

**RENOVATION OF EXISTING OFFICE BUILDING AT
45 BRIDGE STREET, BELLEVILLE, ONTARIO**

PARKING JUSTIFICATION BRIEF

PROJECT NO. n2461

Prepared By:



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Feb 23, 2026

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- Appendix C: Parking Survey Data

1 Introduction

n Engineering Inc. is pleased to submit this Parking Justification Study in support of a parking reduction for the proposed renovation of an existing office building located at 45 Bridge Street, Belleville, Ontario. Figure 1 illustrates the site location.



Figure 1 –Site Location

2 Site Description and Assessments

The subject property currently contains an older vacant building that has remained unused for an extended period. The building is proposed to be renovated and repurposed for office use. The property is zoned Mixed Use Type 1 (MX1) in accordance with City of Belleville Zoning By-law (2024-100). The site is accessible via an existing entrance from Pinnacle Street.

Pinnacle Street is a major collector roadway running north–south, with on-street parking available along the east side. The surrounding land uses consist primarily of commercial and mixed-use developments. Figure 2 shows the existing street-view conditions.



Figure 2 - Existing Site Street View

3 Proposed Development

As per the site plan prepared by n Architecture Inc. (refer to Appendix A), the proposed development includes:

- Renovation of the existing two-storey building with a basement, having a total Gross Floor Area (GFA) of 3,019 m²
- One proposed loading space
- A revised parking layout with 23 parking spaces, including barrier-free (BF) spaces

As a result of the proposed renovation and site plan changes, the total number of available parking spaces is reduced to 23, which does not meet the minimum parking requirements of the Zoning By-law. Therefore, this study evaluates the proposed parking supply in terms of future building's parking demand and availability of parking spaces in the surrounding to support a Minor Variance application.

Table 1 summarizes the required and proposed parking calculations in accordance with the City's Zoning By-law.

Table 1 - Parking Calculations

Landuse	Parking Rate	Required	Proposed
Commercial Use (3019 m ²)	1 spaces per 100 m ² GFA	31	23
Barrier Free (BF) Parking	5% of parking spaces	2	2
Total (Including BF)		31	23

As shown in Table 1, a minimum of 31 parking spaces is required, whereas 23 spaces are proposed, resulting in a deficiency of 8 spaces (25%).

The proposed reduction has been evaluated by examining future parking demand and supply, supported by actual parking utilization data collected along with an assessment of available public parking in the surrounding area. The following sections describe the study methodology and findings.

4 Parking Survey Methodology

The methodology followed a demand-and-supply-based approach. Given the site's central location, there are multiple On-street parking spaces and municipal parking facilities available nearby. To support the parking reduction in the proposed building, on-street parking spaces and a nearby municipal parking lot were surveyed to assess the parking utilization pattern and determine the availability of vacant spaces during typical business hours.

Future parking demand for the proposed building was estimated using the zoning by law's parking rates. The total parking supply and demand were then compared to evaluate whether the proposed parking reduction can be supported.

Below are details of study sites:

- Municipal Parking Lot – 138-168 Front St Belleville, ON
- On Street Parking
 - On Pinnacle St from south of bridge street to Dundas St E
 - On McAnnany & Market St
 - Front St Along the Municipal Parking Lot

The on-street parking areas and municipal lot are located within approximately 150 m of the subject property and are easily accessible by walking. Figure 3 shows the location of parking study sites.



Figure 3 - Parking Survey Study Area

Staff members from n Engineering Inc. conducted a one day parking survey on a typical weekday at the municipal parking lot and proxy site. The details of the parking surveys are provided below:

Parking Survey Details for the Municipal Parking Lot & On-Street Parking:

Description	Municipal Parking Lot	On-Street Parking
Address	138-168 Front St Belleville, ON	On Pinnacle St from south of bridge street to Dundas St E On McAnnany & Market St Front St Along the Municipal Parking Lot
Parking Capacity	124 spaces	Total 85 spaces , (29 spaces on Pinnacle , 24 spaces on McAnnany St 17 spaces on Market St , 15 spaces on Front St)
Paid Parking Rate	1.5\$/hr	1.5\$/hr
Survey Time	February 10, 2026, from 7:00 AM to 6:00 PM (covering regular business hours, including AM peak, midday, and PM peak periods)	
Count period	Every 30 minutes interval	

