

CORTELLUCCI VAUGHAN HOSPITAL

Hospital Precinct On-Street Parking Technical Review

Prepared For: Mackenzie Health

January 7, 2021

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1.0 INTRODUCTION

There is an overarching community imperative to ensure the successful opening and operation of the Cortellucci Vaughan Hospital. This imperative is shared by Mackenzie Health, the City of Vaughan, the Region of York, and the Province of Ontario.

Cortellucci Vaughan Hospital (CVH) is the first public hospital in Vaughan and the first project within the Vaughan Healthcare Centre Precinct, located north of Major Mackenzie Drive and west of Jane Street. The site leverages Provincial, Regional, and Municipal investments in transportation infrastructure, such as the future York Region Transit (YRT) Hub south of Major Mackenzie Drive, which will be connected to the site via a pedestrian underpass.

The shared community imperative necessitates that the transportation related impacts of the Hospital be managed to ensure an efficient opening and smooth operations in the future. Key to managing the transportation impacts is employing a comprehensive and coordinated approach to managing parking both on-site and in the precinct.

Mackenzie Health, and BA Group as their transportation consultants, believes that maintaining an on-street parking supply on municipal streets in the precinct will negatively impact the Hospital, the Precinct, the operations of first responders, and those working at or visiting the site. These impacts will be reviewed in more detail within this report, but include increased congestion and area traffic, delays to first responders, and a detrimental impact to the expansion of sustainable transportation modes.

The municipal streets proposed to be signed as "No Parking" include the following, outlined in **Table 1**.

Street	Street Name as per Cross-Section Precinct Plan Width		Lane Configuration ¹	Street Classification as per Precinct Plan	
Frederick	Street 'A'	26.0m	2 Vehicle + 1 Bicycle per direction	Collector Road	
Banting	Street 'B'	23.0m	2 Vehicle per direction	Local Road	
Vaughan	Street 'C'	26.0m + 6.0m Landscape Buffer	2 Vehicle per direction	Collector Road	
Health Care Circle	Street 'G' 26.0m		2 Vehicle + 1 Bicycle per direction	Collector Road	
Oncie	Street 'E'	26.0m	2 Vehicle per direction + Multiuse Trail	Collector Road	
Wellness Way	Street 'D'	26.0m	2 Vehicle per direction + Multiuse Trail	Collector Road	
Observation Avenue	Street 'E'	26.0m	2 Vehicle per direction + Multiuse Trail	Collector Road	
Darvish Drive	Street 'F'	23.0m	2 Vehicle per direction	Local Road	

TABLE 1 PRECINCT STREET NETWORK INFORMATION

Notes:

1. Precinct Plan Cross-Sections are illustrated in Appendix A

1.1 THE PROPOSAL

The Hospital proposes that no on-street parking be provided on municipal streets within the Vaughan Healthcare Centre Precinct. This would be in keeping with the approach the Hospital has taken to designing and managing their internal roads, in compliance with the principles of the Vaughan Healthcare Centre Precinct Plan, in support of the MVH Mobility Choice Travel Plan, and in harmony with best practices observed at other provincial hospital sites.

To be effective, and in order to avoid potential negative outcomes during the Hospital's "Grand Opening", the Hospital requests that the necessary approvals and signage be in place prior to the first week of February 2021.

2.0 BACKGROUND

The opening of the CVH is a much anticipated milestone in the creation of the Vaughan Healthcare Centre Precinct, the result of hard work shared across the public and private sectors, all levels of government, and individuals who sought to make the ambition of a hospital in Vaughan a reality.

2.1 THE PRECINCT PLAN

Early in the hospital development process, a City-led initiative advanced planning for the Precinct through the creation of the *Vaughan Healthcare Centre Precinct Plan*, ratified by Vaughan City Council in November 2013.



FIGURE 1: VAUGHAN HEALTHCARE CENTRE PRECINCT PLAN

The Precinct Plan, prepared by Malone Given Parsons, The Ventin Group Ltd, Cole Engineering, and Stephen Popovich and Associates, addressed a broad range of planning topics. The Precinct Plan outlined background information, requirements, and recommendations for the Precinct's planning context, its guiding principles, and addressed technical topics such as sustainability, transportation, and site servicing.

The transportation section of the Precinct Plan speaks to the role that parking should play in the Precinct's development, and measures that individual sites (such as the CVH) must undertake in order to develop.

Specifically, the Precinct Plan speaks to the opportunities and impacts that a comprehensive and coordinated approach to parking can provide (emphasis added):

6.3 Parking: "The precinct presents a great opportunity to incorporate a parking management strategy to reduce vehicle reliance and achieve a sustainable transportation system. **Experience has shown that excessive parking supply imposes additional environmental costs, economic costs, contradicts community development objectives for more sustainable liveable and walkable communities, and tends to increase driving and discourage the use of alternative modes of travel.**"

The discussion of parking within the Precinct Plan continues, pointing out that the "Parking Management Strategy" shall include, among other elements:

- A pricing strategy and understanding of the potential spill-over effects resulting from paid parking;
- An enforcement strategy to prevent parking 'spillover' into sensitive areas, particularly the residential area to the north;

Section 6.4 of the Precinct Plan states that site plans within the City of Vaughan are required to prepare a Transportation Demand Management Plan (TDM Plan) and recommends a number of potential strategies that could be employed as part of the TDM Plan. Notably, the recommended strategies include to "Ensure that access is controlled or paid parking is maintained through the Precinct."

