

MEMORANDUM

Date: August 15, 2018

Project #: 21709

To: Jesse Nemec
JT Smith Companies
5285 Meadows Road, Suite 171
Lake Oswego, OR 97035

From: Diego Arguea and Matt Hughart

Project: Crestview Crossing Development

Subject: 6-Party Agreement Transportation Considerations

Pursuant to your request, we have reviewed the *Crestview Improvement Project (From Robin Court to Highway 99W Alignment Exploration)* that was referenced in a six-party agreement (Yamhill County Board Order 06-265) executed in April 2006. The purpose of this agreement was to begin the process to amend the 2005 Newberg Transportation System Plan (TSP) and reclassify the Crestview Drive extension from a Minor Arterial to a Major Collector designation.

The current development proposed by JT Smith Companies will be required to construct a portion of the Crestview Improvement Project, connecting Highway 99W to the existing terminus of Crestview Drive at the southern boundary of the Oxberg Lake and MeadowWood subdivisions.

EXECUTIVE SUMMARY

Our assessment of the six-party agreement (Agreement) concludes that the proposed Crestview Drive alignment, intersection treatments, and cross-sectional elements are consistent with the guiding principles established in the Agreement, and as such, provides equivalent transportation infrastructure as that identified in the Agreement. Additional details are provided herein.

SIX-PARTY AGREEMENT BACKGROUND

In April 2006, the Yamhill County Board of Commissioners accepted an agreement to begin the amendment of the then-current 2005 TSP. The agreement's purpose authorized the City to conduct an amendment to the 2005 TSP that would designate Crestview Drive as a Major Collector roadway and identify a general design and alignment of the Crestview Drive extension (Reference 1, Agreement, #3). A traffic study was prepared by JRH Engineering concluding the change in classification of Crestview Drive

to a Major Collector would not measurably affect the City's transportation network. The TSP was subsequently amended to reflect Crestview Drive as a Major Collector.

Conceptual Alignment

The alignment identified in the Agreement extends Robin Court to Highway 99W and includes one roundabout intersection (located approximately 380 feet from 99W) and one traffic calming circle located approximately 850 feet north of the roundabout location. As stated in the Agreement, this represents a **"general design and alignment"** to provide direction for future development. Site-specific characteristics, unforeseen challenges, and street connectivity and layout were not addressed in the Agreement, and turn lanes, if required, were to be determined at a later date. The general design and alignment shown in the Agreement Exhibit A is shown below in Figure 1.

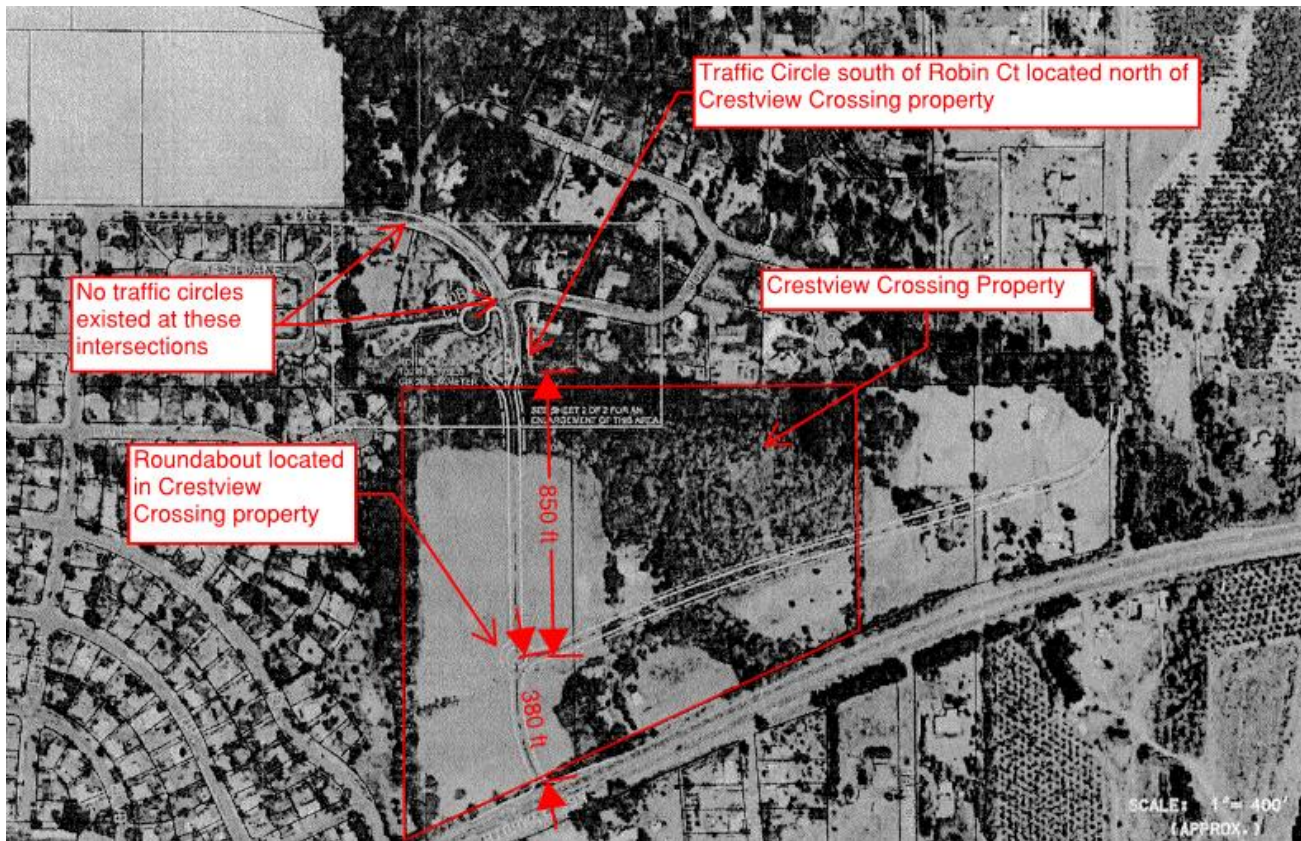


Figure 1. 6-Party Agreement Exhibit A

As shown above, the Agreement identifies a general alignment with two intersection treatments addressing intersection operations and traffic calming. As stated in the Agreement, the alignment should be *designed to encourage a 25 mph speed limit.*

