



**Snohomish County
Planning and Development Services**

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PDS Director

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Everett, WA 98201-4046

3RD REVIEW COMPLETION LETTER

DATE OF LETTER: June 19, 2019

PROJECT NAME: Paradise Lake Road Garden Apartments

PROJECT FILE NUMBERS
(Date of Complete Application):

16-120252 SPA (November 18, 2016)
16-120256 CBP (November 18, 2016)
18-117901 LDA (June 11, 2018)
18-118236 FPA (June 5, 2018)
18-122524 CBP (June 5, 2018)

APPLICANT:
Snohomish Garden Development Company LLC
901 Fifth Avenue, Suite 3210
Seattle, Washington 98164

CONTACT:
Clay White – LDC
20210 - 142 Avenue NE
Woodinville, Washington 98072

PROJECT DESCRIPTION:
Planned Community Business Zone Preliminary Plan approval for a 360-unit apartment complex.

Dear Mr. White,

The information listed below is required to evaluate your proposal further. Please respond to all of the comments.

The scope of our review in this letter addresses the following permit applications:

- **16-120252 SPA:** Planned Community Business (PCB) Preliminary Plan approval for 360 unit apartment complex, includes Urban Residential Development Standards (URDS) site plan approval;
- **16-120256 CBP:** Three rockery retaining walls;
- **18-117901 LDA:** Land Disturbing Activity (LDA) permit for construction, replacing expired 16-120255 LDA;
- **18-18236 FPA:** Forest Practice Application (FPA) to log the site, replacing expired 16-120417 FPA; and
- **18-122524 CBP:** One cast-in-place concrete retaining wall

Planning / Land Use:

Project Manager: Tom Barnett

1. A Determination of Significance (DS) is being issued for this proposal due to its probable significant adverse impacts to traffic. The DS will be sent under separate cover.

Drainage Review:

Reviewer: Jack Hurley

1. Please see the enclosed memo from Mr. Hurley (Attachment A).

Transportation:

Reviewer: David Irwin

1. Please see the enclosed memo from Mr. Irwin (Attachment B).

Fire:

Reviewer: Don Beckwith

1. Please see the enclosed memo from Mr. Beckwith (Attachment C).

Other Information Required:

1. A cover letter that identifies the proposed change(s) cross referenced to the comments on this project is required. Be sure to include and identify any additional changes proposed as well.

RESUBMITTAL OF REQUESTED ITEMS

Please resubmit requested items online at www.mybuildingpermit.com.

Review of your proposal will continue upon the receipt of the above listed information.

Your applications will expire as noted below, pursuant to SCC 30.70.140(1):

- 16-120252 SPA (November 18, 2019)
- 16-120256 CBP (November 18, 2019)
- 18-117901 LDA (December 11, 2019)
- 18-118236 FPA (December 5, 2019)
- 18-122524 CBP (December 5, 2019)

16-120252 SPA

Please do not hesitate to contact me at 425-388-3311, extension 2997, or via e-mail at Tom.Barnett@snoco.org, if you have any questions about this letter.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Barnett', is centered below the word 'Sincerely,'. The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Tom Barnett
Project Manager

ATTACHMENT A

M E M O R A N D U M

TO: Tom Barnett, Principal Economic Development Officer

FROM: Jack Hurley, Engineer III

DATE: June 13, 2019

SUBJECT: 16 120252 SPA, Paradise Lake Road Garden Apts

The preliminary application for Administrative Site Plan approval for the development of the Paradise Lake Road Garden Apts project was reviewed for compliance with the Snohomish County Code codes and standards listed below.

CODE AUTHORITY

The application materials were reviewed for compliance with the following Snohomish County Codes and policies:

- Forest Practices, SCC 30.43F
- Geologically Hazardous Areas, SCC 30.62B
- Critical Aquifer Recharge Areas, SCC 30.62C
- Drainage, SCC 30.63A
- Land Disturbing Activity, 30.63B
- Snohomish County Drainage Manual (SCDM), Volumes I-V
- Snohomish County Engineering Design and Development Standards (EDDS) Chapter 5 Drainage

DOCUMENTS REVIEWED

The following materials, submitted to Planning and Development Services, were included in this review:

- Site Plan,
- Civil Engineering Drawings for site development,
- Full Drainage Report
- Review Memorandum Stormwater Addendum Letter, dated April 22, 2019 by LDC,
- Stormwater Pollution Prevention Plan (Report) and Drawings,
- Landscape Plans,
- Geotechnical Engineering Study, dated September 22, 2016 by Earth Solutions.
- Critical Aquifer Recharge Area Hydrogeological Report, dated April 10, 2017 by Golder Associates.
- SEPA Environmental Checklist.