Lastly, it is worth noting that the Precinct Plan, in its urban design section, states "lay by parking is encouraged along all streets, where appropriate". The subsequent design of the municipal street network by the City of Vaughan's consulting team, did not include any lay-by parking, thereby inferring that it was not appropriate for inclusion.

This is echoed in the Precinct Plan's technical appendices. Specifically, *Appendix C: Street Cross Sections* lays out the proposed cross-sections for the municipal streets in the Precinct. These sections (prepared by Malone Given Parsons) do not include any lay-by parking, nor do they indicate any on-street parking. The vehicular curb lanes in all of the provided sections are labelled as "Travel Lane", with widths commensurate with what would be expected of vehicular travel lanes. There is no indication in the plans, nor in the constructed roads on site today, that curbside parking was ever planned to be implemented in the Precinct. BA Group has included the relevant sections of *Appendix C* as an appendix to this report.

2.2 CVH TDM PLAN & PARKING ANALYSIS

As required by the City of Vaughan and outlined in the Precinct Plan, Mackenzie Health prepared and received approval for the *MVH Mobility Choice Travel Plan*, a TDM Plan designed to suit the context and operational needs of the Hospital (then known as the Mackenzie Vaughan Hospital, or MVH).

The Hospital's TDM Plan highlighted the following:

"An abundant building parking supply encourages single-occupant vehicle trips, rather than carpool, walking, cycling or transit trips. When too much parking is provided, the use of alternative, sustainable modes of travel are put at a substantial marketing disadvantage. At the same time however, the site will require a certain amount of essential parking supply in order to accommodate the needs of staff, patients, and visitors." As noted in the Precinct Plan, pay parking is to be required throughout the Precinct. Thus, the Hospital's TDM Plan responded by implementing such measures:

"A pay-parking system will be implemented for all motorists working or visiting the Hospital. Provincial regulation mandates the rates at which patients and visitors can be charged, which will also have an indirect impact on the costs of staff pricing."

In order to ensure that the needs of the Hospital were met on opening day, and into the future, a parking analysis was prepared by BA Group as part of the Stage 1 site plan approvals. This parking analysis reviewed the planned functional program of the Hospital, parking demands at other, similar hospitals, and used a first principles approach to determine both a by-law parking requirement (to satisfy the needs of the Hospital in a less auto-centric future, supported by enhanced Regional transit) and an "opening day" parking supply target, which was intended to meet the expected needs of the Hospital site, in an effort to mitigate parking impacts spreading through the surrounding area.

The analysis BA Group undertook, and the subsequent determination of the by-law and opening day parking requirements, were encoded into the site specific by-law and the project specific output specifications (PSOS) used to build the project. On-street parking within the Precinct was not accounted for as part of that analysis, as the Precinct Plan indicated that oversupplying parking was not appropriate, and the design of the municipal streets indicated that it would not be provided.



3.0 NEEDS & IMPACT ASSESSMENT

In order to determine if on-street parking is appropriate for the Precinct, it is important to assess which users are typically intended to be served by on-street parking, who would be the most likely users of on-street parking, and what the negative externalities would be of providing, or not providing, on-street parking.

A summary of the streets under consideration is provided in **Table 1**. These streets are primarily collector streets, with the exception of two, large right-of-way, local streets. The street cross-sections included in the Precinct Plan do not illustrate any parking lanes consistent with typical local streets, rather they illustrate 4 vehicular lanes (2 per direction) on each street.

The following sections detail the conditions where on-street parking would typical be provided (Section 3.1) and how the inclusion of on-street parking in the Precinct would result in negative impacts to the Hospital and the Precinct overall (Section 3.2).

3.1 ON-STREET PARKING – NEEDS ASSESSMENT

While the inclusion of on-street parking is the default scenario for non-arterial roads in the City of Vaughan, it is important to consider who on-street parking is intended to serve.

Generally, the City of Vaughan's on-street parking restrictions (as laid out in the City of Vaughan's comprehensive Parking By-law 064-2019) permit the parking of vehicles:

- For no more than 3 hours at a time between 6:00 AM and 6:00 PM (§5 (9)(a))
- Between the hours of 6:00 AM and 2:00 AM (§5 (9)(b))

There are street specific exemptions and on-street permit parking exemptions (for select streets where residents are able to apply for on-street parking permits to exempt specific vehicles from some restrictions) outlined in the Parking By-law, but generally speaking these two restrictions would apply to streets within the Precinct.

The City of Vaughan's standard on-street parking restrictions are in keeping with those in many other municipalities, and are generally enacted to support the use of on-street parking by specific user groups (or "types" of parkers). Based upon the standard restrictions indicated above, the typical user groups would include:

- Residential visitors people parking to visit family and friends for short visits, and after 6:00 PM able to stay for longer visits (i.e. staying for dinner or babysitting). Residents and residential visitors who require exemptions from some restrictions are able to apply for permits in some cases, extending their ability to use available on-street parking.
- 2) Short-stay users people visiting community amenities, such as local libraries, parks, and community centres, etc. where the estimated duration of stay is relatively short.
- Commercial customers people visiting small-format (i.e. "Main Street") retailers which provide limited or no off-street parking.