5 Parking Survey Results

Parking survey was conducted at the municipal parking lot and on-street parking on a weekday. The following are results of the survey:

- The survey was conducted on Tuesday, February 10th, 2026 from 7:00 AM to 6:00 PM
- Survey data was observed and collected every 30-minute interval;
- Peak On-street parking utilization was observed as 42 spaces occupied out of 93 spaces (45%) usage;
- The municipal parking lot shown peak parking utilization of 54 spaces occupied out of 123 (43% usage);
- The minimum available vacant parking spaces were recorded as 120 spaces at the peak utilization period.

The parking utilization data collected on-site is summarized and presented in Appendix C. Table 2 presents parking utilization data of Municipal Parking lot and On-Street Parking

Table 2 –Municipal Parking Lot and On-Street Parking Utilization Data (10-Feb-2026)

Parking Capacity	138-168 Front St Parking Lot	On-Street Parking	Total	Vacant Spaces
	124 Spaces	85 Spaces	209 Spaces	
Time	Occupied Spaces	Occupied Spaces	Total Occupied Spaces	
7:00	5	3	8.00	201.00
7:30	6	3	9.00	200.00
8:00	8	4	12.00	197.00
8:30	24	10	34.00	175.00
9:00	35	23	58.00	151.00
9:30	42	19	61.00	148.00
10:00	49	29	78.00	131.00
10:30	49	39	88.00	121.00
11:00	54	42	96.00	113.00
11:30	51	32	83.00	126.00
12:00	48	35	83.00	126.00
12:30	49	27	76.00	133.00
13:00	47	29	76.00	133.00
13:30	47	28	75.00	134.00
14:00	44	34	78.00	131.00
14:30	51	39	90.00	119.00
15:00	57	34	91.00	118.00
15:30	49	36	85.00	124.00
16:00	43	33	76.00	133.00
16:30	40	37	77.00	132.00
17:00	18	19	37.00	172.00
17:30	12	22	34.00	175.00
18:00	9	18	27.00	182.00
MAX/Min	57	42	96	113

Figure 4 below shows the trend line of the parking occupancy survey on the busiest day for the municipal parking lot and on-street parking zone.