PROJECT DESCRIPTION

Existing Development

The project site is approximately seventeen acres with two single family residences and various outbuilding on site. About half of the site appears to be pasture and the other half appears to have relatively mature tree cover. The surface slopes on the site are generally descending from

northeast to southwest. Surface water from the site contributes to Daniels Creek, located to the southwest of the site.

Proposed Development

The proposal is to develop the site with a 360 unit apartment complex. This development will include frontage improvements to Paradise Lake Road, access and parking for the units along with utility infrastructure improvements on-site to support the development.

Geologically Hazardous Areas, SCC 30.62B:

Geotechnical Engineering Study, dated September 22, 2016 by Earth Solutions, page 3 under the heading GEOLOGICALLY HAZARDOUS AREAS ASSESSMENT reads in part '...Based on the results of our study, no geologically hazardous areas are located within or adjacent to the subject property.' The current information available (Snohomish County Geographic Information System) shows the Southern Whidbey Island fault mapped on the project site at the southwest corner and slightly to the west of the western most parcel.

SCC 30.62B.160 Permanent identification...requires the preparation of a Critical area site plan (1) and recording that site plan with the county auditor ((2).

As a precondition of approval the applicant shall:

1. submit an addendum to the Geotechnical Engineering Study of September 22, 2016 (refer to SCC 30.62B.350).
2. prepare and submit a Critical area site plan for review.
3. record a Critical area site plan.

Critical Aquifer Recharge Areas, SCC 30,62C:

The site is located within an area of the county that is designated as a Sole Source Aquifer. The applicant submitted a Critical Aquifer Recharge Area Hydrogeological Report, dated April 10, 2017 by Golder Associates. The Summary section of the report (page 11) reads in part 'the project will result in some reduction of groundwater recharge, but the effects are anticipated to be minor due to the low recharge potential of the low permeability till soils underlying the site. Since there will be minimal infiltration onsite, impacts to groundwater quality are also anticipated to be low.'

This development activity is not one of the specific uses listed in either SCC 30.62C.330 as prohibited or 30.62C.340 subject to special conditions. No additional information is required to demonstrate compliance with this section of code.

Drainage, SCC 30.63A and Land Disturbing Activity, 30.63B

The proposed new hard surfaces for the project total approximately ten acres: Of that area about forty percent is considered pollution generating. The project is subject to drainage Minimum Requirements #1 through #9.

The estimated earth work for the proposal includes 30,000 cubic yards of cut and 31,000 cubic yards of fill. The assumption is that the earthwork required will be very close to balancing on-site.

DISCUSSION OF DRAINAGE MINIMUM REQUIREMENTS (MRs)

MR #1: Preparation of Stormwater Site Plans (SCC 30.63A.400)

The drainage report and civil engineering drawing address the requirement to prepare a Stormwater Site Plan.

MR #2: Stormwater Pollution Prevention Plans (SWPPPs) (SCC 30.63A.445 to 30.63A.450)

The applicant has provided sufficient SWPPP information in the Stormwater Pollution Prevention Plan (Report) and on the Drawings to address this MR.

MR #3: Source Control of Pollution (SCC 30.63A.515)

Permanent source control BMPs are not required for residential projects of this type. Temporary Source Control BMPs are addressed in the SWPPP (MR #2 above).

MR #4: Preservation of Natural Drainage Systems and Outfalls (SCC 30.63A.520)

Natural drainage patterns are preserved in the proposed drainage design to the maximum extent feasible. Surface water runoff from upstream properties are not impeded from their existing flow onto the site and the discharge from the site will continue to contribute flows to Daniels Creek (the receiving waters). No adverse impacts to the downstream drainage system have been identified by the engineer.

MR #5: On-Site Stormwater Management (SCC 30.63A.525)

Proposal for fulfilling this requirement is to provide Post construction soil quality and depth BMP T5.13 in areas not covered in 'hard surfacing. Roof drains from the buildings will incorporate Perforated stub out connections (BMP T5.10C). All other BMPs associated with MR #5 were deemed 'infeasible' on the basis of area availability and the nature of the soils on site (depth to restrictive layer).

MR #6: Runoff Treatment (SCC 30.63A.530 to 30.63A.545)

The threshold requiring runoff treatment has been exceeded given the proposed amount of pollution generating hard surfaces (PGHS). The stormwater site plan and narrative have proposed the use of proprietary treatment devices to provide Enhanced water quality treatment. The specific units identified by the applicant are currently listed on the Washington State Department of Ecology General Use Level designation to provide this level of treatment. This proposal meets the standard for this development.