It is notable that none of these user groups are anticipated to use the on-street parking in the Vaughan Health Care Centre Precinct. Particularly on "opening day" and in the immediate future, the Hospital will be the only operating entity in the Precinct. Further, future development must conform to the Precinct Plan, which calls for appropriate quantities of off-street parking be provided on-site for each project.

There are no residential visitors, no short-stay users (save those visiting the Hospital), and no commercial customers present in the Precinct, particularly upon the opening of the Hospital. Thus, while on-street parking is the default circumstance for non-arterial municipal streets in Vaughan, we do not believe that it is appropriate for on-street parking to be provided within the Precinct, as none of the 'typical' users are present.

As none of the intended user groups are present in the Precinct, it is important to assess who might use the available on-street parking and would on-street parking provide an overall net benefit to the Precinct.

The Hospital generates two typical user groups with respect to parking activities: staff and visitors (including patients). The Hospital's site plan was designed to provide on-site parking for these two user groups, and subgroups within them, in different parking lots and a parking structure. The goal was to provide visitor parking close to the primary visitor entrances with the aim of providing a simple, clear, and accessible path of travel between vehicles and the final destination within the Hospital. Staff parking was designed to be consolidated and proximate to primary staff entrances.

While some Hospital visitors would present a similar parking profile to "commercial customers", as outlined above (duration of stay less than 3 hours, etc.) it is almost certain that Hospital staff would be the predominate users of available on-street parking.

Hospital staff typically arrive in platoons (due to schedule shift start and end times) and typically start their shifts earlier than most visitors arrive at the Hospital. This would result in large numbers of staff being able to park in available on-street spaces immediately following the conclusion of the overnight (2:00AM to 6:00 AM) parking prohibition. Despite the presence of a 3-hour parking duration restriction, it would be relatively simple for staff to move their vehicle once or twice over the course of their shift. Moving a vehicle could happen in concert with other Hospital staff, who could effectively "swap" spaces during the course of their shift, ensuring that there is no turnover in available on-street parking for visitor uses. Occupancy of the on-street parking by Hospital staff is even more likely later in the day. If a staff member's shift starts within 3 hours of 6:00PM (the end of the 3-hour parking restriction), they could park on-street for the entirety of their shift without having to move their vehicle (until 2:00 AM). This shift scheduling is not only possible, but likely, given the 24-hour operations of the Hospital.

Even within the context of specific Hospital users, on-street parking is not likely to provide utility to those who have a use profile consistent with the originally intended users of the Parking By-law.

3.2 ON-STREET PARKING – IMPACTS ASSESSMENT

In determining if on-street parking in the Precinct would be, overall, beneficial or harmful, it is important to assess the externalities that may occur. These principally relate to congestion and traffic impacts caused by those searching for parking. However, on-street parking would also negatively impact the investments made by the Hospital and others in supporting sustainable transportation alternatives.

3.2.1 Congestion Concerns

The Hospital site plan was designed to separate the primary parking flows (for the major staff and visitor parking areas) from the routes that are essential to ambulances and those destined for the Emergency

Department (ED). These flows, with green arrows representing the primary parking traffic and red representing the routes of ambulances, are illustrated in **Figure 2** below.

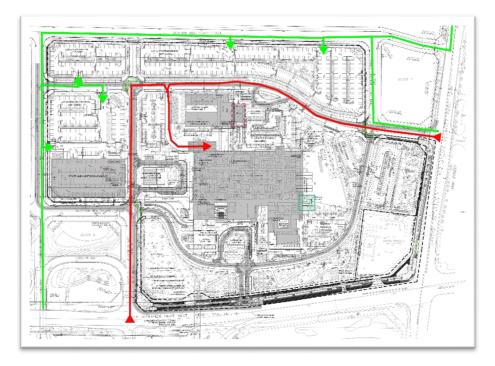


FIGURE 2: PRIMARY TRAFFIC FLOWS

This was done intentionally to ensure that the traffic impacts of the largest generators (being the surface and structured parking lots) would be separated from the routes of those who require direct and timely access to critical facilities.

On-street parking generates recirculation of drivers. This phenomenon occurs as drivers realize that on-street parking is a possibility, especially in circumstances where it is free or below market rates for nearby parking lots. Drivers, recognizing that the most cost-effective option is to locate an on-street parking space, begin circulating, in an outward spiral pattern seeking parking further and further from their ideal location. In the case of the Precinct, this means that drivers would start looking for parking on the municipal streets, and recirculate onto Hospital streets (owned and maintained by the Hospital, without on-street parking), as a way of getting back to the municipal streets to continue their search. These recirculation flows are illustrated in **Figure 3** below.