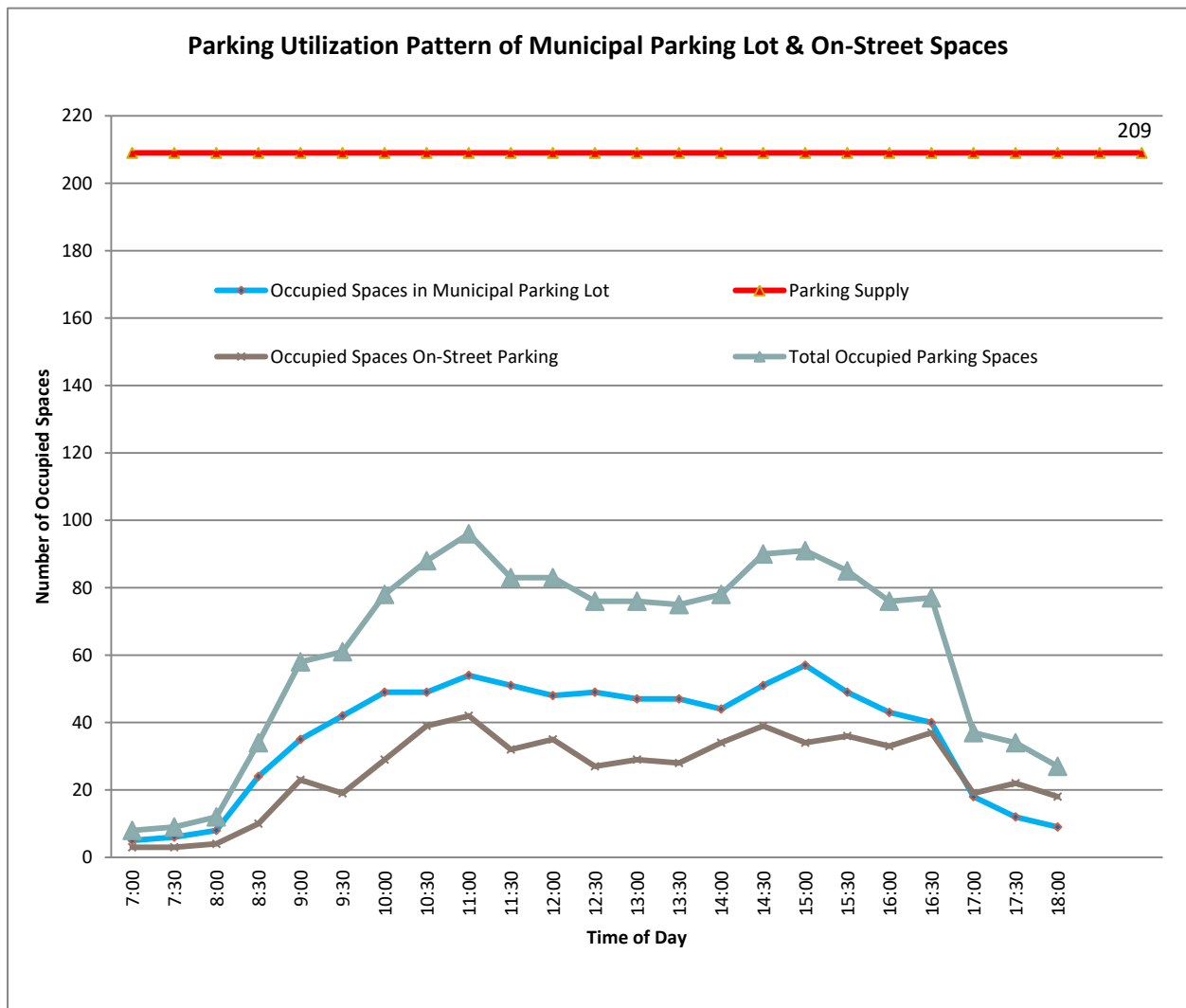


Figure 4 – Parking Utilization Pattern of Municipal Parking Lot & On-Street Parking

6 Parking Demand Analysis

Based on the survey results, it was observed that approximately 50% of the parking spaces remain vacant during peak hours, leaving 113 spaces available for use. This surplus capacity provides a strong basis to support the proposed reduction of eight (8) parking spaces. The additional parking demand generated by the site can be readily accommodated within the existing vacant supply. Even after allocating eight spaces for users of the 45 Bridge Street building, approximately 105 excess parking spaces would remain available for other businesses and visitors. Table 3 presents the comparison of parking demand and supply.

Table 3 – Parking Demand and Supply Comparison

Site	Municipal Parking Lot	On-Street Parking	Proposed Site	Total
Available Parking Spaces	124	85	23	232
Occupied Spaces (Peak Utilization Period)	54	42	31	127
Excess Parking Spaces Available at (Peak Utilization Period)	70	43	-8	105

This surplus capacity can effectively accommodate parking needs of 45 Bridge St building. Therefore, the proposed reduction in parking supply is supported and justified based on both observed conditions and conservative sensitivity testing.

7 Summary & Conclusion

An amendment to the site plan is proposed for an existing office building located at 45 Bridge Street, Belleville, Ontario. The proposal includes interior and exterior renovations while maintaining the existing building Gross Floor Area (GFA) of approximately 3,019 m² and providing a total of 23 parking spaces, including accessible spaces.

The reduction in parking supply triggers a Minor Variance application due to a deficiency of approximately 26%, as 23 spaces are proposed compared to the 31 spaces required under the City of Belleville Zoning By-law.

n Engineering Inc. conducted a comprehensive assessment of parking demand, including an on-site parking survey to evaluate available parking supply in nearby municipal parking facilities and surrounding on-street spaces. The survey covered the municipal parking lot located at 138–168 Front Street and on-street parking along Pinnacle Street, McAnnany Street, Market Street, and Front Street.

Survey results indicate that the maximum parking utilization observed across the municipal parking lot and on-street parking areas during the midday peak period was below 50% as 96 spaces were occupied out of a total supply of 209 spaces. This leaves 113 vacant parking spaces available, of which only eight spaces would be needed to accommodate the anticipated demand associated with the 45 Bridge Street site.


