3.2.A.:**

(1) The fixture unit values in this Table are not applicable in certain assembly occupancies because of surges in use by the occupants. For such occupancies, refer to specific design information.

(2) For fixtures not indicated in this Table, refer to Table 7.6.3.2.D.

(3) Bathroom group is based on a ½ in. size bathtub supply pipe.

(4) Add additional fixture to the fixture load for bathroom group.

(5) Refer to the manufacturer’s recommendations.

(6) For fixture unit values for fixtures with direct flush valves, see Sentence 7.6.3.2(4) and Tables 7.6.3.2.B. and 7.6.3.2.C.

### Table 7.6.3.2.B.

#### Sizing of Water Distribution Systems for Urinals with Direct Flush Valves

Forming Part of Sentences 7.6.3.2(4) and 7.6.3.4(5)

<table>
<thead>
<tr>
<th>Number of Valves</th>
<th>Individual Fixture Units Assigned in Decreasing Values</th>
<th>Fixture Units in Accumulative Values(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>35</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>45</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>53</td>
</tr>
<tr>
<td>5 or more</td>
<td>5 each</td>
<td>58, plus 5 for each additional fixture in excess of 5</td>
</tr>
<tr>
<td>Column 1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**Notes to Table 7.6.3.2.B.:**

(1) The accumulative fixture unit values are the total values to be used in conjunction with Table 7.6.3.2.A.
Hydrant Flow Test Results

<table>
<thead>
<tr>
<th>Hydrant Number:</th>
<th>553</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street:</td>
<td>JOHNSON STREET</td>
</tr>
<tr>
<td>Cross Street:</td>
<td>TORONTO ST &amp; MACDONNELL ST</td>
</tr>
<tr>
<td>Distribution Area:</td>
<td>C-CITY</td>
</tr>
<tr>
<td>Date:</td>
<td>05/31/2018</td>
</tr>
<tr>
<td>Time:</td>
<td>10:40:00 AM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FLOW A</th>
<th>FLOW B</th>
<th>FLOW C</th>
<th>FLOW D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrant Number:</td>
<td>4453</td>
<td>4453</td>
<td></td>
</tr>
<tr>
<td>Static Pressure (psi):</td>
<td>52</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Test flow Rate (US gal/min):</td>
<td>626</td>
<td>670</td>
<td></td>
</tr>
<tr>
<td>Residual Pressure (psi):</td>
<td>50</td>
<td>44</td>
<td></td>
</tr>
</tbody>
</table>

- **Rated Flow:** 1416 US gal/min @ 20 psi residual pressure
- **Hydrant Class:** A
- **Colour Code:** GREEN

**Notes:** Recommended minimum 10psi drop between static and residual pressure not achieved.

These tests results are intended for colour coding of hydrants only. Utilities Kingston assumes no responsibility for the accuracy of this information or for reliance thereon for design.
Hydrant Flow Test Results

<table>
<thead>
<tr>
<th>Hydrant Number:</th>
<th>554</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street:</td>
<td>EARL STREET</td>
</tr>
<tr>
<td>Cross Street:</td>
<td>TORONTO ST &amp; MACDONNELL ST</td>
</tr>
<tr>
<td>Distribution Area:</td>
<td>C-CITY</td>
</tr>
<tr>
<td>Date:</td>
<td>05/09/2016</td>
</tr>
<tr>
<td>Time:</td>
<td>08:58:00 AM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FLOW A</th>
<th>FLOW B</th>
<th>FLOW C</th>
<th>FLOW D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrant Number:</td>
<td>3414</td>
<td>3414</td>
<td></td>
</tr>
<tr>
<td>Static Pressure (psi):</td>
<td>60</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Test flow Rate (US gal/min):</td>
<td>976</td>
<td>1606</td>
<td></td>
</tr>
<tr>
<td>Residual Pressure (psi):</td>
<td>58</td>
<td>56</td>
<td></td>
</tr>
</tbody>
</table>

| Rated Flow: | 5567 US gal/min @ 20 psi residual pressure |
|            | 351 L/s @ 138 kPa residual pressure |
| Hydrant Class: | AA+ |
| Colour Code:   | BLUE |

Notes: Recommended minimum 10psi drop between static and residual pressure not achieved.

