

060575

To: Chairperson and Transportation and Safety Committee

Through: Wes Anderson, Director of Public Works *[Signature]*

From: Nick Hatfield, P.E., Civil Engineer *NH*

Date: September 26, 2006

Subject: Traffic Study for Fairfield and 22nd

Trustees O'Brien and Tross request that the Department of Public Works assess the need to signalize the intersection of Fairfield Avenue and 22nd Street. Staff asks the Committee for further direction as this intersection was previously studied as part of the Lombard Hotel and Convention Center project, as it related to the signalization of the soon to be constructed Convention Way. This study was summarized in the attached memorandum presented to the Village Board in November 2003. The study looked at three possibilities for the Fairfield/22nd intersection, knowing that Grace St./22nd is signalized and Convention Way/22nd will be signalized:

- 1) Leave as is; wait for signal at Convention Way.
- 2) Install an island to allow only right-in, left-in, and right-out.
- 3) Signalize the intersection (allowing all traffic movements).

The results of the study are summarized in the table below which provides the delay in seconds and a ranking of service level from "A" through "F."

Existing Delay / Level of Service	Delay After Convention Way is Signalized	Delay After Convention Way is Signalized Plus Restrictive Island	Delay After Convention Way and Fairfield are Signalized
59.8 / F	29.3 / D	17.8 / C	18.9 / B

As the above table indicates, the service level increases with each incremental improvement at the Fairfield/22nd intersection. The poor service level that currently exists at this intersection is primarily due to the allowable left turns from Fairfield onto 22nd. With the installation of a signal at Convention Way, an immediate increase in the level of service is seen as it provides some gaps for the left turn movement. Eliminating the left turn entirely and forcing left turning traffic to use the signals at Grace St. or Convention Way, or make a right turn onto 22nd from Fairfield and then make a legal u-turn to go west brings the level of service up another grade. Finally, installing a signalized intersection at Fairfield brings the level of service up yet another grade. Note that the consultant that performed the study cautions that the incremental benefit received with the signalized intersection is likely not worth the cost of the improvement, which in rough numbers is approximately \$250,000.

The signal at Convention Way will be funded and constructed as part of the Convention Center and is planned to be operational in early 2007. Any improvement at Fairfield and 22nd would require Village funds, and/or a special assessment or service area, requiring the local businesses and/or residents to pay for the improvements. Further negotiations with Target would also be necessary to complete any improvements. Staff's original recommendation was to wait for Convention Way to be constructed and signalized and then assess what improvements are warranted for this intersection. Based on the request from Trustees Tross and O'Brien, Community Development did solicit a new proposal from the same consultant to update the traffic counts and assess if a signal is appropriate at this time. The amount of this proposal is \$3,000.00.

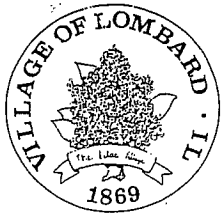
Staff recommends holding off on any further study until the Convention Way intersection and signal are functional. Staff requests that the Committee provide direction as to whether or not a further study is warranted for this intersection at this time, or if it is prudent to wait for the completion of the signalized intersection at Convention Way and then assess if there are any continuing issues at the Fairfield and 22nd intersection.

This item will be on the October 2, 2006 Transportation and Safety Committee agenda.

DD/nh

Attachment

cc: David Hulseberg, AICP, Asst. Village Mgr. and Dir. of Community Development
Dave Gorman, P.E., Development Engineer
Trustee O'Brien
Trustee Tross



lmc
11/12/03

MEMORANDUM

TO: William T. Lichter, Village Manager

FROM: David A. Hulseberg, AICP, Director of Community Development *D.A.H.*

DATE: November 20, 2003

**SUBJECT: PC 03-29 AND 03-30: 70 YORKTOWN SHOPPING CENTER
(YORKTOWN PERIPHERAL PLANNED DEVELOPMENT)
SECOND READING**

At the October 16, 2003 Village Board Meeting, a first reading of Ordinances pertaining to PC 03-29 and PC 03-30 was approved by the Board, subject to conditions. The Board also directed staff to provide additional information regarding the adequacy of the proposed parking spaces for the proposed hotel/convention hall and the impacts of the facility on the 22nd Street and Fairfield Avenue intersections.

