

MEMORANDUM

TO: Mayor and Council
FROM: David R. Taylor, Town Manager
SUBJECT: Status Report on Briarbridge Lane Traffic Gate
DATE: October 23, 1989

The attached Engineering Department Staff Report discusses the background and our assessment of a traffic control gate installed on Briarbridge Lane in the Spring of 1998.

This report was requested by the Council to review the effectiveness of the gate installation. There are no similar gates on public streets in Chapel Hill.

Key Points:

Traffic control gate was installed at the request of local residents to mitigate "cut through" traffic between South Columbia Street and Ransom Street.

The gate was located to allow access to the Church of Christ from either South Columbia Street or Ransom Street.

Traffic volumes on Briarbridge Lane have dropped significantly since installation of the gate.

Residents responded to a questionnaire in favor of keeping the gate in place.

The Church of Christ has had problems with the gate and requests it be removed.

Conclusions:

The gate has been an effective temporary measure to control through traffic on Briarbridge Lane.

The positive effects of the gate on the entire Briarbridge Lane neighborhood seem to outweigh the negative effects experienced by the church.

The gate should remain in place until such time that alternative traffic control measures are constructed as part of the South Columbia Street improvements planned for 1992.

ENGINEERING DEPARTMENT
STAFF REPORT
ON THE BRIARBRIDGE LANE GATE
OCTOBER 23, 1989

This follow up report on Briarbridge Lane was requested by the council to assess the effectiveness of a gate used to mitigate through traffic.

Background

Last year at the request of the local residents, the Town considered alternatives for eliminating through traffic on Briarbridge Lane.

Briarbridge Lane is a narrow residential street that varies in width from 14 feet to approximately 17 feet. The narrow width of the street combined with a steep hill and sharp curve make Briarbridge Lane unsuitable for use other than as a local residential street.

Drivers traveling north on South Columbia Street used Briarbridge Lane as a short-cut to western destinations, instead of using Cameron Avenue, McCauley Street, or Franklin Street.

Town staff recommended the installation of a gate on Briarbridge Lane to discourage through traffic. The gate obviates the continued enforcement necessary if only regulatory signs (i-e. no left turn, no thru traffic) were used.

A gate was recommended instead of a fixed barrier because:

1. It provides flexibility for emergency and service vehicle access.
2. The relative cost of installation was low.
3. It would not require acquisition of additional right-of-way.

On April 11, 1988 the Council adopted a resolution directing the installation of the gate. The closing of the street was considered experimental, and a trial period was established in order to evaluate the effectiveness of the gate. We were directed to report back to Council after assessing the gate installation for approximately 18 months.

Discussion

We have reviewed the operation of Briarbridge Lane since installation of the gate, The following information was included in our assessment.

Traffic Counts

Prior to the installation of the gate, we completed a traffic count on May 17, 1988. This was during the University exam period, so we did not count a "typical" traffic day. However, the counts do reflect the effectiveness of the gate.

The total traffic volume prior to the gate was 436 vehicles. The peak hour had a count of 56 vehicles. We completed traffic counts after the gate was installed, with a total volume of 30 vehicles on September 14 of this year, and a peak hour volume of 7 vehicles. We think the reduction of over 400 vehicles in total traffic volume is significant and is directly attributable to the gate.

Questionnaire

As part of our follow-up assessment we distributed questionnaires to the eleven residents of Briarbridge Lane and Briarbridge Valley and to the Church of Christ. The questionnaire addressed traffic safety, street capacity, convenience, emergency vehicle response and quality of life. Eight questionnaires were returned by the residents plus one by the Church.

All of the residents indicated that their quality of life had improved and that the gate should remain. Two of the responding households thought the gate should be moved closer to South Columbia Street.

The Church feels the gate has had a negative impact. In an attached letter from Mr. Henry C. Boren on behalf of the church, they cited the gate as an "expense and irritation". In addition they request that the Town remove the gate.