These tests results are intended for colour coding of hydrants only. Utilities Kingston assumes no responsibility for the accuracy of this information or for reliance thereon for design.
<table>
<thead>
<tr>
<th>FLOW A</th>
<th>FLOW B</th>
<th>FLOW C</th>
<th>FLOW D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrant Number:</td>
<td>3258</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Static Pressure (psi):</td>
<td>52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test flow Rate (US gal/min):</td>
<td>474</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual Pressure (psi):</td>
<td>40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rated Flow: 804 US gal/min @ 20 psi residual pressure 51 L/s @ 138 kPa residual pressure

Hydrant Class: B

Colour Code: ORANGE

Notes: These tests results are intended for colour coding of hydrants only. Utilities Kingston assumes no responsibility for the accuracy of this information or for reliance thereon for design.
Appendix C - Sanitary

1. Sanitary Sewer Design Sheet
### SANITARY SEWER DESIGN SHEET

**PROJECT:** 628 Johnson Street  
**LOCATION:** City Of Kingston  
**CLIENT:** Sasi Kunaratnam

### Tributary Area

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex. Toronto Street</td>
<td>4107-101</td>
<td>4107-200</td>
<td>28.97</td>
<td>200</td>
<td>63</td>
<td>0.78</td>
<td>0.92</td>
<td>N/A</td>
<td>U/K</td>
<td>U/K</td>
<td>28.97</td>
<td>200</td>
<td>0.18</td>
<td>0.29</td>
<td>U/K</td>
<td>U/K</td>
<td></td>
</tr>
<tr>
<td>Ex. Dwelling @ 628 Johnson St</td>
<td>5</td>
<td>0.04</td>
<td>10</td>
<td>10</td>
<td>4.00</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>150</td>
<td>0.18</td>
<td>0.17</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Proposed Conversion to Two Units</td>
<td>11</td>
<td>0.04</td>
<td>22</td>
<td>22</td>
<td>4.00</td>
<td>0.36</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>150</td>
<td>0.18</td>
<td>0.17</td>
<td>21.54</td>
<td></td>
</tr>
</tbody>
</table>

### Designed

- **CA**: Population Per Bedroom: 2.0  
- **BT**: Capital Per Bed: 350  
- **INFILTRATION ALLOWANCE**: 0.14 l/sec/Ha  
- **Vet @ Design**: Assumed pipe loss coefficient = 0.013  
- **Residential Peaking Factor**: 4.00

### Checked

- **CA**: Estimated from Record Drawings  
- **BT**: Assumed

### Alleged

- **CA**: File Ref: Date: Sheet No.: 1 of 1

---

**Exhibit H**

Report Number COA-20-023

---

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Appendix D – Design Drawings

1. C-200 – Site Servicing Plan
2. C-300 – Grading Plan
1. INSTALL SILT FENCE AT THE DOWNSLOPE SIDE OF DISTURBED AREAS AND SNOW FENCE ALONG PERIMETER OF THE DEVELOPMENT SITE, PRIOR TO THE START OF CONSTRUCTION.

2. THE DEVELOPER SHALL NOT BE CONSIDERED RESPONSIBLE TO THE CONTRACTOR IN ANY RESPECT FOR THE AMOUNT OF GRADING OR EARTHWORK PROVIDED AS REQUIRED TO TAKE UP GRADE DIFFERENTIALS IN EXCESS OF SUCH SLOPES.

3. TEMPORARY SWALES WITH CHECK DAMS ARE TO BE CONSTRUCTED PRIOR TO THE BEGINNING OF SITE GRADING, AS REQUIRED.

4. THE CONTRACTOR SHALL COMPLETE THE DRAINAGE SWALES IN THE LOCATIONS AND TO THE GRADES AND ELEVATIONS, DEPTHS AND SECTIONS SPECIFIED ON THE PLAN, PRIOR TO FINAL LANDSCAPING BY THE CONTRACTOR. THE CONTRACTOR SHALL ENSURE THAT THE REQUIRED SWALES ARE PROVIDED IN ACCORDANCE WITH THE ENGINEER'S REQUIREMENTS.

5. ALL EXPOSED SOILS ARE TO BE STABILIZED AND VEGETATED AS SOON AS POSSIBLE USING SEED AND MULCH APPLICATION ON 100mm OF TOPSOIL, AS DIRECTED BY THE ENGINEER.