Based on the observed utilization patterns, the availability of substantial excess parking supply in the surrounding area, it can be concluded that the proposed reduction in parking spaces is reasonable and justified. The development is not expected to create any adverse impact on existing parking conditions in the area.

We trust that this study satisfies the City of Belleville technical requirements and provides sufficient justification regarding parking demand for the proposed future development. For any inquiries, please contact the undersigned.

Respectfully Submitted,

n Engineering Inc.

Prepared by:



Sultan Ahmad Azizi M-Tech. EIT
Transportation Analyst

Reviewed by:

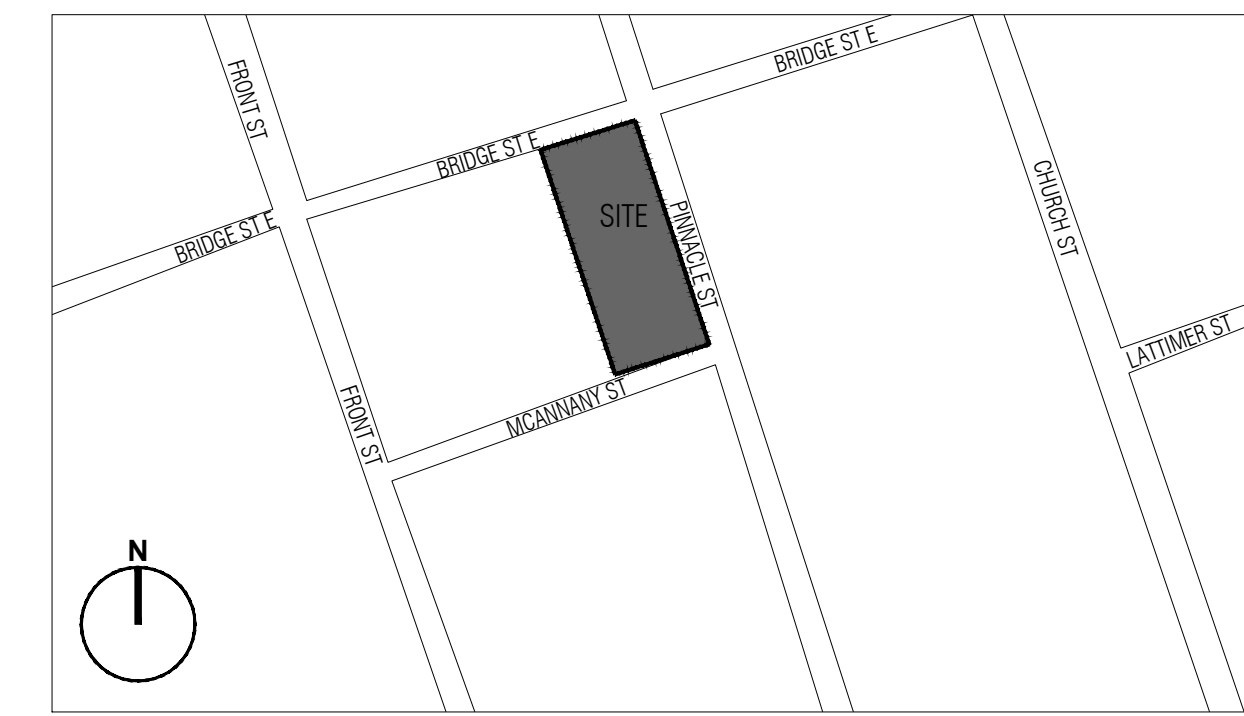


Abu. S. Ziauddin M.Eng. P.Eng (PEO, EGBC & APEGA)
Head of Engineering

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APPENDIX A

Site Plan



KEY MAP

SCALE: NTS

PROJECT STATISTICS

ADDRESS: 45 BRIDGE STREET EAST, BELLEVILLE, ON

MX1- MIXED USE TYPE 1 (ZONING BY-LAW 2024-100)