PROPOSED DEVELOPMENT

The proposed residential application acknowledges responsibility to construct the extension of Crestview Drive, connecting from Robin Court to Highway 99W, and has developed an alignment consistent with that shown in the 2006 Agreement.

Constructed To-Date

As shown in Figure 1, Crestview Drive, from Birdhaven Loop to the northern edge of Crestview Crossing, was reconstructed in 2011/2012 to include two intersection traffic calming traffic circles on Crestview Drive at Birdhaven Loop and Robin Court, depicted in Figure 2 below.



Figure 2. Traffic Calming Treatments along Crestview Drive

Neither of these traffic calming circles were identified in the Agreement. The traffic calming circles were constructed after the 2006 Agreement was adopted and are recognized to have a traffic calming effect to limit speeds to 25 mph.

PROPOSED ALIGNMENT

The June 2018 Crestview Crossing Traffic Impact Analysis (TIA) evaluated the impacts of the proposed development and identified recommended mitigation measures. The mitigation measures were selected considering anticipated traffic volumes along Crestview Drive and include the number and configuration travel lanes on the southbound approach to 99W, turn lane storage lengths, as well as transition tapers approaching the roundabout.

Roundabout Intersection

In accordance with the Agreement, construction of a roundabout is proposed to serve traffic into the residential areas north of Highway 99W, and connect to the future Benjamin Road Realignment (a Minor Collector). The roundabout location was determined based on the required queue storage length as an outcome of the TIA as well as roundabout design parameters, including entry deflection angles and transition tapers. As shown in Crestview Crossing site plan application, the roundabout is located approximately 545 feet north of Highway 99W (measured from the center of roundabout to the stop bar at Highway 99W). A southbound left-turn lane on Crestview Drive approaching Highway 99W provides 250 feet of storage and requires at least 50 feet of transition. The northbound transition taper into the roundabout is approximately 200 feet, and has been designed to accommodate all turning movements including u-turns. A detailed exhibit illustrates these distances and is included as an attachment to this memorandum.

The Public Improvement Standards of the Newberg Development Code (Chapter 15.505) were also reviewed to ensure consistency with Collector Roadway spacing standards (400 feet for a Major Collector designation). As such, the location of the roundabout has been designed to comply with the Newberg Development Code and the 6-Party Agreement in the context of the projected traffic operations while recognizing site-specific design considerations and constraints.

Two-way Stop Controlled Intersection

To provide efficient connectivity to adjacent residential development, a two-way stop-controlled intersection (Public Street C) has been designed approximately 500 feet north of the proposed roundabout. The location of this intersection is influenced by intersection spacing on a Major Collector (greater than 400 feet minimum spacing requirement), location of wetlands (site constraints), meeting minimum intersection sight distance requirements, and ability to provide an east-west roadway serving the proposed large lot homes of the Development. The location of this intersection is approximately 410 feet south of Robin Court, the closest public street intersection to the north.

Additional Considerations

Consideration was given to the 6-Party Agreement and the spacing between traffic calming devices during the roadway and site design process. The intersection spacing shown in the conceptual alignment of the 6-Party Agreement and the proposed alignment is shown in a detailed exhibit included as an attachment to this memorandum

As shown in the attachment and in Figure 1, the conceptual spacing shown in the Agreement between the roundabout and traffic calming circle is approximately 850 feet. The proposed site layout and intersection design maintains similar distance between the proposed roundabout and the constructed traffic calming circle on Robin Court (approximately 910 feet). We conclude that the difference in spacing (60 feet) will not impact travel speeds and that the 25 mph roadway design speed is consistent with the 6-Party Agreement.

6-PARTY AGREEMENT CONSISTENCY

In summary, we conclude the proposed alignment and intersection treatments are consistent with and satisfy the terms of the 6-Party Agreement for the following reasons.

1. The purpose of the Agreement is to re-designate Crestview Drive from a Minor Arterial to a Major Collector designation. The re-designation was successfully incorporated into the City's Transportation System Plan based in part on the JRH traffic study.
2. The current Crestview Crossing development proposal acknowledges the Agreement and proposes a roadway extension design consistent with City Major Collector requirements as well as key Agreement elements.
3. The spacing difference between the proposed roundabout and the recently constructed traffic calming circle at Robin Court is not expected to impact travel speeds on Crestview Drive extension and thus is consistent with the traffic calming south in the 6-Party Agreement.
4. With construction of the proposed roundabout, there will be a total of three traffic calming intersection treatments along Crestview Drive between Highway 99W and Birdhaven Loop. This is a greater amount of traffic calming than originally identified in the Agreement, indicating consistency in design and fulfillment of intent by the Applicant.

We trust this memorandum demonstrates consistency with the 6-Party Agreement.

REFERENCES

1. Yamhill County Board of Commissioners. *6-Party Agreement, Crestview Improvement Project (From Robin Court to Highway 99W Alignment Exploration)*. Board Order #06-265. April 19, 2006.

ATTACHMENT

Crestview Drive Exhibit: Intersection Spacing Distances