



MEMORANDUM

TO: Jessica Numanoglu, Senior Planner

FROM: Erica Rooney, P.E., Asst. City Engineer *ER*
Amanda Owings, P.E., Associate Engineer
Public Works Department, Engineering Division

SUBJECT: **LU 12-0052**
A Request for a Resource Protection Boundary Delineation and a Development Review Permit to Construct an approx. 63,000 SF Commercial Development in Five (5) Single Story Buildings
Site address: 4591 Carman Dr.
21E07AA Tax Lot 11
Owner: Kruse Development LLC
Applicant: Gramor Investments, Inc.

Review of
e-mails from Jeff Novak, dated 04/17/13 and 04/23/13
Kittelson & Associates, Inc. Response to WNA emails, dated 4/24/13
Reviewers: Amanda Owings, Todd Knepper, Erica Rooney

DATE: April 26, 2013

Engineering staff has reviewed several documents that were recently submitted for the record in regards to the original Traffic Impact Study provided by Kittelson & Associates, dated December 2012 (Exhibit F10). The Waluga Neighborhood Association (WNA) sent emails on April 17 and 23 (Exhibits G1 and G2). Kittelson and Associates addressed the issues noted in those emails in their own formal response on April 24 (Exhibit F17).

In review of all these recent documents, Engineering provides the following comments, with reference to the number system shown in the WNA emails.

1. Traffic Management Plan (TMP) and volumes on Quarry and Galewood

Engineering staff accepts and concurs with the comments provided in Kittelson's April 24 response (Exhibit F17), and offers the following additional comments:

The proposed development is an allowed use, per the Comprehensive Plan. Current code does not require the applicant to study maximum land use/traffic impact; it considers the development as presented. In fairness to all developments reviewed by the City, we cannot impose a minimum impact regarding traffic flows in the surrounding area, especially after the traffic impact study has shown results to be within thresholds.

WNA proposed a 20% threshold for Quarry, which amounts to additional 1-2 vehicles/hour. The City cannot limit development using arbitrary increases in traffic counts. The proposed volumes on Quarry will still be within the acceptable range of anticipated volumes for a Neighborhood Collector, as defined in the current Transportation System Plan.

Neither Code, Comprehensive Plan nor the TSP has any policy limiting traffic volume increases on roadway segments. It is very difficult to track direct traffic impacts of a specific development. Many factors contribute to the overall traffic volumes; therefore, it would be unfair to penalize a development after it is operational. It is for this reason that travel demand models and impact studies are prepared prior to construction and use a conservative methodology, as explained in Kittelson's April 24 response.

It is important to reiterate that with the proposed development, the nearby intersections on Quarry will continue to operate at LOS B. This is well below the threshold of LOS E that is considered acceptable by the Comprehensive Plan and the Transportation System Plan.

To date, Gramor Development, Inc. has not received any formal request for mitigation from WNA. If Gramor and the WNA agree to a potential mitigation measure, the City must be involved in and approve of any modifications affecting the public right-of-way and traffic diversion.

2. Bangy/Meadows, Bangy/Bonita, and Carmen/Meadows/Quarry Intersections

Engineering staff accepts and concurs with the comments provided in Kittelson's April 24 response (Exhibit F17), and offers the following additional comments:

Upon review of the proposed project, Engineering did not feel the intersections of Meadows/Bangy and Bonita/Bangy were directly impacted by the development. These two intersections currently operate at LOS C and, therefore, can sustain additional volume at the PM peak. Additionally, the City will upgrade both signals this spring to operate more efficiently. Meadows/Bangy will receive the first of several Flashing Yellow Arrow installations. Bonita/Bangy will be retimed to coordinate better with the surrounding signals and volume conditions.