	REQUIRED	PROPOSED
LOT AREA		2,359.19 SQ.M (0.58 Acres)
LOT FRONTAGE	MIN. 10M	31.65M
LOT DEPTH		74.40M
LOT COVERAGE	MAX. 65%	49.00% (1,156.07 SQ.M)
BUILDING AREA (EXISTING TO REMAIN)		1,030.07 SQ.M (11,087.55 SQ.FT.)
BUILDING GFA (EXISTING TO REMAIN)		3,019.02 SQ.M (32,496.48 SQ.FT.)
BUILDING HEIGHT (EXISTING TO REMAIN)	MAX. 13.5M	12.23M
LANDSCAPED AREA	MIN. 25%	13.08% (308.53 SQ.M)
ASPHALT PAVED AREA		30.75% (725.35 SQ.M)
WALKWAY AREA		7.17% (169.24 SQ.M)
PARKING	31	23 (ICL. 2 B/F SPACES)
LOADING	2	1

	REQUIRED	PROPOSED
FRONT (NORTH) YARD (EXISTING TO REMAIN)	MIN. 3.6 M	7.6 M
REAR (SOUTH) YARD (EXISTING TO REMAIN)	MIN. 7.5 M	29.7 M
EXT SIDE (EAST) YARD (EXISTING TO REMAIN)	MIN. 4.5 M	0.60 M
INT SIDE (WEST) YARD (EXISTING TO REMAIN)	-	0.10 M

	REQUIRED	PROPOSED
COMMERCIAL USE (3,019.02 SQ.M. GFA) 1 SPACE PER 100 SQ.M GFA	3019.02/100=30.19 [31]	23
TOTAL (2.4M x 6.0M)	31	23 (ICL. 2 B/F SPACES)
BARRIER-FREE PARKING		
5% OF THE REQUIRED NUMBER OF PARKING SPACES	31x0.05=1.55 [2]	2
TYPE-A (3.4M x 6.0M)	1	1
TYPE-B (2.7M x 6.0M)	1	1
BICYCLE PARKING		
COMMERCIAL USE (3,019.02 SQ.M. GFA) 1 SPACE PER 1,500 SQ.M GFA	3019.02/1500=2.0 [2]	2
LOADING (3.6M x 12.0M)		
COMMERCIAL USE (3,019.02 SQ.M. GFA) 2 IF GREATER THAN 2,300 SQ.M GFA	2	1

SCOPE OF WORK:
TO CONVERT AN EXISTING TWO-STORY BUILDING WITH A BASEMENT, CURRENTLY VACANT, INTO AN OFFICE BUILDING AND REPAIR/UPGRADE THE FACADES.

