

Technical Memorandum

To:	Curtiss Scarlett – Land Development Manager	Date:	2019-09-23
Cc:	Christopher Gordon		
From:	Andrew Harte, P.Eng.	Project Number:	2019-22

Re: 3232 Jockvale Road – Roadway Network and Resident Concerns

Comments were received from the City of Ottawa on September 17, 2019, outlining concerns from existing area residents on the plan of subdivision for 3232 Jockvale Road. The plan of subdivision is the final area of the residential community bound by Strandherd Drive to the north, Chapman Mills Drive to the west and south, and the Kennedy-Burnett Stormwater Management Pond to the east. In total, approximately 200 units are planned for the subdivision and the existing roadways of Namaste Walk, Lilith Street, Cashmere Terrace and Hamsa Street would be extended to the Chapman Mills Drive corridor.

The comments received from the City included:

- 1. Anticipated volumes on Namaste Walk, Lilith Street, Cashmere Terrace and Hamsa Street
- 2. Potential of cut through traffic (or lack there of) on Madrid Ave, Tallgrass Lane and Andora Ave.
- 3. Potential of cut through traffic (or lack there of) using future Chapman Mills Drive (west bound Chapman Mills Drive through Namaste Walk, Lilith Street, Cashmere Terrace and Hamsa Street to Strandherd)

The following sections will answer each comment specifically.

Comment Responses

Comment #1

Table 1 provides an approximate total auto trip generation for each of the internal roadways of Namaste Walk, Lilith Street, Cashmere Terrace and Hamsa Street.

	Units	Trip Gen					,	Frequency of Vehicles per Internal Road (car/minutes)		
Street		AM			PM					
		In	Out	Total	In	Out	Total	In	Out	Total
Namaste	37	8	14	22	14	12	26	1 car per 4.3-	1 car per 4-10 minutes	1 car per 2.2- 10 minutes
Lilith	40	8	15	23	14	13	28			
Cashmere	30	7	11	17	11	10	21	15 minutes		
Hamsa	26	4	6	10	6	6	12			

Table 1: Internal Roadway Trip Approximation

Note:

- 1 Chakra Street and Street No 2 assumed to exit along Chapman Mills Drive
- 2 Units are estimated total with Mion Parcel

As summarized above, a vehicle is anticipated to be generated every 2 to 10 minutes on each of the internal roadways. If a <u>conservative</u> split of 50% to Chapman Mills Drive, and 50% through the existing community, this would have a resulting impact of 1 car per 4.4 to 20 minutes, or an equivalent volume of 3 to 14 cars during the AM and PM peak hours.

Notwithstanding the above split, once the temporary dead ends are removed and all the vehicles generated along Namaste Walk, Lilith Street, Cashmere Terrace and Hamsa Street to the south of Clarity Avenue exclusively exited along Clarity Avenue to Chapman Mills Drive (a 100% split through the existing community), the volumes would be under the City's Transportation Impact Assessment (TIA) Guideline thresholds for a local roadway.

Comment #2

The connections of Tallgrass Lane and Madrid Avenue to Strandherd Drive are right-in/right-out accesses (restricted left turns) controlled by the existing medians, and the future widened Strandherd Drive will be a divided roadway and maintain this operation. Therefore, any right turning vehicles from within the community will have travelled past more direct routes to access Strandherd Drive and no cut through traffic is anticipated along either Tallgrass Lane or Madrid Avenue.

At Andora Avenue, 22-28 two-way vehicles are expected to use the signalized intersection at Strandherd Drive and are identified within the TIA. These trips are generally assumed to come from the east end of the subdivision as Hamsa Street provides a direct connection to the north. The concept referenced in the comments would have the same impact, as Hamsa Street still provides a direct connection and Cashmere Terrace ("Octave" in the Harmony plan provided with the comments) cannot connect to Chapman Mills Drive. Figure 1 illustrates the two plans.

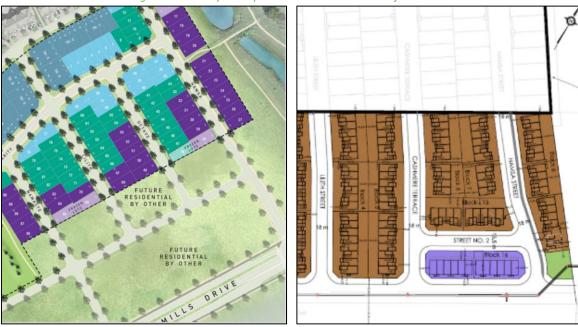


Figure 1: Harmony Concept Plan and Submitted Plan of Subdivision

From a terminology stand point, cut through traffic would be considered as trips passing through a community from outside the community. Such as a trip from Manotick traveling along Hamas Street to

get to Strandherd Drive instead of using Chapman Mills Drive or Greenbank Road. Trips originating within the community, such as the proposed plan of subdivision, are not considered cut through traffic. These trips are using the local road network provided to access higher order roads, specifically the collector road of Chapman Mills Drive and arterial road of Strandherd Drive.

Comment #3

The existing and proposed road network limit the benefits of any cut through traffic along most of the internal roadways, generally resulting upwards of an additional 120 metres travel distance and at least two additional stops and turns (one left, one right) to meander through to Strandherd Drive or cut the corner to Chapman Mills Drive.

It is noted that until Chapman Mills Drive is connected to the east over the Kennedy-Burnett Stormwater Management Pond, Hamsa Street would provide a shorter distance from the dead end of Chapman Mills Drive to Strandherd Drive for trips destined to the east. This is a very limited volume for the proposed developments, either 3232 Jockvale Road or Caivan Conservancy Phase 1, and is anticipated to be within the range of vehicles discussed in Comment #2.

Conclusion

The road network proposed within the plan of subdivision provides greater connectivity to Chapman Mills Drive, while continuing to limit the impact traffic infiltration within the existing and future community. No changes to the road network are recommended.

Prepared By:

Senior Transportation Engineer