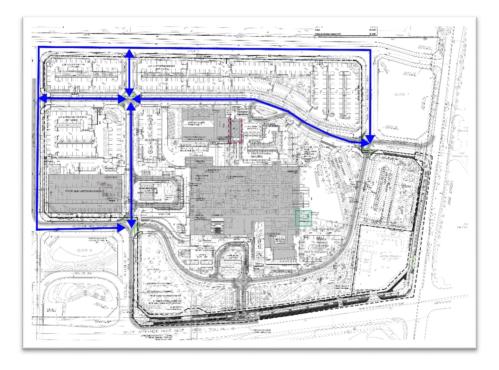


FIGURE 3: RECIRCULATION TRAFFIC FLOWS

This recirculating traffic, which is effectively "new traffic" generated by the search for on-street parking, interferes with the primary access routes of ambulances and those headed to the ED. Traffic is increased on link segments of the roads, as well as at intersections where drivers are making additional turning manoeuvres beyond what would have been required if they were following the provided wayfinding to reach visitor and staff parking lots.



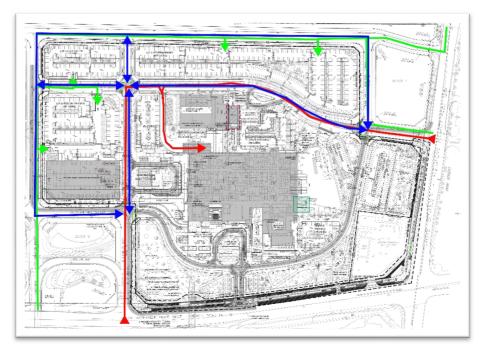


FIGURE 4: OVERLAPPING TRAFFIC FLOWS

In addition to congestion caused by recirculating drivers, drivers waiting for on-street parking would add to the overall impediments to drivers using the streets. This may be as simple as someone waiting in a through lane for someone in a parking lane to leave, or waiting for another driver to finish a parallel parking manoeuvre. A user waiting for an on-street space to become available negatively impacts the overall road capacity.

Concerns about congestion and their impacts on ambulances was expressed by the York Region Paramedic Services (YR-PS) during the site planning process. Appended to this report is a letter from YR-PS outlining concerns about site congestion with the extension of Street D (which flanks the Hospital's western side) through to the municipal Street C. This interconnection is anticipated to bring additional traffic to Street D, which is a primary ambulance and ED access route. Notwithstanding YR-PS's concerns, Street D was extended to Street C. Further congesting this route with recirculating drivers would present additional complications and delay to those attempting to reach the Hospital in times of crisis.

Complicating the issues around parking-induced congestion further are road operations concerns. As the four-lane road cross-sections were laid out without parking being shown, permitting parking in the curb lanes will reduce available lane capacity on each road, resulting in congestion. Previously prepared analysis in support of the Precinct and Hospital did not account for this reduced road capacity, particularly during periods of shift change when traffic volumes are highest. This reduction in capacity is compounded by poor weather. There is a concern that during periods of poor weather, such as when snow plowing is necessary, the municipal street network will be significantly more congested than the Hospital street network. The combination of snow drifts and on-street parking would effectively narrow the municipal streets, while the Hospital streets, without on-street parking, would be easier to maintain and would have more width available for snow storage. The resulting difference in practical operating capacity would encourage drivers to use



Hospital streets to reach their final destination (such as a staff or visitor parking lot) rather than municipal streets as originally planned, further adding to the congestion on link segments and at intersections.

3.2.2 Sustainable Transportation Alternatives

The presence of on-street parking, either free or offered at a lower price than neighbouring surface lots, directly undermines the outcomes of the Hospital's TDM Plan. As noted previously, the Hospital prepared and is enacting a TDM Plan which seeks to reduce dependence on single occupant vehicles. Through this plan the Hospital has made investments in infrastructure ranging from providing bicycle parking to facilitating a below-grade pedestrian connection to the future York Region transit terminal on the south side of Major Mackenzie Drive.

The TDM Plan, a requirement of the municipal Precinct Plan, uses a mix of "carrots" and "sticks" to encourage changes in behaviour with respect to transportation. Two of the most significant "sticks" are the implementation of parking pricing and control of the parking supply. These two "sticks" work in tandem to put automobile travel on equal footing with other transportation modes by ensuring drivers are responsible for the externalities of driving, such as the cost of leasing, constructing, and maintaining parking lots and structures. The TDM Plan's "carrots" (such as the connection to the transit terminal and convenient bicycle parking) are rendered less effective if drivers have access to free or cheap and abundant on-street parking.

Overall on-street parking weakens the effectiveness of the Hospital's TDM Plan and the Precinct Plan.

3.3 IMPACTS OF "NO PARKING"

While the prior analysis reviewed the impacts of providing parking, it is also important to assess the impacts of the proposed "No Parking" restrictions in the precinct.

The potential impacts are minimal, if evident at all. As a result of the Hospital generating users that are not "expecting" to have access to on-street parking, in the way that residential neighbourhoods or main streetstyle commercial businesses would, there are few parties that would notice the missing parking. The Hospital's parking analysis specifically set out to capture the potential parking needs of the site's users and the Hospital has constructed parking to accommodate what was determined to be necessary. This means that all of the planned users should be able to be accommodated on-site, without leading to an oversupply of parking.

