



COUNCIL DECISION REQUEST

SUBJECT: All Way Stop – Sherwood Drive and Forest Drive

MEETING DATE: 11-6-14

SUBMITTED BY: LaRon G. Garrett, Asst Town Mgr 

SUBMITTAL TO AGENDA
APPROVED BY TOWN MANAGER

AMOUNT BUDGETED: \$0

EXPENDITURE REQUIRED: 0\$



EXHIBITS (If Applicable, To Be Attached): Letter of Request, Intersection Report

POSSIBLE MOTION

I move to direct staff to retain the existing Two-Way traffic control at the intersection of W. Sherwood Drive and W. Forest Drive - N. Monarch Drive.

SUMMARY OF THE BASIS FOR POSSIBLE MOTION:

The intersection of W. Sherwood Drive and W. Forest Drive / N. Monarch Drive is currently controlled with a STOP sign on W. Forest and N. Monarch with Sherwood Drive being the through street. Town staff received a request to install two additional STOP signs at this intersection making it an All-Way STOP. A copy of the letter of request is attached.

Staff performed an evaluation of the intersection based on Administrative Policy A107 – Intersection Traffic Control. This policy sets forth the criteria for evaluating an intersection to determine if a change in traffic control is warranted. There are six criteria evaluated to determine if an intersection traffic control should be upgraded from a Two-Way STOP to an All-Way STOP.

After collecting and reviewing the field data for this intersection it was determined that the current conditions do not meet any of the criteria that would warrant upgrading this intersection to an All-Way STOP. A copy of the report is attached.

Based on this evaluation, staff does not recommend installing the additional STOP signs at the intersection of W. Sherwood Drive and W. Forest Drive - N. Monarch Drive.

PROS:

By leaving the intersection traffic control as it is the collector road traffic will continue to flow without interruption.

CONS:

None

FUNDING:

Acct: N/A	Budget:	Available:	Expense:	Remaining:
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FM: _____ Date: _____

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Mayor
Route
Dir's Copy to
Council
Ret Dir's In
File

RECEIVED
AUG 25 2014
TOWN CLERK
TOWN OF PAYSON

Alan H Kline

722 W Sherwood Drive

Payson, AZ 85541

Payson Town Council

303 North Beeline Highway

Payson, AZ

I would like to request that the intersection of Monarch, W Forest and W Sherwood be made a 4 way stop. This route has become very popular with pedestrian use. Residents wanting to make use of the Rumsey facilities, the PetSmart dog park and the library use this route as a shortcut to these facilities. This is also a bus stop for school buses. We have school children crossing at this intersection to get to the school buses and/or sports fields. My wife and I have designated an area at the foot of our driveway as a rest area for walkers and installed a bench for public use. Lastly, we have many elderly residents needing a little extra time crossing W Sherwood when walking as this is a popular exercise route.

I would appreciate your giving serious and timely consideration to this request.

Sincerely,



Alan H Kline

928-595-0834

**STOP SIGN REQUEST
FOR THE INTERSECTION OF
WEST SHERWOOD DRIVE AND WEST FOREST DRIVE / NORTH MONARCH DRIVE**

A request was submitted by Mr. Alan H. Kline who resides at 722 W. Sherwood Drive to modify the traffic control at the intersection of W. Sherwood Drive and W. Forest Drive / N. Monarch Drive. This is a residential area with Sherwood Dr. acting as a collector road for the Woodhill and Alpine Village subdivisions. This traffic control at this intersection currently functions as a 2-Way STOP. Sherwood Dr. is a through street and traffic is not required to stop at this intersection currently. West Forest Dr. and N. Monarch Dr. are both local streets that intersect Sherwood Dr. and are currently controlled by a STOP sign. The posted speed limit on all the streets in this area is 25 MPH.