6. THE GRADING OF ALL LOTS AND BLOCKS IS TO BE PERFORMED TO PROVIDE FINISHED PERIMETER SURFACES WHICH ARE FLUSH WITH GIVEN STREET LINE, REAR AND SIDE LINE ELEVATIONS.

7. FINAL PERIMETER GRADES FOR A LOT OR BLOCK WHERE NOT OTHERWISE SHOWN HEREON SHALL BE COINCIDENT WITH THE ADJOINING PERIMETER ELEVATIONS.

8. ALL REGRADED AREAS THAT ARE NOT OCCUPIED BY DWELLINGS, ROADS, SIDEWALKS, DRIVEWAYS, PARKS AND OTHER SERVICES SHALL BE COVERED ADJACENT.

9. ALL TEMPORARY EROSION AND SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO THE COMMENCEMENT OF SITE GRADING, MUST BE INSPECTED DURING CONSTRUCTION AND MUST BE COMPLETE IN ACCORDANCE WITH THE ENGINEER'S REQUIREMENTS.

10. UNLESS OTHERWISE INDICATED, THE LOT LINE AND CORNER ELEVATIONS SHOWN HEREON ARE GENERALLY THE MINIMUM ELEVATIONS FOR THE DISTRICT.

11. THE CONTRACTOR SHALL KEEP PUBLIC ROADWAYS FREE OF DEBRIS DURING CONSTRUCTION. ANY MATERIAL TRACKED FROM THE SITE SHALL BE KEPT BEYOND THE REGRADED AREAS AND THE CONTRACTOR SHALL COMPLETE THE DRAINAGE SWALES IN THE LOCATIONS AND TO THE GRADES AND ELEVATIONS, DEPTHS AND SECTIONS SPECIFIED ON THE PLAN, PRIOR TO FINAL LANDSCAPING BY THE CONTRACTOR. THE CONTRACTOR SHALL ENSURE THAT THE REQUIRED SWALES ARE PROVIDED IN ACCORDANCE WITH THE ENGINEER'S REQUIREMENTS.

12. GIVEN THE PROPOSED BUILDING GRADES MAY BE RAISED TO COMPENSATE FOR DIFFERENCES BETWEEN ASSUMED AND ACTUAL BUILDING ELEVATIONS, THE CONTRACTOR SHALL VERIFY ALL ELEVATIONS WITHIN THE PROPOSED BUILDING AND ADJACENT AREAS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

13. THE CONTRACTOR SHALL ENSURE THAT ALL EXISTING AND PROPOSED DRAINAGE SWALES, SUMP PUMP INLETS AND OUTLETS, ARE LOCATIONED AND TO THE ELEVATIONS, DEPTHS AND SECTIONS SPECIFIED ON THE PLAN, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

14. THE MUNICIPALITY SHALL BE CONFORMED TO.

15. SUMP PUMP DISCHARGE OUTLET SHALL BE DIRECT TO THE REAR YARD SWALE (NORTH SIDE OF NEW DWELLING).

16. GRADING AND SODDING OF ADJACENT ROADWAY BOULEVARDS WILL BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH MUNICIPAL SITE PLAN APPROVAL OR DEVELOPER GRADING APPROVAL.

17. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE CONTRACT DOCUMENTS, AS WELL AS FOR THE PROPER EXECUTION OF THE CONTRACT DOCUMENTS. SHOP DRAWINGS SHALL BE SUBMITTED TO IBI GROUP FOR GENERAL CONFORMANCE BEFORE PROCEEDING WITH FABRICATION.

18. SHOP DRAWINGS SHALL BE SUBMITTED TO IBI GROUP FOR GENERAL CONFORMANCE BEFORE PROCEEDING WITH FABRICATION. REPLICA DRAWINGS OR REPRODUCTIONS OF THE DRAWINGS PROVIDED TO IBI GROUP SHALL NOT BE GIVEN TO ANY OTHER PERSON WITHOUT THE WRITTEN CONSENT OF IBI GROUP.

19. REPRODUCTION OR DISTRIBUTION FOR ANY PURPOSE OTHER THAN AUTHORIZED BY IBI GROUP IS PROHIBITED.

20. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE CONTRACT DOCUMENTS, AS WELL AS FOR THE PROPER EXECUTION OF THE CONTRACT DOCUMENTS. SHOP DRAWINGS SHALL BE SUBMITTED TO IBI GROUP FOR GENERAL CONFORMANCE BEFORE PROCEEDING WITH FABRICATION.

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