MR #7: Flow Control (SCC 30.63A.550)

The threshold requiring flow control has been exceeded given the proposed amount of impervious surfaces. The stormwater site plan and narrative propose to address the runoff from the development utilizing two detention facilities, underground detention pipe and open storage in pond. These facilities will provide temporary storage of stormwater runoff and discharge at a restricted rate to the MSSSS in Paradise Lake Road. The hydrologic analysis of the proposed system indicates that the flow control requirement is achieved by the proposed system.

MR #8: Wetlands Protection (SCC 30.63A.570)

The proposal does not include utilizing wetlands for either flow control or stormwater treatment. This MR is specific to utilizing wetlands and the associated buffers for flow control and or treatment. Since the proposal does not include this in the design no additional information or analysis of this MR is required.

MR #9: Inspection, Operation Maintenance etc. (SCC 30.63A.575 to 30.63A.605)

A Stormwater Facility Easement (SFE) is required for this project. The SFE must be submitted for review, accepted by the county and recorded prior to issuance of construction permits.

Operation and maintenance information about the anticipated BMPs is provided in the Stormwater Report and Stormwater Addendum Letter. Other items related to this MR will be addressed in the construction review, permit issuance and construction approval stage of the project. No additional information related to this MR is required for preliminary approval.

CONCLUSION:

Based on the review of the preliminary application relating to drainage and grading, this project can fulfill the requirements of Snohomish County codes and policies, including the Snohomish County Drainage Manual and Engineering Design and Development Standards Chapter 5 Drainage.

CONDITIONS

As a precondition of approval, to address the mapped Geologically hazardous area on and adjacent to the site, the applicant shall:

1. submit an addendum to the Geotechnical Engineering Study of September 22, 2016 (refer to SCC 30.62B.350).
2. prepare and submit a Critical area site plan for review.
3. record a Critical area site plan.

Prior to permit issuance:

A Stormwater Facility Easement (SFE) is required for this project. The SFE must be submitted for review, accepted by the county and recorded prior to issuance of construction permits.

ATTACHMENT B

MEMORANDUM

June 11, 2019

TO: Tom Barnett, Principal Planner
Planning and Development Services

FROM: David Irwin, Engineer II, Transportation Development Reviewer
Planning and Development Services, Transportation Engineering Section

SUBJECT: File No. 16 120252 SPA, Paradise Lake Road Garden Apartments
3rd Transportation Impact, Mitigation and Concurrency Review Comments

Purpose

The purpose of this memo is to provide review comments in response to the 3rd traffic submittal received by PDS from the applicant on April 29, 2019.

General Information

The Transportation Engineering Review Section of Planning and Development Services (PDS) has reviewed the subject development proposal for compliance with Chapter 30.66B SCC (Snohomish County's Traffic Mitigation and Concurrency Ordinance), Snohomish County Engineering Design and Development Standards (EDDS), and the applicable County Rules and procedures. This memo provides a summary of that review. This development proposal is subject to the requirements of the version of Chapter 30.66B SCC that was in effect at the time of submittal of a complete application to the County.

- The applicant is proposing to develop a 360 unit apartment complex with 15 buildings. The site encompasses three parcels totaling 16.91 acres in the PCB zone.
- The subject property is located at 9321 Paradise Lake Road in Transportation Service Area (TSA) "E", inside the urban growth area (UGA).
- On site access will be provided by a private drive aisle.
- The plan and traffic study used for this review was received by (PDS) on April 29, 2019.
- The subject development is vested to the January 22, 2016 version of the EDDS.
- The site is currently developed with two SFRs. According to the site plan, the SFRs will be removed. Credit will be applied to the existing SFRs.

History

The following is a summary of the traffic submittals and transportation impact review memo's provided to date:

| | |
|--------------------------------|---|
| November 18, 2016 | Original Traffic Submittal by Applicant |
| February 28, 2017 | 1 st Transportation Impact Review Memo by PDS |
| June 28, 2018 | 2 nd Traffic Submittal by Applicant |
| September 5, 2018 | 2 nd Transportation Impact Review Memo by PDS |
| Sept. 28, 2018 & Oct. 23, 2018 | Informal Supplemental Traffic Submittals by Applicant |
| November 15, 2018 | Informal PDS Transportation Impact Review Status Letter |
| April 29, 2019 | 3 rd Traffic Submittal by Applicant |
| June 4, 2019 | Applicant Concurrency Mitigation Offer Rec'd (Broadway/164 th /Elliot Intersection) |

