

## Incident #: 20-3430-OF Call #: 20-40272

Date/Time Reported: 06/27/2020 1856 Report Date/Time: 07/01/2020 0953 Occurred Between: 06/24/2020 1200-07/09/2020 2127 Status: No Crime Involved

Reporting Officer: Officer Walter Larson

Signature:

## # EVENTS(S)

LOCATION TYPE: Highway/Road/Alley/Street Zone: RD 309 (POST 10) 103 SAND POND RD @ 85 BUCKLIN AVE WARWICK RI

## 1 Traffic Survey

#	PERSON(S)	PERSON TYPE	SEX	RACE	AGE	SSN	PHONE
1	HOWE, TIMOTHY POST RD WARWICK RI DOB: 01/01/1979	REPORTING PARTY	м	W	41	NOT AVAIL	****
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## 2020-16

On 6/27/20 at 1500 hrs while I arrived on duty I received a Traffic Study Request from Councilman Howe in regards to creating a one way in/out for the streets of Bucklin and Sand Pond.

Sand Pond Rd. is a residental neighborhood, it begins at Post Rd. and runs east and continues through the rotary which connects Sand Pond, Puritan Dr., and Bucklin Ave. Sand Pond is a two laned roadway (unmarked) with a speed limit of 25 mph; there are four speed limit signs on this road (two east and two west). Sand Pond is 858 feet long. There is a significant curve on Sand Pond 757 feet from Post Rd which is about 49 degrees to the right with 101 feet to the stop sign from the curve. Sand Pond is about 20-22 feet wide with the shortest part being about 18 feet (by the western portion of the cemetery).

Eastbound traffic has a stop sign at the rotary; westbound traffic has a stop sign to enter Post Rd. traffic. There are five homes on the north side of Sand Pond and ten on the south side; one business on the southeast corner of Post Rd. and Sand Pond which has a parking lot that enters onto Sand Pond Rd. There's another business located at the northeast corner of this intersection as well; parking for this business (with an apartment upstairs) parks in a parking lot off Sand Pond. Also on the north side of Sand Pond is a historical cemetary with water access to Sand Pond watershed area. There are multiple no parking signs on the north side of Sand Pond, specifically by the cemetary. At the first telephone (on the south side of Sand Pond) there is a "No Thru Trucking" sign erected.

Bucklin Ave is located south of Sand Pond. It also beings at Post Rd. and ends east of Post Rd. at the above mentioned rotary. There are five homes on the north side of Bucklin and one vacant business located at the northeast corner of Bucklin and Post with traffic entering onto Bucklin. There are 11 homes on the south side of Bucklin and one restaurant (China Sea) which has entrances/exits onto Post Rd. and Bucklin. There is a traffic light located at the intersection of Bucklin, Post and Elm St. as well as a stop sign at the rotary. Like Sand Pond, Bucklin also has multiple "No Parking" and "Slow, Children" signs. There is also a "No Thru Trucking" sign located at the first telephone in from Post Rd. on the South side of Bucklin. Bucklin has five 25 MPH speed limit signs erected, three for eastbound traffic and two for westbound.

Bucklin is approximately 956 feet long and averages 22-24 feet in with, the shortest portion is about 17 feet. This shorter portion of the road is problematic because there is a large oak tree at the corner of Bucklin creating a blind corner which is about 28 degrees. This tree obscures traffic for both sides making it difficult to see oncoming traffic from either side. Also westbound traffic in the afternoon (especially in summertime) has a glare at sunset making visibility very difficult to see any oncoming traffic.

On 6/27/20 at about 1842 hrs I spoke with Councilman Howe in regards to the traffic study. He asked if there was a way to make Bucklin and Sand Pond one ways, with one road traveling east and one road traveling west. If possible the logical answer would be to make Bucklin a one-way for westbound traffic (since it has a traffic light to enter Post Rd. traffic) and make Sand Pond a one-way for eastbound traffic.

On 7/9/20 at approximately 1538 hrs (and ending at 1800 hrs) while on patrol I responded to the intersection of Bucklin Ave and Sand Pond Rd to monitor traffic and count how many vehicles entered/exited the neighborhood during a rush hour. There were 287 vehicles which traveled west on Bucklin and 476 vehicles traveled east. Sand Pond had 67 vehicles travel west and 58 east.

On 7/10/20 at around 1600 hrs to about 1810 hrs while on patrol I responded to the intersection of Post Rd. and Bucklin Ave in regards to this survey. I positioned myself just north of Bucklin and south of Sand Pond. During this time I observed 307 vehicles to travel west on Bucklin and enter Post Rd. traffic, the majority of the vehicle turned left to head south on Post. I also observed 402 vehicles to travel from Post Rd. to take Bucklin Ave eastbound; the majority of these vehicles traveled north on Post and took a right onto Bucklin eastbound. I also observed 63 vehicles travel westbound on Sand Pond and enter Post Rd. traffic; about half of these vehicles went north and the other half went south on Post. I also observed 55 vehicles to travel eastbound on Sand Pond; the majority of these vehicles took a left onto Sand Pond from Post Rd. southbound.

On 7/14/20 at approximately 1550 hrs to around 1750 hrs I monitored traffic in the area of Sand Pond Rd., Bucklin Ave. and Post Rd. Bucklin had 405 vehicles travel from Bucklin eastbound onto Post Rd. Again the majority of the vehicles traveled from Post Rd. headed north and took the right onto Bucklin; about ten took Post Rd. southbound and took a left to head east on Bucklin. In contrast there were 262 vehicles which traveled west on Bucklin onto Post Rd. About 10 took a right onto Post to head north, about 20 went straight onto Elm and the rest went south on Post. Sand Pond had 37 vehicles travel east and 56 travel west onto Post.

There have been multiple traffic studies completed by this department. 19-2741-OF was requested for speed reduction on Sand Pond. This studied utilized the All Traffic Solutions Variable Message Board for 9 days and collected from over 700 vehicles daily. This study showed us the average speed of vehicles was 14.39 MPH, half of the vehicles traveled at 13.69 MPH and 85% of the vehicles traveled at 18.64 MPH. As I conducted this study I found similar results.

17-6165-OF (Study 2017-31) was competed by this department in regards to a speed reduction on Bucklin. During this study the majority of vehicles were found to be traveling from 19-27 MPH with one vehicle at 33 MPH. As I have conducted this study I also saw similar figures.

I ran a records check for the past five years for accidents on both roads in question. Sand Pond had two, 16-4402-AC was a hit and run of an unattended vehicle which occurred in the early morning hours of a vehicle parked on Sand Pond and clipped by a neighboring resident's vehicle. 17-113-AC had an out of city operator lose control on ice and hit a pole.

Bucklin had one accident in the past five years. 20-1040-AC had a drunk operator travel east on Bucklin and strike a tree at 45 Bucklin knocking the tree onto the house. The tree being removed from the roadway did increase some visibility.

I spoke with many of the residents in the area regarding this study and listened to their complaints. I told them making both roads a "One Way" would increase the lane size; studies show increased lane sizes create faster speeds. Even putting in a side walk or marked area for pedestrian and bicycle traffic would be a minimum of three-five feet (recommended by the American Disabilities Administration) would create a lane of 12 feet at the shortest part of Bucklin (the problematic corner) and 13 feet wide at Sand Pond's shortest portion. The reason why wider lanes create higher speeds is because it gives drivers an increased buffer of error. Another major concern for a smaller road especially on Sand Pond would be a large Fire Apparatus responding to a fire would find it difficult to navigate the approximate 49 degree turn decreasing response time if they properly negotiate the turn.

I also informed them creating a speed bump would not be recommended on a secondary road used by emergency

vehicles, the other issued created is there is not enough room to create one on either road which would not interfere with the driveways of the residences. they require a suggested 12-14 feet of space and the city would be liable for any damages incurred from said speed bump. A speed table would also not be feasible since it is much larger (22 feet recommended by the Institute of Transportation Engineers) than a speed bump and would create the same issues.

My recommendation for this survey would be to place "Local Traffic Only" on the southeastern portion of both roads. Place one "Local Traffic Only" on the second telephone pole on Sand Pond as you enter from Post Rd. (west of Post Rd). Place another on Bucklin Ave. The first telephone on Bucklin already has two signs on it, one a speed limit sign and another a "No Thru Trucking". My suggestion is to erect a "Local Traffic Only" sign 122 feet in from Post Rd. on the northwest portion of 15 Bucklin Ave's property. In regards to the "No Thru Trucking" on Bucklin and Sand Pond it has been discovered they were placed in 1964 after a proposal. It is unknown if they had been voted in the city's ordinances as law or if they were erected and are not enforceable. It is my recommendation the "No Thru Trucking" signs be voted as an enforceable ordinance. I also suggest removing the large oak tree at 44 Bucklin Ave. The tree is directly in front of the front door and walkway of the residence. The tree has grown so large the roots are raising up the pavement at the narrow corner adding to the obstruction in the roadway. I spoke with the resident of 44 Bucklin who agrees about the tree creating a traffic hazard and believes it should be removed. I also recommend placing a yellow or orange "Slow Curve Ahead" sign on both sides of the curve. One on the erected sign at 15 Bucklin, the other on a telephone pole located at the north west portion of 61 Bucklin Ave.