#  

August 15, 2007

Mr. Steve O’Neal<br>Chatham Development Corporation<br>6208 Fayetteville Road, Suite 104<br>Durham, North Carolina 27713

Subject: Proposed PortSide Boat \& RV Storage

## Dear Mr. O'Neal:

This letter summarizes our preliminary review of the anticipated impact of traffic generated by the proposed PortSide Boat \& RV Storage facility. The facility is proposed along the south side of US 64, approximately one (1) mile west of the US 64 and NC 751 intersection in Chatham County, North Carolina. A review of the preliminary site plan indicates that the site is expected to consist of approximately 75,500 square feet of RV and boat storage space. Access to the facility is proposed via one (1) right-in entrance driveway and one (1) rightout exit driveway along US 64.

## Existing Traffic

The existing (2007) traffic volumes along US 64 in the vicinity of the proposed site were based on a review of the North Carolina Department of Transportation (NCDOT) Average Daily Traffic (ADT) maps. A review of the 2003, 2004 and 2005 maps indicates an ADT of $16,000,17,000$ and 18,000 vehicles per day (vpd), respectively, along US 64. Traffic volumes were projected to the existing year 2007 by applying an annual compounded growth rate of $6 \%$, which corresponds to the historical growth rate experienced along this section of US 64. Utilizing a $6 \%$ growth rate for two (2) years yields a 2007 ADT of approximately 20,000 vpd. It is assumed that approximately 10 percent of the daily traffic occurs during the AM peak hour and PM peak hour and a 50/50 directional distribution was assumed. Thus, approximately 1,000 vehicles per hour (vph) would be expected along each direction of US 64, in the vicinity of the proposed site, during both the AM and PM peak hours.

## Site Trip Generation

As indicated, the proposed site is expected to consist of approximately 75,500 square feet of RV and boat storage space. The Institute of Transportation Engineers (ITE) Trip Generation Manual, $7^{\text {th }}$ Edition does not have a specific land use for this type of development. A review of similar land uses shows that Land Use 151 -Mini-Warehouse yields a trip generation that would be most similar to the subject site. Table 1 provides a summary of the resultant trips expected to be generated by the subject site during the AM and PM peak hours. It should be noted that is expected that the proposed site is likely to generate the majority of its traffic during the
weekend period. However, since adjacent street traffic along US 64 would be expected to be significantly lower during the weekend period, the weekday AM and PM peak hours are the focus of this letter.

TABLE 1
Trip Generation

| ITE LAND USE (Code) | SIZE | $\begin{gathered} \text { AVERAGE } \\ \text { DAILY } \\ \text { TRAFFIC } \\ (\mathrm{vpd}) \\ \hline \end{gathered}$ | AMPEAK HOUR(vph) |  | PMPEAK HOUR(vph) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Entering | Exiting | Entering | Exiting |
| Mini-Warehouse (151) | $75,500$ <br> square feet | 189 | 7 | 5 | 10 | 10 |

As shown in Table 1, at full build-out, it is estimated that the proposed site will generate approximately 189 total site trips ( 95 entering and 94 exiting) during an average 24 -hour weekday period. Of this total, approximately 12 total site trips ( 7 entering and 5 exiting) are expected to occur during the weekday AM peak hour while approximately 20 total site trips (10 entering and 10 exiting ) are expected to occur during the weekday PM peak hour.

## Site Trip Distribution

As indicated, access to the site is proposed via one (1) right-in entrance driveway and one (1) right-out exit driveway along US 64. Thus, all site traffic will enter and exit the site from/to eastbound US 64. Due to the low number of projected trips, the directional distribution is relatively insignificant although a portion of the site traffic will be required to make a U-turn maneuver at an adjacent median break in order to either enter or exit the site from/to westbound US 64.

## Combined Traffic

For the purpose of this preliminary traffic assessment, it is assumed that the proposed site will be built-out in 2008. Thus, applying a $6 \%$ growth rate to the existing (2007) traffic volumes, an ADT of approximately 21,000 vpd along US 64 is estimated for combined (2008) traffic conditions. Assuming similar assumptions for peak hour and directional distribution, it can be assumed that approximately $1,050 \mathrm{vph}$ can be expected along each direction of US 64 during both the AM and PM peak hours. As shown on Table 1, a minimal amount of traffic is expected to be generated by the proposed site during the AM and PM peak hours thus, the impact to US 64 traffic is expected to be insignificant.

## Conclusions and Recommendations

In summary, the proposed PortSide Boat \& RV Storage facility is not expected to have a significant impact on the adjacent roadway. The preliminary site plan indicates that a separate right-turn lane along US 64 into the site is currently proposed. It is anticipated that nominal storage would be required for the turn lane however, the North Carolina Department of Transportation (NCDOT) will provide the final design requirements.

If you should have any questions or comments relative to this preliminary traffic assessment, please feel free to contact me at (919) 872-5115.

Sincerely yours, Ramey Kemp \& Associates, Inc.


Jason Hamilton, P.E., PTOE
Transportation Manager