Informal traffic study submittals were received by PDS on September 28th and October 23, 2018. A response letter dated November 15, 2018 was sent back to the applicant identifying the accepted mitigation options for intersections impacted by the proposed development east of SR 522. The November 15, 2018, letter also identified items that the applicant was required to address in a formal transportation impact application submittal. In the Transportation memo dated September 5, 2018, the following items were identified as needing to be addressed and based upon the 3rd submittal the status of each item has been updated and is indicated in italics below:

1. Provide a PE stamp + signature on the TIA and supporting documents (Miscellaneous - p.3)
This has been adequately addressed.
2. Address how the 23 TMC's with the same count date of May 22, 2018, were obtained (Miscellaneous - p.3)
This has been adequately addressed.
3. Address the reduced delay from 2022 to 2024 (LOS Forecast – p.5)
This has been adequately addressed.
4. Address the turning movements on Paradise Lake Road + Chevron Driveway. Acceptable mitigation for collisions history and LOS impacts on State Highways + Arterial Units will be determined after completion of micro-simulation analysis. (p. 6-7)
This has been adequately addressed.
5. Address the three (3) previous comments/questions by the County Traffic Engineer and provide a written summary for each item at the next submittal (p. 7-8)
 1. Provide a VISSIM analysis for the arterial operations for NB Bostian Road left turns (existing) vs the re-routing via the proposed mitigation.
 2. Address the storage and queuing for the eastbound left turn on Paradise Lake Road at the intersection with 91st Ave SE (spur road)
 3. Identify how the northbound Bostian Road peak hour right turn only restriction will be enforced. Provide examples of where this has been successfully implemented.

These items have been adequately addressed.

6. Address the LOS deficiency (concurrency) for northbound Broadway Ave + southbound Yew Way. This is required before a concurrency determination can be made. (p. 10).

The applicant has made a mitigation offer that could theoretically resolve the LOS deficiency for County concurrency purposes on northbound Broadway Avenue but no construction plans have been submitted as required under SCC 30.66B.170. The offer is also contingent on sufficient right-of-way and a latecomer's agreement.

Level of service for County concurrency purposes on Southbound Yew Way will be addressed via a signal to be installed by the WSDOT.

7. Address County Traffic Engineer's comments provided above on August 14, 2018, and the Synchro comments provided in the July 31, 2018 memo. A written response summary needs to be provided for each item at the next submittal. (p. 8-10)

This has been adequately addressed.

8. Address the RRFB school crossing / raised median / three-lane section / channelization plan. (Frontage Improvement - p.12)

This has been adequately addressed.

9. Provide a revised TDM Plan. (TDM - p.17)

This has been adequately addressed.

10. Address the LOS impacts at the intersection of West Bostian Road and SR 524 as part of the VISSIM analysis for Paradise Lake Road/SR 522. (p. 5 & p. 18)

*This has **not** been adequately addressed. An informal submittal of the VISSIM analysis was received on September 28, 2018 and a revised one on October 23, 2018. The results of the VISSIM analysis were summarized in the formal submittal received by Snohomish County on April 29, 2019. This analysis shows that the intersection of Yew Way/SR 524 and the intersection of SR 524/W. Bostian Road will operate at LOS F (see Non-Mitigated Intersection(s) West of SR 522 section of this memo). The applicant has **not** proposed any mitigation west of SR 522 to return the intersections back to pre-developed conditions as required by section 5.3 of the ILA.*

11. Address the multiple WSDOT comments and provide a written response to each item at the next submittal. (p. 18-22)

This has been adequately addressed.

Notice of Decision Requirements for Concurrency and Impact Fee Determination:

The status of the review of the April 29, 2019, submittal is that the development has not been determined to be concurrent. Under SCC 30.66B.180, notice of a concurrency determination shall be combined with the notice of public hearing for the underlying application.

This decision applying a traffic impact fee under Chapter 30.66B SCC may be appealed pursuant to SCC.30.66B.370. See the Status section below for additional information.

Concurrency [SCC 30.66B.120]

Status

The County makes a concurrency determination for each development application to ensure the development will not impact a county arterial unit in arrears or likely cause any county arterial unit to fall into arrears, except when the developer proposes to either modify the development so as to not impact the arterial unit in arrears or remedy any arterial unit in arrears in accordance with SCC 30.66B.170; SCC 30.66B.120; SCC 30.66B.160.