Staff has collected supplemental information regarding available parking around the facility and has reviewed comparable parking supply and demand information for the Board's consideration. Additionally, KLOA, the Village's traffic consultant, has run additional traffic analyses in order to determine what additional intersection improvements, if any, are warranted.

EXECUTIVE SUMMARY:

Attached please find a copy of the additional information for the Board's reference. In summation, the attached report offers the following:

- If the facilities operations operated substantially higher than typically found in the Chicago market, the demand for additional parking can be accommodated through cross-park rights available at Target (125 spaces), parking agreements with Northern Baptist Theological Seminary and 701 E. 22nd Street (140 spaces and 839 spaces respectively) and valet parking for the signature restaurants.
- The use of free valet parking for the signature restaurants will operate per the established provisions adopted by the Village Board in 2002 as part of Section 127 of the Village Code. These provisions will require the operator to submit for review and approval a valet parking plan depicting the proposed parking and drop-off areas for the valet service.

- If the Village Board also wanted to consider additional intersection improvements at 22nd Street and Fairfield Avenue, a restricted right-out from the north approach would significantly improve the overall level of service for the site. This would require additional negotiations with Target Corporation.
- While a traffic light could be installed as well, KLOA asserts that the additional incremental benefit may not be worth the expense.
- The current negotiated agreements with Target Corporation which provides for the development of Convention Way necessitates the installation of a traffic signal at 22nd Street and Convention Way.
- Given the availability of alternative parking in the area brings into question whether or not it makes good business sense to incur the additional expense to build an additional layer to the deck. This is something potential investors may look at when assessing the investment potential of the project. (see Len Flood memo of November 12, 2003)

Staff notes that practically speaking, some proportionate share of the conference space would be unutilized at any given time. KLOA data indicates that these facilities operate at 50% of capacity 80-85 percent of the time. For example, one conference room may have a meeting while the other is being reserved for a companion luncheon session. Other rooms would be in transition from one meeting to the next.

Based upon these figures, if one wanted to construct the facility to accommodate the higher possible demand for the facility an additional 218 spaces would be needed. How the demand for spaces could be satisfied is noted below as part of Item 2.

b. Comparable Facilities

Another methodology to determine whether the proposed parking spaces is in line with comparable facilities within the Chicago western suburban market, staff surveyed a number of facilities as shown in Appendix 1. This table identified the name and location of the facility, the number of rooms, square footage of the conference space, restaurant occupancy and any other traffic generating elements included within the facility. Based upon this analysis, staff finds that parking supply can vary greatly between facilities. However, the proposed parking for the Lombard facility is comparable to others within the region.

It must be noted that the ultimate demand is a function of the specific market niche a particular facility has within the overall market.

In review of these facilities, staff finds the Wyndham Itasca Hotel is a very comparable to the proposed Lombard facility, as the meeting spaces, number of rooms, amount of conference spaces and the inclusion of a signature restaurant are all proportional and comparable to the Lombard facility. In each of these areas, the Itasca facility is approximately 80 percent of the size of the proposed Lombard facility, and was constructed with a corresponding 80 percent of the proposed parking for the Lombard site as well. The Wyndham facility has 748 spaces on-site, with agreements in place with neighboring office buildings to utilize their parking spaces on an as-needed basis.

Item 2: Location/accessibility of parking

Staff conducted an analysis of the available parking lots surrounding the proposed facility. Unlike the Fountain Square development, this facility is being proposed on a site surrounded by parking lots.

Appendix 2 is an aerial photo of the proposed facility with concentric rings around the facility showing the distances varying parking lots are from the facility. Each ring represents a city block (i.e., 1/8 of a mile).

Also depicted on the map within the first ring are parking areas than can be made available for overflow parking. These include:

Convention Way, new signal at 22nd and Convention Way), KLOA looked at two additional scenarios to see if additional improvements to the 22nd Street and Fairfield Avenue intersection are warranted. The two additional scenarios tested were:

Scenario 1: Modify the south approach to the 22nd St./Fairfield Av. intersection with a "half-porkchop". This design would allow for full access to southbound Fairfield Avenue. Northbound traffic on Fairfield would be forced to turn right at Fairfield.

Scenario 2: Leave the 22nd St./Fairfield Av. intersection as it is currently designed but Install a traffic signal at the intersection.

Appendix 3 is the companion traffic report and summary based upon these options. The analysis finds that the intersection level of service is improved under both scenarios. Simply stated, both scenarios improve the level of service of the intersection above it current failure rating.