Staff Assessment

Last year the church agreed to participate in this project by installing a concrete island in their driveway, at their expense. The intent of the driveway island was to discourage drivers from driving around the gate and cutting through the Church parking lot. Apparently the Church still has some "through" traffic using their parking lot.

There has been an occasional problem with drivers turning into Briarbridge Lane without realizing it is closed to through traffic. This has created maneuvering problems and further use of the parking lot. The gate was located so that the church can have access to Briarbridge Lane and South Columbia Street. There have been no reported accidents attributed to the gate.

The one problem we did not foresee was vandalism. During the few weeks following installation of the gate, the island and the gate were vandalized on two separate occasions. According to the church, one of their rock columns has been damaged twice.

Alternatives

We think there are three possible alternatives to address the through traffic and access issues on Briarbridge Lane.

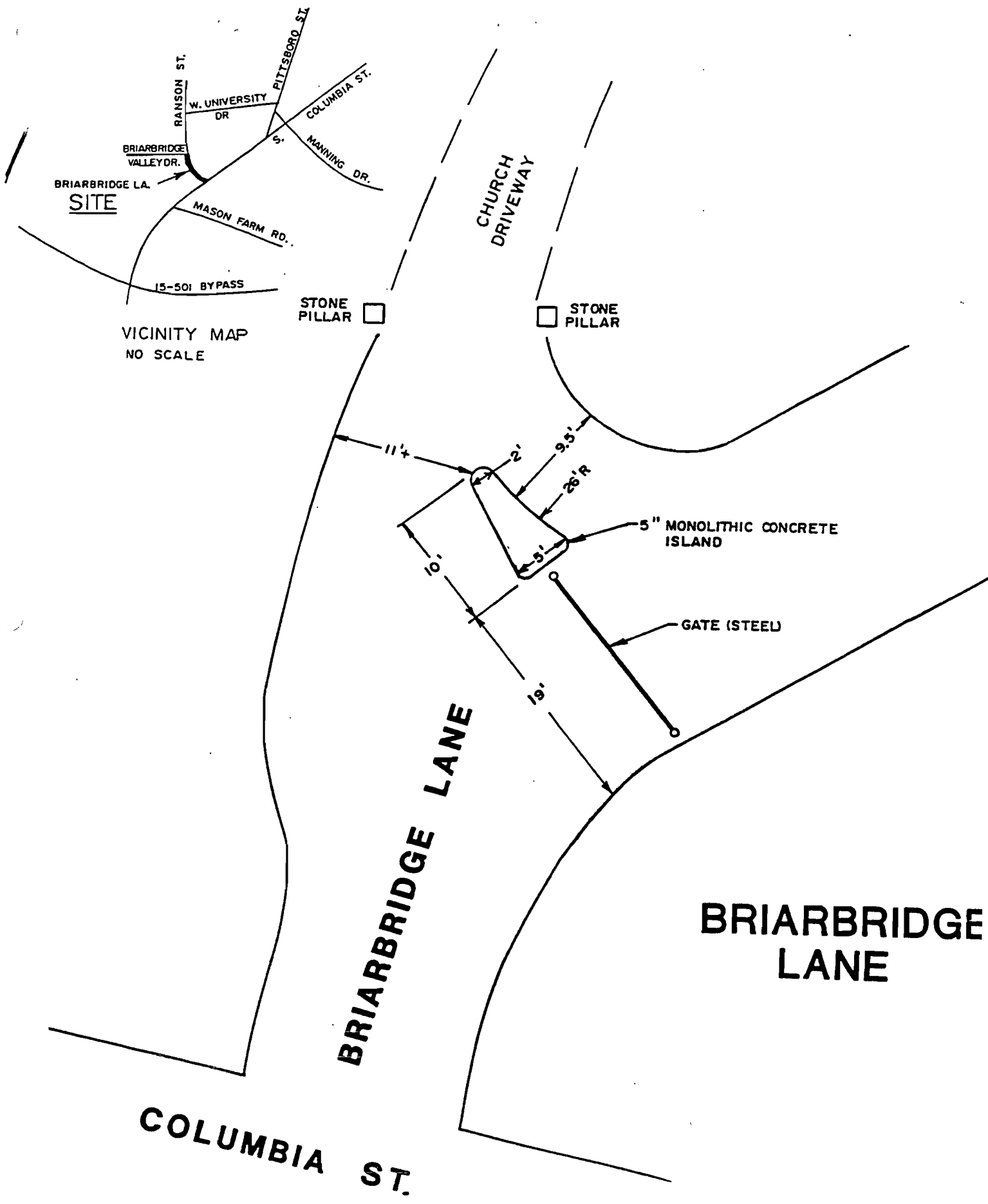
1. Remove the gate and erect a sign prohibiting left turns into Briarbridge Lane from South Columbia Street. This would increase access to the church and remove the "irritation" of the gate for the church members. However, without continuous enforcement of the left turn prohibition we think traffic would increase significantly on the street.
2. Move the gate closer to South Columbia Street. This would prevent through traffic on Briarbridge Lane and minimize the church's turnaround problems. However, it would reduce the church's access to Briarbridge Lane and would force all church traffic to enter and exit to the west on Ransom Street.
3. Leave the gate at the present location. Through traffic would continue to be eliminated, but the church would have to contend with some drivers who would use their driveway to bypass the barrier.

Conclusion

In spite of their reservations concerning the partial restriction of their access we think the church has been cooperative with the Town and the residents concerning this issue. The church has experienced some expense for the initial installation of their concrete island and for repair of the damage due to the above mentioned vandalism.

The gate is considered to be a temporary compromise solution. We hope that a permanent solution can be worked out when South Columbia Street is widened. In the interim, the gate seems to be effective in controlling through traffic on Briarbridge Lane. However, it is not without its problems, as discussed above.

We suggest that the gate remain in place until such time that alternative measures are constructed (as part of the South Columbia Street Improvements) which will effectively mitigate through traffic on Briarbridge while still allowing reasonable access to the church.



BRIARBRIDGE L.A. SITE

VICINITY MAP
NO SCALE

STONE PILLAR

STONE PILLAR

CHURCH DRIVEWAY

5" MONOLITHIC CONCRETE ISLAND

GATE (STEEL)

BRIARBRIDGE LANE

BRIARBRIDGE LANE

COLUMBIA ST.

Church of Christ
Briarbridge Ln at S. Columbia
Chapel Hill
September 27, 1989

Mr. Mike Taylor
Engineering Department
Town of Chapel Hill

Dear Mr. Taylor:


This note will supplement what I have put down on your questionnaire.

The gate has been both an expense and an irritation to our members. First, we had to build the island (according to your--or some other engineer's--specifications). Second, many of the persons who formerly used the street have blamed our group specifically for the closing; they are mistaken, but they do not know that. In consequence, one or more of them has resorted to vandalism, quite deliberately pulling down one of the stone pillars of our gate. It is down at the moment; we paid to get it rebuilt once but haven't got around to taking care of it again. Many drivers still manage to get around the island, using our driveway--sometimes backing and filling--and have damaged our walls (they are low) and shrubbery.

Churches do not wish to cause citizens to have bad feelings toward them, as you can well imagine.

We decided, in business meeting, to request the town to remove the gate. The town created the problem by making it impossible for cars to cut through the light at Manning (by making Pittsboro one-way). We feel you have put a heavy burden on us by adopting this means of dealing with too-heavy traffic on Briarbridge. But note, as I wrote on the questionnaire, that the street never was two-way at the point where the gate was installed.

Sincerely,



Henry C. Boren
Trustee
For the Congregation

Incidentally, one time when I was working on the grounds I stopped a car that was using our driveway to by-pass the gate and suggested he should go some other way. He said he lived just below, in Briarbridge Valley Lane (I think that's the name of the street below us); those are the people who wanted the street closed!