The Manual on Uniform Traffic Control Devices (MUTCD) Section 2B.05 provides the following guidance concerning STOP sign applications:

“STOP signs should be used if engineering judgment indicates that one or more of the following conditions exist:

- A. Intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law;*
- B. Street entering a through highway or street;*
- C. Unsignalized intersection in a signalized area; and/or*
- D. High speeds, restricted view, or crash records indicate a need for control by the STOP sign.*

STOP signs should not be used for speed control.

STOP signs should be installed in a manner that minimizes the numbers of vehicles having to stop. At intersections where a full stop is not necessary at all times, consideration should be given to using less restrictive measures such as YIELD signs.”

Town Staff completed a field investigation to determine the current traffic conditions approaching this intersection. Following is a summary of the data that was collected:

Street	Direction of Travel	Average Daily Traffic	85 th Percentile Speed (mph)	Peak Hourly Traffic	Peak Hour
Sherwood Drive	East	435	34.2	44	3PM
Sherwood Drive	West	543	32.6	56	3PM
Forest Drive	North	33	19.4	6	11AM
Monarch Drive	South	47	18.1	7	7AM, 8AM, 10AM, 4PM

Police Department records indicate there has been one reported accidents at this intersection in the past 5 years.

Following is the analysis of the criteria required to be addressed to determine a recommendation on whether to modify the existing traffic control at this intersection to an All-Way STOP, or let it remain as a 2-Way STOP.

Criteria No. 1 – Traffic Volumes

Comparing the peak traffic volumes between Sherwood Drive (44) and Forest Drive (6) the minor roadway traffic is 13.6% of the major roadway.

Comparing the peak traffic volumes between Sherwood Drive (44) and Monarch Drive (7) the minor roadway traffic is 15.9% of the major roadway.

Neither minor roadway peak traffic reaches the required 60% of the major roadway to recommend an All-Way STOP.

Criteria No. 2 - Accidents

During the past 5 years there has been one reported accident at this intersection. That accident occurred in November, 2013. This intersection does not qualify for an All-Way STOP since there has not been at least 3 accidents in any 12 month period during the past 5 years.

Criteria No. 3 – Intersection Geometry

These streets intersect at 90° which is ideal. There are no physical features that obstruct the sight distance.

Criteria No. 4 – Non-vehicular Traffic

There are several individuals who walk along the street in this area. Sherwood Drive is a wide street allowing room for the pedestrians. Forest Drive and Monarch Drive are standard size streets. There are no designated crosswalks in the area. Some pedestrians do cross Sherwood Drive at this intersection. The minimum number of pedestrians during the peak hour would need to be at least 22 (50% of the peak hour vehicular traffic) in order to qualify for an All-Way Stop.

Criteria No. 5 – Stopping Sight Distance

Stopping Sight Distance is the distance required to stop a vehicle traveling at a particular speed from the time the driver can see an obstruction 0.5' above the ground. Based on the American Association of State Highway and Transportation Officials (AASHTO) Policy on Geometric Design of Highways and Street, the minimum sight stopping distance on Sherwood Drive is 150 feet for a vehicle traveling at 25mph and 246 feet for a vehicle traveling at 35mph. The posted speed limit on Sherwood Drive is 25mph and 85% of the traffic is traveling at or below 34.2 mph. The minimum amount of stopping sight distance available on Sherwood Drive for eastbound traffic is 260 feet which exceeds the distance required for vehicles traveling at the 85th percentile speed.

Criteria No. 6 – Other Factors

No other factors were observed at this intersection that would indicate that an All-Way STOP is warranted at this intersection.

Below is a summary table of the findings of this report.

Criteria No.	Criteria	Justify an All-Way STOP
1	Traffic Volume	No
2	Accidents	No
3	Geometry	No
4	Non-Vehicular Traffic	No
5	Stopping Sight Distance	No
6	Other Factors	No

As shown in the table, this intersection does not meet any of the established criteria to be converted to an All-Way STOP. This intersection has been discussed with the Police Department and they support this recommendation of not changing the traffic control to an All-Way STOP.

Therefore, based on engineering judgment, an All-Way STOP is not warranted at this intersection.