

# Memorandum

Date: September 30<sup>th</sup>, 2022

To: Matthew Trollinger, Town Manager

From: Anjuli Tapia, PE, Fehr & Peers

**Subject: Somerset Pool Safety Study**

DC21-0092

## Purpose and Need

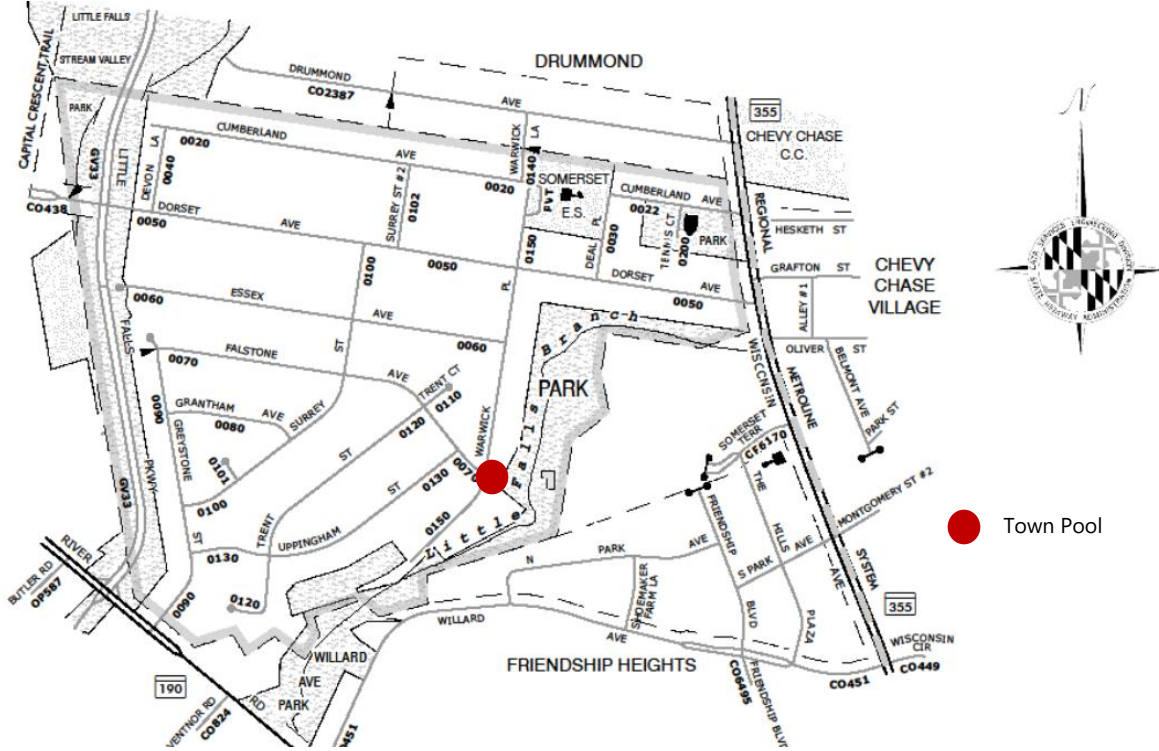
The Town of Somerset is a small, incorporated municipality consisting of roughly 0.28 square miles of land, consisting of residential houses, a Town Hall, Town pool, and tennis courts. For several years, members of the Town's Pool Committee and other residents have raised concerns about pedestrian safety in the pool parking lot, and inadequacy of signage. The Pool entrance makes up the east leg of the Warwick Lane / Falstone Lane intersection as shown in **Figure 1**. The path to the pool runs between Warwick Lane and the pool house, through a parking lot, and across a bridge as shown in **Figure 2** and **Figure 3**. The path is used year-round, and there is a need to address safety for those accessing the pool, those walking to and from the Friendship Heights metro, and those walking to and from Somerset Elementary School.

This study sought to address the following issues:

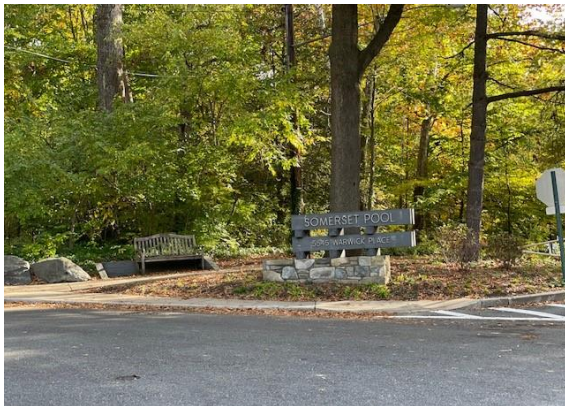
- Signage
- Pedestrian and vehicle visibility
- Parking spaces
- Additional parking requirements



**Figure 1**



**Figure 2**



**Figure 3**





# Existing Conditions

Existing conditions data was collected through stakeholder interviews, a site visit in November 2021, and observations of a peak weekend event in July 2022. Interviews indicated that the majority of people walk from the

neighborhood. The Town Pool is only open to Town residents, with the exception of swim meets during the Summer which bring regional visitors. The peak traffic conditions at the Town pool occur during swim meets which mostly happen on the weekends, and a few weeknights through the Summer. Interviews noted that parking is mostly full during these peak events. No one is out directing or managing traffic at entrance during these peak events. It is also worth noting that children frequently walk from the nearby elementary school to the Pool after school using the sidewalk as shown in **Figure 4**.

