

T5M Connect
10973 141 Street NW
Edmonton, AB T5M 1T5

2020-11-13
Our File No: 3819.T01

Attention: David Campbell

To: David Campbell

Re: North Glenora Rezoning – Traffic & Parking Memo

Dear David,

WATT Consulting Group (WATT) is pleased to provide this memo that provides a review of traffic and parking impacts to accompany the rezoning application and development proposed at 10904, 10906 and 10908 139 Street NW in the North Glenora neighbourhood of Edmonton. The proposed plan is to replace the existing two single family homes on the properties with a 16-unit multifamily residential development.

1.0 PROJECT DESCRIPTION

The study site is located in the North Glenora neighbourhood in northwest Edmonton. The roadways adjacent to the site are 109 Avenue NW to the south and 139 Street NW to the east. Coronation School is also located along 139 Street NW to the east of the proposed development. A context map is shown in **Figure 1**, below.

2.0 TRANSPORTATION NETWORK

109 Avenue NW runs east-west and is a local roadway with a right-in/right-out connection to Groat Road NW to the east and a western terminus at 140 Street NW. The roadway cross-section is approximately 11.5m wide with a single travel lane in each direction and parking on both sides of the street.

139 Street NW runs north-south and is a local roadway with a connection to 107 Avenue NW to the south and a northern terminus at 110 Avenue NW. The roadway cross-section is approximately 11.5m wide with a single travel lane in each direction and parking on both sides of the street unless signed no parking or no stopping, such as the signed bus zone on the east side of 139 Street NW in front of Coronation School.

The intersection of **109 Avenue NW / 139 Street NW** is controlled by a four-way stop with marked pedestrian crossings on all four legs of the intersection.



Figure 1: Site Context

Transit route 125 runs along 109B Avenue NW and 109A Avenue NW, with the nearest stops being on 109A Avenue NW just east of 139 Street NW within 200m of the site. This route provides connection to several Transit Centres including Belvedere, Coliseum, Stadium, Kingsway/RAH, Westmount, and Jasper Place. Buses operate using the following schedule:

- Weekdays – 15 to 30 minutes headways; and
- Saturday & Sunday – 30 to 60 minute headways.

Bicycle routes are provided on 109 Avenue as on-street facilities with painted “sharrow” markings.

The **pedestrian network** consists of separate sidewalk on both sides of the roadways with curb ramps at intersections.

Based on available City count data and a short duration count completed on October 14, 2020, the estimated daily volumes on the roadways are approximately:

- 109 Avenue NW, west of 139 Street NW – 200 vehicles per day (20 in the peak hour);
- 109 Avenue NW, east of 139 Street NW – 670 vehicles per day (67 in the peak hour);
- and
- 139 Street NW – 750 vehicles per day (75 in the peak hour).

The volumes for 109 Avenue NW are shown separately east and west of 139 Street NW, as there is a notable difference along those two roadway segments. The volumes along 139 Street NW, north and south of 109 Avenue NW, are similar (within approximately 100 vehicles per day).

These volumes are well suited for the road classifications, cross-sections and the 4-way stop control.

3.0 PROPOSED DEVELOPMENT

The proposed zoning for the development is DC2 and consists of a two-storey multifamily development with 16 residential units, replacing two existing single-family homes. A schematic design for the proposed development is provided in **Figure 2**.



Figure 2: Proposed Development – Schematic Design

Eight surface parking stalls are planned to be provided as part of the development with access from the existing lane that runs north-south along the west side of the proposed development. This is illustrated in **Figure 3** which shows the lower level of the development.



Figure 3: Proposed Development – Lower Level Floor Plan & Parking

4.0 SITE TRIPS

Using the existing and proposed land uses outlined in Section 3.0, a trip generation assessment was completed for the site. The City of Edmonton’s TIA Guidelines were used in determining the trip rates. A summary of the trips generation rates and trip generation numbers are provided in **Table 1** and **Table 2**, respectively.