LEGEND

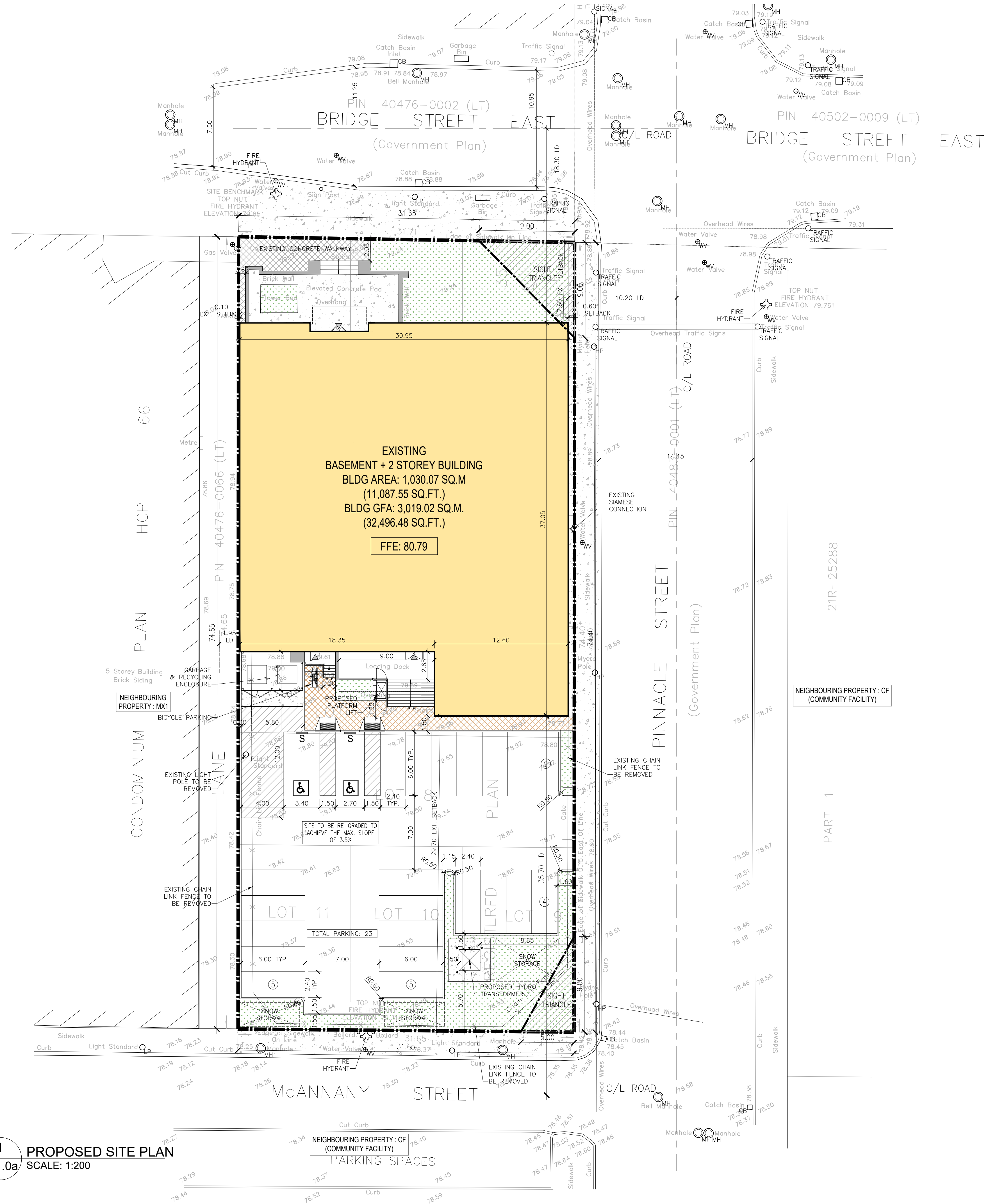
- PROPERTY LINE
- EXISTING BUILDING
- EXISTING BUILDING ALTERED TO BE AN OFFICE BUILDING
- LANDSCAPE
- CONC. PAVEMENT, 150MM RAISED
- ASPHALT
- BARRIER FREE PARKING
- BARRIER FREE RAMP
- CURB
- MAIN DOOR ENTRANCE
- OVERHEAD DOOR
- ACCESSIBLE PARKING SIGN

MUNICIPAL ADDRESS & LEGAL DESCRIPTION
45 BRIDGE STREET EAST
BELLEVILLE, ON. K8N 1L5
LOTS 2, 3, 4, 5 AND 6 REGISTERED PLAN 35
LOTS 7, 8, 9, AND 11 REGISTERED PLAN 10
CITY OF BELLEVILLE
COUNTY OF HASTINGS

SURVEY INFORMATION TAKEN FROM
TOPOGRAPHIC SURVEY OF LOTS 2, 3, 4, 5 AND 6 REGISTERED PLAN 35, LOTS 7, 8, 9, AND 11 REGISTERED PLAN 10, CITY OF BELLEVILLE, COUNTY OF HASTINGS COMPLETED BY KEITH WATSON OF WATSON LAND SURVEYORS LTD. COMPLETED ON SEPTEMBER 19, 2025
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A-1.0a
PROPOSED SITE PLAN
SCALE: 1:200

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PROJECT NORTH

23 FEB. 2026

23rd FEBRUARY 2026
NOT FOR CONSTRUCTION
ISSUED FOR MINOR VARIANCE

No.	Date	Version	Dwn.
10.	23 FEB 2026	ISSUED FOR MINOR VARIANCE	NC
9.	08 DEC 2025	ISSUED FOR SPA-2	NC
8.	05 DEC 2025	ISSUED FOR COORDINATION	NC
7.	03 DEC 2025	ISSUED FOR COORDINATION	NC
6.	02 OCT 2025	ISSUED FOR SPA-1	MB
5.	25 SEPT 2025	ISSUED FOR COORDINATION	MB
4.	24 SEPT 2025	ISSUED FOR CLIENT REVIEW & COORDINATION	MB
3.	12 SEPT 2025	ISSUED FOR COORDINATION	MB
2.	11 JUNE 2025	ISSUED FOR PRE-CONSULTATION	MG
1.	11 DEC 2024	ISSUED FOR CLIENT REVIEW	JH