**Figure 4**



Feedback during interviews did not identify any concerns for traffic or vehicle queuing at the Falstone Avenue / Warwick Place intersection. Access and circulation within the parking lot is the predominant safety concern as it creates numerous conflicts between vehicles and pedestrians. The biggest factors contributing to the safety concern include:

- The double-loaded perpendicular parking spaces line the driveway entrance creating conflicts between parked vehicles trying to exit and circulating visitors
- The pedestrian pathway is striped in the street creating conflicts between pedestrians, parked vehicles, and circulating visitors as shown in **Figure 5**
- The driveway entrance is narrow to accommodate for two-way traffic and pedestrians
- Landscaping in the parking lot results in limited sight distance for parked vehicles trying to exit





- A confusing circulation pattern between the parking lot and the bridge to the Town pool, as well as overgrown trees blocking signage create confusion for circulating vehicles and increased conflicts with pedestrians as shown in **Figure 6**

**Figure 5**



**Figure 6**



Observations of a weekend swim meet in July 2022 captured detailed parking occupancy data, traffic counts, and vehicle conflicts. The swim meet was scheduled for 10am-12pm on Saturday, July 16<sup>th</sup>, 2022, and observations were conducted one hour prior (8am-9am) and one hour after (11:30am-12:30pm). **Table 1** below summarizes the data collection. The following can be concluded from observing the peak event parking and circulation:

- The parking lot is fully occupied 60-90 minutes prior to the start of the swim meet, yet vehicles continue to enter the parking lot to look for available spaces. This causes queuing and congestion within the parking lot as shown in **Figure 7**.
- There is heavy drop-off and pick-up activity within the parking lot at the entrance to the bridge, as well as at the Falstone Ave/Warwick PI intersection.
- Numerous U-turns were observed at the Falstone Ave/Warwick PI intersection.
- Pedestrians use space on south side of the parking lot entryway more than the crosswalk on the north side of the entryway as shown in **Figure 8**.
- On-street parking on Falstone Ave and Warwick PI fills up as a result of overflow parking as shown in **Figure 9**.



Item		Analysis Period	
		08:00 - 09:00 AM	11.30 AM - 12.30 PM
<b>Common parking lot spaces</b>	<i>Total</i>	29	
	Occupied	29	29
	Unoccupied	0	0
	Vehicles parked back-in	10	4
	Vehicles parked front-in	19	25
<b>Handicapped parking lot spaces</b>	<i>Total</i>	3	
	Occupied	3	2
	Unoccupied	0	1
	Vehicles parked back-in	0	0
	Vehicles parked front-in	3	3
<b>Modal Counts</b>	Vehicles	19	27
	Bicycles	7	7
	Scooters	2	2
	Pedestrians	90	179
	Strollers	1	0
<b>Number of vehicle-pedestrian conflicts</b>	Parking lot	2	6
	Entryway	0	1
<b>Number of vehicle-vehicle conflicts</b>	Entryway	0	1



**Figure 7**



**Figure 8**



**Figure 9**





# Recommendations

A critical piece to improving safety is reducing the number of conflict points between pedestrians and vehicles in the parking lot. By shifting pedestrians to the south side of the parking lot, which seems to follow the pedestrian desire lines, this effectively removes the conflict point with left-turning vehicles just before the bridge. While the Town previously considered a paved sidewalk in the landscaped area on the southern edge of the pool site, hardscape improvements can be costly and lead to drainage issues.

Given there is only one access point to the parking lot and pool, two-way traffic at this driveway must continue which means converting to angled parking is not ideal. At present, there is approximately 57-58 feet of available space in this double-loaded parking aisle.

The recommendation is to remove the seven (7) perpendicular parking spaces on the south side. Due to the angles of the driveway entrance it's not possible to shift the pedestrian walkway and maintain these spaces. This would reduce the available parking within the lot, but observations indicate available capacity on the neighborhood streets to absorb additional parking demand. The striped pedestrian walkway on the north side of the aisle should be removed. The parking spaces on the north side of the aisle could remain as they are or they could be converted to a single parallel space directed outbound, resulting in additional loss of two spaces. The Town could maintain the perpendicular spaces in the short term, continue to monitor circulation, and then consider this change as a near term option.

To further address pedestrian safety, the striped crosswalk at the driveway entrance should remain, and a second striped crosswalk is recommended where the sidewalk brings out pedestrians slightly east of the driveway. Consideration could also be made for a raised crosswalk which would slow vehicles down even further and increase the visibility of pedestrians crossing.

To address circulation within the parking lot the Town could use signage at the parking lot entrance to indicate when the parking lot is full and potentially station a person managing circulation and pedestrian crossings at the Falstone Ave/Warwick Pl intersection. This would prevent vehicles from continuing to enter the lot and improve queueing and congestion while leaving travel open for pedestrians and bicyclists. The signage could be removed once the swim meet concluded allowing vehicles to exit smoothly. This will likely result in increased drop-off activity at the Falstone Ave/Warwick Pl intersection. The Town could use cones and signage to designate two to four on-street parking spaces as drop-off/pick-up areas specific to peak weekend swim events.

These recommendations represent striping and other pavement marking improvements that could be implemented fairly quickly and at low cost