Table 1: Trip Generation Rates

Land Use	Source	AM Peak Hour (In / Out Split)	PM Peak Hour (In / Out Split)
Low Density Residential (existing)	CoE TIA Guidelines	0.69 trips/du (19% / 81%)	0.79 trips/du (67% / 33%)
RA7 & RA8 – Apartment Housing	CoE TIA Guidelines	0.34 trips/du (17% / 83%)	0.40 trips/du (63% / 37%)

Table 2: Net Trip Generation

Land Use	Size	AM Peak Hour		PM Peak Hour	
		In	Out	In	Out
Existing (low density) Residential	2 units	0	-1	-1	-1
Proposed Residential (apartments)	16 units	1	5	4	2
Total (net trips)		1	4	3	1

These volumes are appropriate for the roadway network and will not significantly increase the volume of traffic in the neighbourhood, with 5 or less additional trips being generated in the peak hours. This estimation of trips may be high because these trips do not account for people traveling by transit, bicycle and walking trips.

5.0 ON-STREET PARKING REVIEW

On-street parking exists on all streets within the immediate vicinity of the proposed development, generally with parking on both sides and few restrictions in place (other than along the east side of 139 Street NW in front of Coronation School). **Figure 4** illustrates the available on-street parking near the proposed development.



Figure 4: On-Street Parking Map

The on-street parking supply near the proposed development is enough to accommodate 161 vehicles, using an average length of 7.0m for each parking stall. When calculating the number of stalls available within the study area, those areas where parking is not permitted (e.g. on and leading up to crosswalks, private driveways, lane accesses, etc.) were accounted for. This

included the area in front of Coronation School marked as “no stopping”, which is shown in red on the above figure. A small section of angle parking – shown in yellow on **Figure 4** – was included in the available parking along the north side of 109 Avenue NW.

WATT undertook field observations on the following days and times to determine what general utilization of the available on-street parking occurs:

- Monday, October 19, 2020 at 9:00am;
- Tuesday, October 20, 2020 at 11:00am;
- Wednesday, October 21, 2020 at 4:30pm; and
- Monday, November 9, 2020 at 6:15pm.

These days and times were chosen to provide a variety of observable conditions, including when Coronation School is both in and out of session. The hours of operation for Coronation School, as noted on their website, include the morning bell at 8:30am and afternoon dismissal at 3:27pm, except for Thursday’s when afternoon dismissal is at 2:21pm.

The count observations summarised in **Table 3**. Please note that the data for 109 Avenue NW, west of 139 Street, includes 60m south along 140 Street SW.

Table 3: Observed Parking Utilization

Day / Time	Number of Parked Vehicles								Total	Total Stalls	% Utilized
	139 St, N of 109 Ave		139 St, S of 109 Ave		109 Ave, E of 139 St		109 Ave, W of 139 St				
	East Side (A)	West Side (B)	East Side (C)	West Side (D)	North Side (E)	South Side (F)	North Side (G)	South Side (H)			
Oct 19, 2020 9:00 am	4	2	9	1	0	5	13	8	42	161	26%
Oct 20, 2020 11:00 am	2	0	7	4	0	3	9	6	31	161	19%
Oct 21, 2020 4:30 pm	1	2	7	1	0	3	9	5	28	161	17%
Nov 9, 2020 6:15 pm	1	0	7	4	0	6	10	8	36	161	22%

As can be seen in **Table 3**, the highest utilization of on-street parking occurred earlier in the morning with a total of 42 vehicles utilizing the available on-street parking, for a utilization rate of 26% of available space. This still leaves room for 119 additional vehicles to park on-street.

APPLICABLE PARKING POLICIES

At the June 23, 2020 City Council Public Hearing (item 3.22), City Council voted to enable Open Option Parking city-wide effective July 2, 2020. As identified on the City’s website, “Open Option Parking means that minimum on-site parking requirements have been removed from Edmonton’s Zoning Bylaw, allowing developers, homeowners and businesses to decide how much on-site

parking to provide on their properties based on their particular operations, activities or lifestyle.” As further noted on the City’s website, “removing parking minimums doesn’t necessarily mean that no parking will be provided. Businesses and homeowners know their parking needs best and have an interest in ensuring they are met, making this approach more likely to result in the ‘right amount’ of parking.”

NEAR-BY DEVELOPMENTS

A number of near-by redevelopments have been approved in North Glenora, including applications for some of the “patio homes” sites along 109 Avenue NW and 135 Street NW, as well as a four-storey residential building with commercial at the southeast corner of the 109 Avenue NW and 135 Street NW intersection.