The following table is offered for comparative purposes:

Intersection	Existing Delay/LOS	Original Analysis (light at Convention Way)	Scenario 1 (light at Convention Way plus northbound right out only)	Scenario 2 (light at Convention Way and Fairfield)
22 nd /Grace	13.2/B+	14.9/B+	16.1/B	18.9/B
22 nd /Convention	10.7/B+	11.0/B+	11.2/B+	10.1/B+
22 nd /Fairfield	59.8/F	29.3/D	17.8/C	18.9/B
Ring Rd/Fairfield	9.4/A	9.7/A	9.9/A	9.9/A
Ring Road/Target Dr. (Magazine Rd)	10.4/B	12.6/B	12.9/B	12.9/B

The current failure of the 22nd/Fairfield intersection can be attributed to the existing left-turn movements from Fairfield onto 22nd Street in general, and the existing southbound left-turn movements from Fairfield Avenue, in particular. Staff believes that the increase in traffic movements in this area can be partly attributed to the various new developments (i.e., Yorkbrook Condos, Providence Subdivision, Brown's/Engelsina Subdivisions, etc.) that have occurred north of the intersection since 1995, when the original Yorktown Peripheral planned development was initially approved.

The traffic model does not anticipate the new hotel facility to increase the number of trips on the north approach to Fairfield Av. – only increases to the south approach are anticipated. Scenario 1's restriction of left-turn movements would redirect individuals to signalized intersections at Convention Way and Grace Street. Additionally, by limiting left turn movements from the south approach, increases in efficiency can be achieved for the north approach, as the number of potential intersection conflicts are also reduced.

Scenario 2's full signalization increases the level of service for the intersection as well. However, this improvement can only be fully realized if the signal was synchronized with the



Kenig, Lindgren, O'Hara, Aboona, Inc.

August 7, 2006

1501 East Higgins Road, Suite 1001 Rosemont, Illinois 60018
p 815 518 9990 f 815 518 9987

Mr. David Hulseberg, AICP
Director of Community Development
Village of Lombard
255 East Wilson Avenue
Lombard, Illinois 60148-3931

Re: 22nd Street Traffic Counts and Gap Analysis
Lombard, Illinois

Dear Dave:

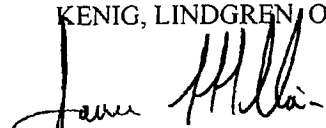
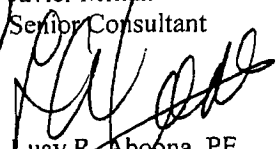
As requested, Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) is pleased to submit this proposal for the collection of traffic counts at the 22nd Street intersections with Grace Street/Lake Road and Fairfield Avenue/Target access drive. We will conduct manual traffic counts at the aforementioned intersections during the weekday morning (7:00 to 9:00 A.M.) and evening (4:00 to 6:00 P.M.) peak periods as well as during the Saturday midday peak period (11:00 A.M. to 1:00 P.M.). In addition to the traffic counts we will also perform a gap analysis at the intersection of 22nd Street with Fairfield Avenue/Target access drive during the peak periods. The collected data will be summarized and presented in a memorandum report. As part of the data analysis we will evaluate whether the intersection of 22nd Street with Fairfield Avenue/Target access drive warrants the need for a traffic signal. We estimate the time to complete this study to be within three weeks from receipt of authorization to proceed.

Based on our experience in similar studies, the cost for our professional staff time and services and direct expenses for the tasks discussed above will be approximately \$3,000. To the maximum extent permitted by law, the Village of Lombard agrees to limit Kenig, Lindgren, O'Hara, Aboona, Inc.'s liability for the Village of Lombard's damages up to the sum of the total fee on this project. This limitation should apply regardless of the cause of action or legal theory pled or asserted.

We are pleased to have this opportunity to once again offer our professional services to the Village of Lombard. We will initiate our services on this project upon receipt of a signed copy of this letter of agreement for our files.

Sincerely,

KENIG, LINDGREN, O'HARA, ABOONA, INC.


Javier Millan
Senior Consultant

Luay R. Aboona, PE
As its Principal
And Contracting Officer

ACCEPTED AND APPROVED THIS

_____ DAY OF _____, 2006

(Signature)

(Typed Name)

Authorized to Execute Agreements for:
