Stantec Consulting Ltd.
100-300 Hagey Boulevard, Waterloo ON N2L 0A4

July 9, 2026
File: 1603-10926/29

Attention: **Silver Lake Developments**
c/o Alex Vandersluis, Auburn Developments
700 Richmond Street, Unit 410
London ON N6A 5C7

Dear Mr. Vandersluis,

Reference: **The Barrel Yards Development, 110 Erb Street West, Waterloo**
Addendum to Functional Servicing Report – Stages 3 and 4 Development

This letter has been prepared as an Addendum to the December 2024 Functional Servicing Report (FSR) previously submitted for Stages 3 and 4 and updates all appropriate information to reflect recent changes made to the Site Plan and building unit counts for these stages of the Barrel Yards Development. This Addendum contains revisions to the following Sections of the 2024 FSR:

- Section 1 (Introduction): outlines revised building details and unit counts
- Section 2 (Sanitary Servicing): provides updated sanitary sewer design calculations

No changes are required for any other sections of the December 2024 FSR, and it remains valid.

Revised Buildings and Unit Counts

The current revised proposal, as outlined in the attached Master Site Plan prepared by GSP Group, dated May 6, 2026, and Architectural Plans prepared by Turner Fleischer, dated July 6, 2026, consists of the following buildings for Stages 3 and 4 at the subject site:

- Stage 3: Single 17-storey Residential Building (Tower K) with a total of 210 units
- Stage 4: Two 30-storey Residential Buildings (Towers F and G) on a shared 6-storey podium with a total of 566 units, and approximately 991.3 m^2 of commercial floor area

Revised Sanitary Sewer Design Calculations

The updated sanitary sewer design calculations, to reflect the revised building details and unit counts as noted above, have been included with this Addendum. Based on these calculations, the full occupancy of proposed Stage 3 building (Tower K) is expected to generate a peak theoretical sanitary flow of approximately 17 L/s at sanitary outlet # 2 (ERB SAN # 1) including other areas of the site draining to this outlet. This is less than the sanitary outlet capacity of 59 L/s reported in the 2024 FSR.

Similarly, the full occupancy of proposed Stage 4 buildings is expected to generate a peak theoretical sanitary flow of approximately 14 L/s at sanitary outlet # 3 (FDBD SAN # 1) including other areas of the site draining to this outlet. This is less than the sanitary outlet capacity of 19 L/s reported in the 2024 FSR.

Conclusions

Based on the preceding letter, it is concluded that sanitary servicing for Stages 3 and 4 of the development can be adequately provided through the connections to the existing sanitary sewers discharging to the existing sanitary outlets on Erb Street and Father David Bauer Drive.

Reference: **The Barrel Yards Development, 110 Erb Street West, Waterloo**
Addendum to Functional Servicing Report – Stages 3 and 4 Development

It is recommended that the 2024 FSR and this Addendum letter be circulated to the City of Waterloo and other review agencies in support of the current applications for Official Plan Amendment and Zoning Bylaw Amendment Approvals, and later in support of the Site Plan Application for Stages 3 and 4 Development at the Barrel Yards Site.

We trust the enclosed is satisfactory and sufficient for your purposes; however, should you have any further questions or comments, feel free to contact the undersigned.

Regards,

STANTEC CONSULTING LTD.



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Community Development
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Attachment: Sanitary Sewer Design Calculations
Master Site Plan prepared by GSP Group, dated May 6, 2026
Architectural Plans prepared by Turner Fleischer, dated July 6, 2026

c. Ms. Kristen Barisdale, GSP Group
Mr. Steve Kapolnas, Stantec Consulting Ltd.

ATTACHMENTS

Sanitary Sewer Design Calculations

Stantec

SUBDIVISION: **The BarrelYards**

DATE: July 9, 2026
DESIGNED BY: AMB
CHECKED BY: SAK

SANITARY SEWER DESIGN SHEET

FILE NUMBERS: 1603-10926

CITY OF WATERLOO

DESIGN PARAMETERS

AVERAGE DAILY FLOW
PER PERSON = 275 l/p/day
Hotels= 225 l/p/day
MINIMUM VELOCITY = 0.600 m/s
n = 0.013
MAX PEAK FAC.= 4.500
MIN PEAK FAC.= 1.500

RESIDENTIAL: 0.000003 cums/capita
HOTEL: 0.000003 cums/Ha
COMMERCIAL: 0.00125 cums/Ha
INDUSTRIAL: 0.00050 cums/Ha
INSTITUTIONAL: 0.00010 cums/Ha
INFILTRATION: 0.00015 cums/Ha
RESIDENTIAL HARMON PEAKING FACTOR

LOCATION			RESIDENTIAL AREA AND POPULATION						COMM		INDUST		INSTIT	C+I+I	INFILTRATION			TOTAL FLOW	PIPE					
STREET	FROM M.H.	TO M.H.	AREA (ha)	POP. DENSITY (p/ha)	POP.	CUMULATIVE AREA (ha)	CUMULATIVE POP.	PEAK FACT.	PEAK FLOW (m3/s)	AREA (ha)	ACCU. AREA (ha)	AREA (ha)	ACCU. AREA (ha)	AREA (ha)	ACCU. AREA (ha)	PEAK FLOW (m3/s)	TOTAL AREA (ha)	ACCU. AREA (ha)	INFILT. FLOW (m3/s)		DIST (m)	DIA (mm)	SLOPE (%)	CAP. (FULL) (m3/s)	VEL. (FULL) (m/s)	VEL. (ACT.) (m/s)
FDBD SAN #2																										
Outlet 1 - Existing 300mm Dia. @ 0.12%																										
Townhomes (Note: 22 Units @ 2.2 p.p.u			0.24	0.00	48	0.24	48	4.318	0.001							0.000	0.24	0.24	0.000	0.001	10.00	150	0.50	0.011	0.61	0.35
Condo Point Towers 2 (Note: 178 units @ 2.2 p.p.u.)			0.40	0.00	392	0.40	440	4.002	0.005							0.000	0.40	0.40	0.000	0.005	10.00	150	0.50	0.011	0.61	0.59
Condo Point Towers Link (Note: 60 units @ 2.2 p.p.u.)			0.20	0.00	132	0.60	572	3.943	0.007							0.000	0.20	0.60	0.000	0.007	10.00	150	0.50	0.011	0.61	0.65
Condo Point Towers 1 (Note: 179 units @ 2.2 p.p.u.)			0.40	0.00	394	1.00	966	3.810	0.011							0.000	0.40	1.00	0.000	0.011	10.00	150	0.50	0.011	0.61	0.71
Apartment A (Note: 242 units @ 2.2 p.p.u.)			0.74	0.00	532	1.74	1498	3.680	0.017							0.000	0.74	1.74	0.000	0.017	10.00	200	0.50	0.023	0.73	0.80
Apartment B (Note: 242 units @ 2.2 p.p.u.)			0.74	0.00	532	2.48	2030	3.581	0.022							0.000	0.74	2.48	0.000	0.022	10.00	200	0.50	0.023	0.73	0.84
Live/Work Commercial (Note: approx. 10 units @ 2.2 p.p.u.)			0.01	0.00	22	2.49	2052	3.577	0.022							0.000	0.01	2.49	0.000	0.022	10.00	300	0.12	0.033	0.47	0.51
ERB SAN #1																										
Outlet 2 - Existing 250mm Dia. @ 1.00%																										
Apartment I (Note: 236 units @ 1.76 p.p.u.)			0.49	0.00	415	0.49	415	4.015	0.005							0.000	0.49	0.49	0.000	0.005	10.00	200	0.50	0.023	0.73	0.55
Apartment J (Note: 216 units @ 1.76 p.p.u.)			0.49	0.00	380	0.98	795	3.862	0.009							0.000	0.49	0.98	0.000	0.009	10.00	200	0.50	0.023	0.73	0.68
Short Stay Hotel (Note:194units @ 1.76 p.p.u.)			0.48	0.00	341	1.46	1136	3.764	0.013							0.000	0.48	1.46	0.000	0.013	10.00	200	0.50	0.023	0.73	0.75
Apartment K (Note: 210 units @ 2.07 p.p.u.)			0.43	0.00	435	1.89	1571	3.665	0.017							0.000	0.43	1.89	0.000	0.017	10.00	200	0.50	0.023	0.73	0.80
Existing Sanitary Pipe																					10.00	250	1.00	0.059	1.20	0.00
FDBD SAN #1																										
Outlet 3 - Existing 200mm Dia. @ 0.34%																										
Apartment F and G Towers plus Retail (Note: 566 units @ 2.07 p.p.u)			1.75	0.00	1172	1.75	1172	3.755	0.013	0.60	0.60					0.0008	2.35	2.35	0.000	0.014	10.00	200	0.34	0.019	0.60	0.66
					4747																					

Stage 3 and 4
Used as worse case Scenario

The worst case scenario was used for both the live work commercial and short stay hotel
Live/Work Commercial at 1.16l/s/ha (DGSSMS) for both building will total **0.0001cu.m./s** [0.01ha X 0.0116cu.m./s/ha] which is **less than 0.0010cu.m/s** used
Short Stay Hotel at 2.604x10^{-6}cu.m./bed/s (225L/bed/day) (DGSSMS) will total **0.0004cu.m./s** [160 units*2.604x10-6cu.m./bed/s] which is **less than 0.0030cu.m./s** used

Note:
1. Average Flow updated from 350 l/p/day to 275 l/p/day
2. Residental cums/capita updated for 0.000004 to 0.000003
3. Stage 6 & 7 p.p.u updated from 2.2 p.p.u to 1.76 p.p.u.
4. Stage 3 & 4 p.p.u updated from 1.76 p.p.u to 2.07 p.p.u.