The roundabout at Carman/Meadows/Quarry currently operates at LOS C/D and will increase to a LOS E with the full development. Such an increase is allowed within the thresholds of City code. Per recent work completed on the TSP, the 2035 Metro travel demand model for this area shows unconstrained flow (a volume/capacity ratio at 0.8 or less) at the roundabout and several

streets within the study area. In fact, most intersections in the study area operate unconstrained, with the exception of two approaches that operate at constrained (v/c around 0.8) and congested (v/c around 0.9). No roadways in the immediate vicinity of the proposed development are anticipated to reach the jammed condition (v/c over 1.0).

3. Net trip calculations based on previous uses.

Engineering staff accepts and concurs with the comments provided in Kittelson's April 24 response (Exhibit F17), and has no further comments or concerns.

4. Trip Distribution and trip assignment from proposed driveways and on adjacent roadways.

Kittelson's April 24 response (Exhibit F17) addresses both the original WNA item and the revised concerns (Exhibits G1 and G2). Engineering staff accepts and concurs with the comments provided in Kittelson's April 24 response and offers the following additional comments:

Point 5 is the primary access for incoming trips; it is likely this driveway will see a larger amount of entering trips. This is a modeling issue. Point 8, though a full-access driveway, is the primary access for drivers traveling from the south and west which yields less traffic than that from Kruse Way; this is proven by the ADTs – Kruse has more traffic than Quarry, Carman, or Meadows.

When calculating total traffic on a roadway, one must count all the incoming traffic. Therefore, Point 5 has a heavier volume than Point 8. One cannot correlate the amount of entering traffic at a driveway with the street volume – there are several factors that influence route choice: geometry, signal locations, roadway classification, etc. Creating such a correlation does not impact the results of the study or warrant mitigation in another part of the study area.

If route choice was different, thereby altering the distribution of traffic, the LOS may be different at a given intersection; there is no reason to purposefully distort the traffic model.

5. Meadows Road Traffic Volumes

Engineering staff accepts and concurs with the comments provided in Kittelson's April 24 response (Exhibit F17) and offers the following additional comments:

Lunch hour peaks are a very real condition in some business parks nationally. However, both the applicant's and WNA's traffic count data shows that the PM peak is the highest and most impactful on traffic flow at this location. It is this measure that any new contributing development must address. Measuring the lunch hour peak impacts is not a requirement of this application.

Even with the development imposing a large number of trips at the PM peak, the transportation system continues to operate within thresholds. If this impact were to shift to the lunch hour peak, which is already determined to be less than the PM peak, the impacts would again be within thresholds.

6. Traffic Distribution compared between Kruse Way and Quarry Road

Engineering staff accepts and concurs with the comments provided in Kittelson's April 24 response (Exhibit F17) and offers the following additional comments:

Per the traffic analysis, only 8 new trips in the peak hour (80 trips/day) travel away from the site down Quarry; this is only half of the trips that proceed away from the site via Kruse Way/Carman. As mentioned before, Quarry is a Neighborhood Collector, which is intended to accommodate up to 5,000 trips per day. Presently, Quarry volumes are about 4,885 trips per day. No mitigation plan is warranted for the neighborhood due to this development.

7. Vacancy Rate of nearby properties and their affect on traffic volumes in the future.

Engineering staff accepts and concurs with the comments provided in Kittelson's April 24 response (Exhibit F17) and offers the following additional comments:

There are many variables that make up route choice and traffic volumes, and vacancy rates can be a part of that impact. The traffic engineers used the best available information and standard practices within the industry to present the proposed traffic impacts. Clackamas County's Emme travel demand model data uses appropriate growth rates for projecting traffic flows; use of pre-recessional counts is not standard practice. It is important to note that even when modeling traffic using Metro's travel demand model for Year 2035 (where volumes are higher than present day,) all intersections in the area operate within thresholds.

Closing Comments

Engineering Staff believes that Kittelson's April 24 response (Exhibit F17) thoroughly and adequately addresses the WNA's concerns (Exhibits G1 and G2). We do not see any reason to modify the original conditions of approval as proposed in the April 26th staff report for this project.