There may be a perception that if on-street parking is not provided nearby, parkers will travel further afield to find it. While this may occur infrequently, the presence of on-street parking would be more likely to encourage this behaviour, rather than discourage it. This is a result of the "spiral searching" behaviour that is common with on-street parking. As previously discussed, once a driver realizes that they have an economical advantage to find a free or cheap parking space, they have a tendency to search in an expanding spiral looking for an available space. This could result in a driver leaving the Precinct to find available on-street parking in the residential neighbourhood to the north. However, if "No Parking" is provided near the user's destination (i.e. the Hospital) they would be more likely to forego their search, as they would not be attuned to the option of on-street parking.

Future commercial development planned for the Precinct may be impacted by the absence of on-street parking. However, as discussed in **Section 5.2**, the types of commercial development planned for the Precinct is not the "Main Street" / small format retail that often considers cheap and abundant on-street parking part of their success.

4.0 BEST PRACTICES

In reviewing other hospital sites, both suburban and urban, it was determined that those surveyed do not typically provide on-street parking in the immediate vicinity of the hospital. As the distance from a particular hospital increases and/or the mix of uses changes, various special conditions arise. However, these special conditions are typically directly related to the "intended" users discussed in **Section 3.1**.

BA Group reviewed a select number of urban and suburban hospitals to determine what, if any, parking restrictions are provided on municipal streets in the immediate vicinity of the hospital site. These sites and selected representative streets are summarized in **Table 2** below. It is notable that municipal streets near hospitals primarily have "no parking" prohibitions on them, regardless of adjacent land uses. Municipal streets within residential neighbourhoods that are located in close proximity to hospitals (often immediately adjacent to) typically contain some form of residential permit parking or parking time restriction (such as 1-hour parking or parking only after 5pm). As noted however, these exist exclusively in residential neighbourhoods where "residential visitors" would be the anticipated users, and typically only on one side of the street.

While the proximity of the nearest residential streets varies between sites, it is typical that "standard restrictions" do not apply until a street is at least 200 to 300m from the Hospital and the street contains low rise residential development. Although the Vaughan Healthcare Centre Precinct is adjacent a residential neighbourhood, it does not exist within one, indicating that such exemptions from a standard "no parking" prohibition are not required.



Hospital	Location	Nearby Land Uses	Representative Streets	Parking Restrictions	Proximity	Notes
William Osler – Peel Memorial	Kennedy Road North &	Residential (Low-rise, townhouse, and apartments)	Trueman Street	No Parking Both Sides	Immediately Adjacent the Hospital	Single detached houses facing the Hospital
	Queen Street East		Eastern Avenue	No Parking One side 1 Hour Parking One Side	Perpendicular to the Hospital	Single detached houses on both sides
	Brampton		Wilson Ave	No Parking One Side Standard Restrictions ¹ One Side	±250m from the hospital site	Single detached houses separated by a Regional arterial road (Queen St)
William Osler – Etobicoke	Highway 27 & Finch Avenue West	Institutional (Humber College)	Norbrook Crescent	No Parking (Monday to Friday, 8AM-5PM) Both Sides	±250m from the hospital site	Single & semi- detached houses separated by a 5-lane major collector road (Humber College Blvd)
General	Toronto	Residential (Low-rise)	Briarwood Avenue	No Parking (Monday to Friday, 8AM-5PM) Both Sides	±300m from the hospital site	Single detached houses separated by a 5- lane major collector road (Humber College Blvd) & a major arterial road (Highway 27)
	Keele Street & Wilson Avenue Toronto	Government Complex (Ontario) Residential (Low-rise and apartment)	Wintergreen Road	No Parking One Side 1h Parking (8AM-5PM)	±200m from the hospital site	Single detached neighbourhood separated by a major arterial road (Wilson Ave)
Humber River			Sir William Hearst	No Parking	Immediately Adjacent the Hospital	5-lane major collector road
			Ridge Road	No Parking One Side No Parking (Monday to Friday, 7AM to 5PM) One Side	±200m from the hospital site	Single detached neighbourhood – No vehicular connections to the Hospital
Markham	Highway 7 & Ninth Line	Residential	Riverlands Ave	Daytime Parking Allowed by Permit Only, both sides	Immediately Adjacent the Hospital	Low-Rise (Townhouse / Row House)
Stouffville	Markham	(Low-rise)	Elm Lea Street	No Parking One Side Standard Restrictions ¹ One Side	±300m from the hospital site	Single detached houses separated by a major regional road (Ninth Line)
Mackenzie Health –	Major Mackenzie Drive &	Institutional (High School)	Centre Street West	No Parking One Side Standard Restrictions ¹ One Side	±200m from the hospital site	Single detached neighbourhood separated by a collector road (Trench Street)
Richmond Hill	Trench Street Richmond Hill	Residential (Low-rise)	Richmond Street	No Parking One Side Standard Restrictions ¹ One Side	±300m from the hospital site	Single detached neighbourhood

TABLE 2 Example Hospitals & Area Parking Restrictions

Notes:

1. Standard Restrictions represent typical Parking By-law Conditions (i.e. 3 hour limit, no parking between 2AM and 6AM)



5.0 OPTIONS ASSESSMENT

In determining the recommended course of action with respect to the Precinct parking restrictions, BA Group analyzed several alternative options for consideration. These are outlined below, with an impact assessment and summary provided in **Table 3**.

The below options were assessed for the municipal streets in the Vaughan Healthcare Centre Precinct, which include:

- Fredrick Banting Street Formerly Streets 'A' & 'B'
- Vaughan Health Care Circle Formerly Streets 'C', 'G', & 'E'
- Observation Avenue Formerly Street 'E'
- Wellness Way Formerly Street 'D'
- Darvish Drive Formerly Street 'F'

5.1 ALTERNATIVE OPTIONS

Maintaining the Status Quo

This option assumes that the City of Vaughan's "Standard Restrictions" are applied. These would include:

- a) a 3-hour parking limit (between 6:00 AM and 6:00 PM)
- b) no parking overnight (between 2:00 AM and 6:00 AM)

Paid On-Street Parking

Assumes the implementation of a "pay-and-display"-style municipal paid parking program. While the City of Vaughan does not have a comprehensive on-street paid parking program, we understand that a pilot project is underway within the Vaughan Metropolitan Centre.

Time Limited (Narrow Parking Permitted Window)

This option reduces the available "time permitted" parking from 3 hours to 1 hour, to encourage higher turnover.

Time Limited (Time of Day Restriction)

Similar to restrictions seen in residential neighbourhoods near other hospitals, parking is prohibited during "office hours" (i.e. Monday to Friday, 8:00 AM to 6:00 PM) but permitted, with standard restrictions, afterwards.

Permit Only

Another technique used in areas where residential neighbourhoods are proximate to hospitals, parking is restricted to only permit holders, who must be an area resident.

No Parking

Parking is prohibited for any users, any time of day.

TABLE 3 OPTIONS ASSESSMENT

Option	Example Restriction	Vehicular Capacity Maintained	Complies with Precinct Plan	Supports Hospital TDM Plan	Prevents Congestion & Recirculation	Implementable Prior to Opening Day	Primary User Group Served
Maintain Status Quo	3 Hour Limit (6 AM – 6 PM) No Parking Overnight (2 AM – 6 AM)	No	No	No	No	Yes	Hospital Staff
Paid On Street	3 Hour Limit (6 AM – 6 PM) Per ½ Hour Cost	No	Yes	No (if priced cheaper than Hospital lots)	No	Likely No	Hospital Visitors Hospital Staff (if cheaper than staff parking permits)
Time Limited (Narrow Window)	1 Hour Limit (6 AM – 6 PM) No Parking Overnight (2 AM – 6 AM)	No	No	No	No	Yes	Short-stay Hospital Visitors Patients likely excluded
Time Limited (Time of Day)	No Parking (6 AM – 6 PM) 3 Hour Limit (6 PM – 2 AM) No Parking Overnight (2 AM – 6 AM)	Partly	No	No	No	Yes	Hospital Staff with Late/Evening Shifts
Permit Only	No Parking Except by Residential Permit	No	No	Yes	Yes	Yes	No Users Served, as there are no residents in the Precinct
No Parking	No Parking Anytime	Yes	Yes	Yes	Yes	Yes	No Users Served



As noted in the prior summary table, the only option that is compliant with the Precinct Plan, TDM supportive, and mitigates against congestion and recirculation issues is the "No Parking" option proposed by the Hospital.

It is notable that paid on-street parking is likely not implementable in advance of the Hospital's planned opening due to the lead times required to procure and install the necessary equipment. Further, if the pricing is not in keeping with the Hospital's pricing for parking the effect would be similar to having no paid parking at all.

The "Permit Only" option is not practical, as there are no residents in the Precinct who would be eligible for future permits, thus making it, effectively, a "No Parking" option.

5.2 FUTURE CONDITIONS

While the prior options assessment has been conducted with the "Opening Day" scenario in mind, BA Group has also considered a future scenario. In the near to medium term, other parcels within the Precinct will begin to develop, following the principles laid out in the Precinct Plan and in keeping with the terms of the City's ground lease with the Hospital.

The Precinct Plan identified other primary land uses that may develop in the balance of the non-Hospital lands within the precinct. These include:

- A long-term care facility;
- Medical office buildings;
- A "Medical Mall";
- A community health facility;
- Supportive Housing, and
- An "Incubator Space."

It is worth noting that the majority of these land use types would not necessarily require on-street parking to support the development of their parcels. For land uses that may benefit from some on-street parking (for example the "Medical Mall"), it is important to review the planned block structure associated with each use.



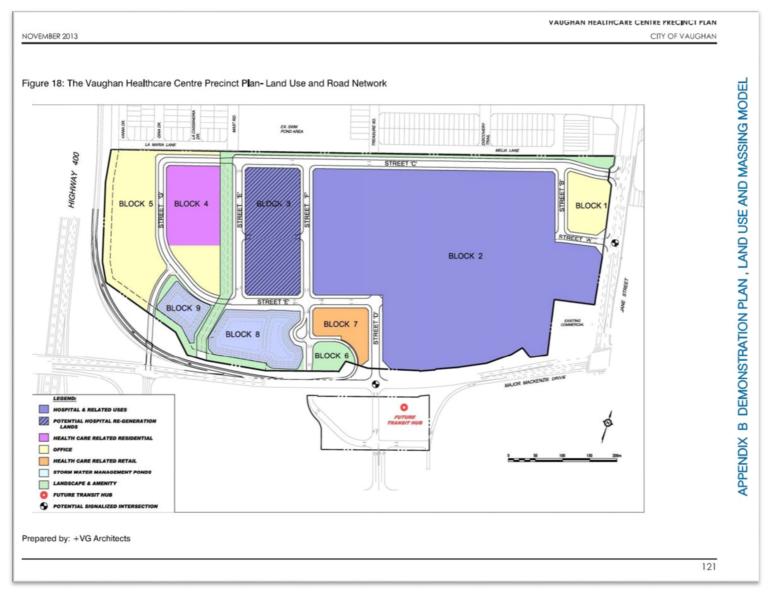


FIGURE 5: EXCERPT FROM PRECINCT PLAN – APPENDIX B – FIGURE 18



In the case of the "Medical Mall", proposed to be located on Block 7, the block is bound by two high-capacity municipal streets (Vaughan Health Care Circle, formerly known as Street E, and Wellness Way, formerly known as Street D) and two sets of, what are in effect, "off-ramps". In BA Group's opinion, these streets would not be suitable candidates for on-street parking due to their short frontages, proximity to signalized intersections, and need for available road capacity.

Other blocks present similar influencing factors, such as the previous discussed congestion issues caused by on-street parking (i.e. impacting the street around Block 1). Yet other developments (i.e. the long term care home) are required by the Precinct Plan to manage their parking and include parking pricing.

Thus, BA Group does not foresee a future circumstance where on-street parking would be necessary, subject to future development also adhering to the principles of the Precinct Plan. However, this is not a definitive conclusion. It is possible that circumstances may arise that would result in the Precinct benefiting from on-street parking in specific locations and under specific operating parameters. BA Group would recommend future study at such time that on-street parking in the Precinct is proposed to determine if circumstances warrant a targeted introduction.



6.0 CONCLUSION

The Hospital proposes that no on-street parking be provided on municipal streets within the Vaughan Healthcare Centre Precinct. This would be in keeping with the approach the Hospital has taken to designing and managing their internal roads, in compliance with the principles of the Vaughan Healthcare Centre Precinct Plan, in support of the MVH Mobility Choice Travel Plan, and in harmony with best practices observed at other hospital sites reviewed in Toronto, Peel Region, and York Region.

To be effective, and in order to avoid potential negative outcomes during the Hospital's "Grand Opening", the Hospital requests that the necessary approvals and infrastructure be in place prior to the first week of February 2021.

The introduction of "No Parking" prohibitions in the Precinct would ensure that the City of Vaughan, along with its Regional and Hospital partners, are doing their part to ensure that the shared community imperative for a successful opening and operation of the Cortellucci Vaughan Hospital is addressed.

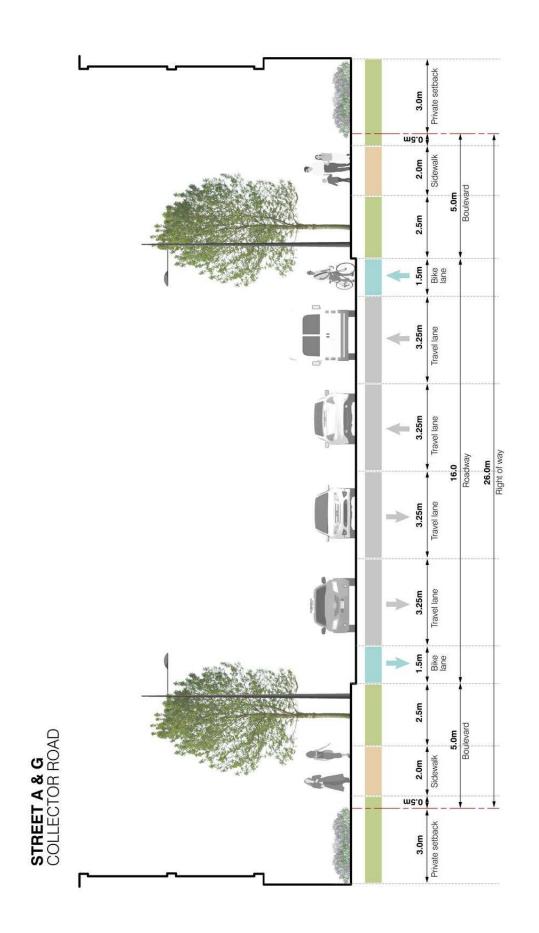
Failure to introduce the prohibitions would likely result in increased congestion and impacts to drivers, ambulances, and others. On-street parking does not meet the requirements of the Precinct Plan and works to undermine the Hospital's Transportation Demand Management plan, as well as infrastructure investments made in sustainable transportation alternatives.

In reviewing other Hospital sites is it clear that other hospitals in Toronto, Peel Region, and York Region do not provide on-street parking unless adjacent residential neighbourhoods, even then including various partial prohibitions to discourage the use of on-street parking by hospital patients, visitors, and staff. BA Group's analysis of the potential alternatives indicates that the most impactful path forward is to enact the proposed "No Parking" prohibitions throughout the Precinct in advance of the Hospital's opening. Should sufficient demand be present in the future, this decision could be reviewed should the City deem it appropriate.

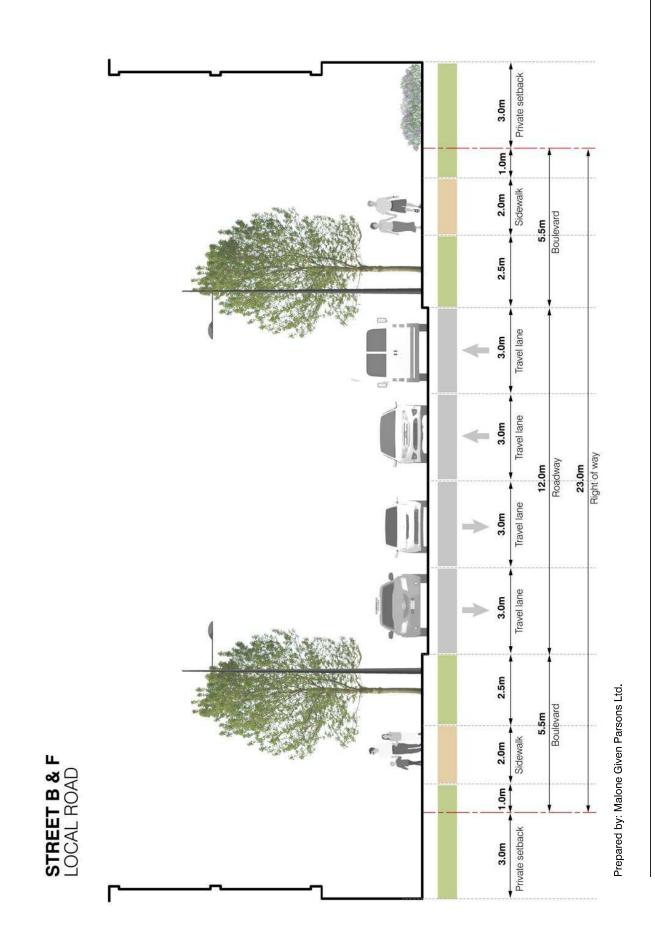


APPENDIX A: Precinct Plan – Appendix C – Street Cross Sections

APPENDIX C: Street cross sections



NOVEMBER 2013

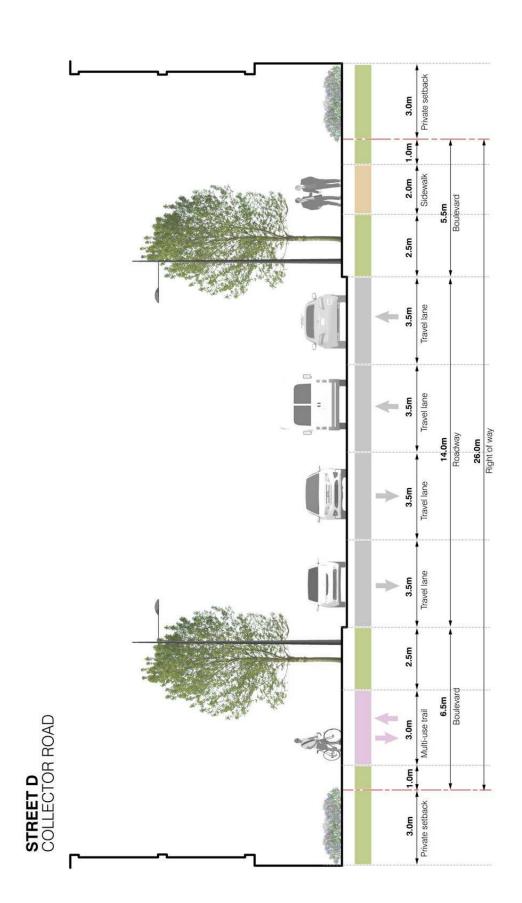


APPENDIX C STREET CROSS SECTIONS

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APPENDIX C STREET CROSS SECTIONS



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APPENDIX C STREET CROSS SECTIONS

APPENDIX B: Correspondence from York Region Paramedic Services





Community and Health Services Department Paramedic and Seniors Services Branch

August 1, 2017

Mr. David Stolte Vice President, Strategy & Redevelopment Mackenzie Health 10 Trench Street Richmond Hill, ON L4C 4Z3

Dear Mr. Stolte,

Re: Mackenzie Vaughan Hospital Road Access from Street C.

Thank you for allowing us the opportunity to provide feedback on the design of the new Mackenzie Vaughan Hospital as it relates to the ambulance garage and the emergency department access. After reviewing the plan, we have concerns with the proposed north-south road from Street C through the staff parking lot.

Our concern is that by creating this roadway, it would allow the general public to use this road as a way to by-pass the Jane St and Major Mackenzie intersection as a 'short cut'. This access could cause increased traffic congestion which has the potential to delay ambulances from accessing the hospital in a timely matter.

We would strongly recommend that this roadway be reviewed to ensure unnecessary delays are not created to ambulances or other patients in need of emergency services entering the site as well as reducing potential issues due to the amount of traffic this road could potentially create.

Thank you for your consideration in this matter.

lain Park

Deputy Chief/Manager Paramedic Services, Paramedic Operations

YORK-#7772595-v1-Mackenzie Vaughan Hospital Road - letter to VP of Mackenzie Health