The closest redevelopment to this proposed site is located at 13803 109 Avenue NW. The planned 36 dwelling apartment building recently underwent an appeal hearing with the Subdivision and Development Appeal Board on October 29, 2020. One of the concerns raised by the appellants was the site’s proposed parking, which included 18 on-site parking stalls. A decision regarding the appeal for the development is expected within fifteen days of the hearing date.

As discussed above, and shown in **Table 3**, there does appear to be ample parking available in the vicinity of 109 Avenue NW and 139 Street NW, with the highest observed utilization being 26%. Along the south side of 109 Avenue NW, east of 139 Street NW (segment F on **Figure 4**) – which would be most desirable for future residents of the 36 unit apartment complex – appears to have room to accommodate future over-flow parking as a maximum 5 parked vehicles was observed out of a potential 22 on-street parking stalls.

6.0 TRAFFIC CALMING & SAFETY CONSIDERATIONS

A number of traffic calming and safety considerations are in place on the surrounding road network, in particular adjacent to Coronation School along 139 Street NW, north of 109 Avenue NW, and along 109 Avenue NW, east of 139 Street NW.

This includes 30 km/h playground zones and a curb bulb-out for the pedestrian crossing at the intersection of 139 Street NW / 109A Avenue NW (west), shown in **Figure 5**, below. Curb bulb-outs narrow the roadway which results in vehicle speed reductions and increases the visibility between pedestrians and motorists, providing increased safety for crossing the road.



Figure 5: Curb Bulb-Out at 139 St NW / 109A Ave NW (West)

As outlined in Section 1.2 of the document, the “Canadian Guide to Traffic Calming, 2nd Edition” (TAC / CITE, June 2017) provides “information and guidance related to the planning, design, installation, operation, and maintenance of traffic calming measures on local, collector and arterial roads within Canada.” In the section outlining the applicability and effectiveness of traffic calming and speed management measures, under roadway narrowing, on-street parking (specifically on-street parallel parking) is listed as one specific measure.

As noted in the guide, “the effect of using on-street parking to narrow the effective roadway space is to reduce vehicle speeds and to reduce possible shortcutting or through traffic.” Advantages of on-street parking are noted to be:

- Parked vehicles providing a buffer between traffic and pedestrians on sidewalks; and
- Traffic noise potentially being reduced due to a reduction in traffic volumes or speeds.

With the low volume of additional traffic expected to be generated by the proposed development, traffic safety is not anticipated to be negatively impacted.

7.0 CONCLUSIONS

The proposed development is in the heart of a mature residential neighbourhood and will consist of 16 residential units. The adjacent transportation network is appropriate for the existing volumes and has capacity for the traffic that will be generated by the development. The proposed development is only anticipated to generate 5 additional trips in the AM and 4 additional trips in the PM peak hour, compared to the existing single-family homes, which is not expected to adversely impact the neighbourhood.

Though the City of Edmonton enacted Open Option Parking city-wide effective July 2, 2020, this proposed development includes eight on-site parking stalls which will be accessed from the lane that runs along the west side of the properties. In addition, based on the completed parking observations, there is available on-street parking should it be needed. The observed parking utilization was 26% at its highest, which leaves room for 119 additional vehicles to park on-street

in the vicinity of 109 Avenue NW and 139 Street NW. As noted in the “Canadian Guide to Traffic Calming, 2nd Edition,” on-street parking is considered a traffic calming and speed management measure that narrows the effective roadway space to reduce vehicle speeds and reduce possible shortcutting and through traffic.

With the low volume of additional traffic expected to be generated by the proposed development, traffic safety is not anticipated to be negatively impacted in the vicinity of the development.

We trust that this memo provides you with the information required with respect to traffic and parking impacts to support the rezoning application and development proposed at 10904, 10906 and 10908 139 Street NW in the North Glenora. If you have any questions or require additional information, please connect with me via email or at the phone number below.

Regards,

WATT Consulting Group

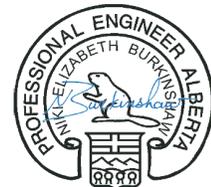
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<p align="center">PERMIT TO PRACTICE WATT CONSULTING GROUP LTD.</p> <p>Signature _____</p> <p>Date _____</p> <p>PERMIT NUMBER: P 3818 The Association of Professional Engineers, Geologists and Geophysicists of Alberta</p>
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