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RENOVATION OF THE EXISTING OFFICE BUILDING AT 45 BRIDGE STREET EAST, BELLEVILLE, ON

PROPOSED SITE PLAN

DRAWN BY: JH	DATE: 19 NOV. 2024
CHECKED BY: NM	SCALE: AS NOTED
PROJECT NO.:	DRAWING NO.:
24-61	A-1.0a

APPENDIX B

Parking Survey Data



n Engineering Inc

9120 Leslie Street, Suite-208, Richmond Hill, Ontario, L4B3J9 T: 416-256-9741

Proxy Site Parking Utilization Survey Sheet

Surveyor : PARIN PATEL

Date : 10th Feb, 2026

Site Plan Location: 45 Bridge St E, Belleville, On

Proxy Site Survey Location: 04-street Parking C

Available Parking Spots	<u>85</u>	Data Collection Time	Count Interval
Reserved	Visitor: Total:	From 7:00 AM to 7:00 PM	Every 30 minutes

Time	Occupied Parking Spots	Number of Cars on Unmarked Spaces	Notes
7:00 AM	<u>3</u>		
7:30 AM	<u>3</u>		
8:00 AM	<u>4</u>		
8:30 AM	<u>10</u>		
9:00 AM	<u>23</u>		
9:30 AM	<u>19</u>		
10:00 AM	<u>29</u>		
10:30 AM	<u>85 + 4 = 39</u>		
11:00 AM	<u>42</u>		
11:30 AM	<u>32</u>		
12:00 PM	<u>35</u>		
12:30 PM	<u>27</u>		
1:00 PM	<u>29</u>		
1:30 PM	<u>28</u>		
2:00 PM	<u>34</u>		
2:30 PM	<u>39</u>		
3:00 PM	<u>34</u>		
3:30 PM	<u>36</u>		
4:00 PM	<u>33</u>		
4:30 PM	<u>37</u>		
5:00 PM	<u>19</u>		
5:30 PM	<u>22</u>		
6:00 PM	<u>18</u>		
6:30 PM			
7:00 PM			

Notes:

Details of On-Street Parking:

Signed: Parin Patel
10th Feb, 2026

- ① Pinnacle St (South of Bridge St E and North of Dundas St E)
- ② Front St C Between McAnnam St and Dundas St E)
- ③ McAnnam St
- ④ Market St



n Engineering Inc

9120 Leslie Street, Suite-208, Richmond Hill, Ontario, L4B3J9 T: 416-256-9741

Proxy Site Parking Utilization Survey Sheet

Surveyor : **PARIN PATEL**

Date : **10th Feb, 2020**

Site Plan Location: 45 Bridge St E, Belleville, On

Proxy Site Survey Location: **Belleville city parking lot (Front st.)**

Available Parking Spots	124	Data Collection Time	Count Interval
Reserved	Visitor: Total:	From 7:00 AM to 7:00 PM	Every 30 minutes

Time	Occupied Parking Spots	Number of Cars on Unmarked Spaces	Notes
7:00 AM	5		
7:30 AM	6		
8:00 AM	8		
8:30 AM	20 24		
9:00 AM	35		
9:30 AM	42		
10:00 AM	49		
10:30 AM	49		
11:00 AM	54		
11:30 AM	51		
12:00 PM	48		
12:30 PM	49		
1:00 PM	47		
1:30 PM	47		
2:00 PM	44		
2:30 PM	51		
3:00 PM	57		
3:30 PM	49		
4:00 PM	43		
4:30 PM	40		
5:00 PM	18		
5:30 PM	12		
6:00 PM	9		
6:30 PM			
7:00 PM			

Notes:

Signed: *Parin Patel*
10th Feb, 2020