As stated on page 30 of the applicant's traffic study dated April 19, 2019, the development will impact Broadway Avenue with three or more northbound directional peak hour trips. Currently, northbound Broadway Avenue operates at level-of-service, LOS E (14.59 MPH). The development's traffic study indicates the future (2024) operations of northbound Broadway Avenue with pipeline and the development's trips will be LOS F (11.84 MPH).

SCC 30.66B.170(1) [emphasis added]: If a developer chooses to mitigate the development's impact by constructing offsite road improvements to remedy the arterial unit in arrears, the developer must investigate the impact, identify improvements, and offer a construction plan to the director for construction of the offsite improvements. Construction of improvements shall be in accordance with the EDDS and the procedures of Title 13 SCC.

Based on applicant's traffic study submitted April 29, 2019, the development is generating more than 50 peak hour trips and will impact an arterial unit which is likely to be in arrears with three or more directional peak hour trips in the deficient direction. In a letter dated November 15, 2018, PDS highlighted the concurrency deficiency on Broadway for the applicant. PDS subsequently sent a conceptual schematic plan for a temporary signal to the applicant on December 4, 2018, as a potential mitigation option for the concurrency deficiency. The traffic study submitted by the applicant on April 29th, 2019, does not include an offer to fund and construct a mitigation proposal for this LOS deficiency. Rather the April 29, 2019, traffic study provides, *"A traffic signal is being considered at the Broadway Avenue/164th Street SE/Elliot Road intersection. This improvement is being explored by the County and would improve the operations to LOS E in the northbound direction, meeting County standards."* On June 4, 2019, the applicant sent PDS a letter indicating its intent to revise its proposal to address the concurrency deficiency but did not provide a construction plan to the director as required by SCC 30.66B.170(1). The offer is conditioned upon assuming sufficient right-of-way is available. In addition, the offer is contingent on a latecomers' agreement, a process under chapter 13.95 SCC. If construction plans were provided and the plans addressed whether the improvements could be constructed within the existing right-of-way, the developer's offer could theoretically satisfy SCC 30.66B.170(1). At this time, absent such information, the development cannot be determined concurrent.

Trip Generation

The original Traffic Impact Analysis (TIA) by Transpo Group was received by PDS on November 18, 2016, a subsequent TIA was received by PDS on June 28, 2018, and informal submittals of the TIA were received on September 28th and October 23, 2018. The current TIA was received on April 29, 2019. The traffic studies submitted indicate that the Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition, 2012) was used to estimate the traffic generated by the apartment complex (ITE's Land Use (LU) code 220). The traffic study submitted anticipates the proposed development will generate 182.1 AM peak hour trips (PHT) and 221.2 PM PHTs.

Trip Distribution

The County's first traffic review comments, on February 28, 2017, indicate the following concerns with the initial trip distribution submitted by the applicant:

Due to the proposed development not being in the general proximity to: pedestrian facilities, public transit, grocery stores, public parks, schools, and other attractors, it appears the only mode of transportation is by vehicle. With that in mind, the trip distribution would anticipate more vehicles using alternative routes to and from the nearest attractors.

Pedestrian Facilities: Pedestrian facilities will be constructed along the developments frontage. However, there are no pedestrian facilities adjacent to Paradise Lake Road northwest or southeast of the subject development.

Public Transit: The nearest public transit stop is 2.8 miles south of the proposed development at the intersection of NE Woodinville-Duvall Road and 176th Ave NE.

Grocery: The nearest grocery/food supply store is Costco (and located approximately 3.25 miles away) which can be accessed via State Route (SR) 522 and Bostian Road/240th Street SE. Bostian Road/240th Street SE is a Minor Collector Arterial and the traffic study does not appear to show any trips to or from the arterial as would typically be anticipated if there is congestion on SR 522 during the PM peak hour. The other nearest grocery store is Albertson's (and located approximately 3.6 miles away via Broadway Ave) on SR 9. The traffic study does not show any trips to or from the Minor Arterial of Broadway Ave/Yew Way. The next nearest grocery store is Safeway (and located approximately 5.3 miles away via Paradise Lake Road and NE Woodinville-Duvall Road) near Cottage Lake. The traffic study shows 10% of the developments distribution heading southeast on Paradise Lake Road.

Public Park: The nearest public park is the Paradise Valley Conservation walking trails. The park entrance is approximately 1.5 miles southeast of the proposed development on Paradise Lake Road. As specified above, there are no pedestrian facilities between the proposed development and the park.

School(s): Maltby Elementary School adjoins the subject developments northeast property corner. Pedestrian facilities have not been proposed, therefore, the school is located approximately 1.0 miles away from the subject development by car. Hidden River Middle School is southwest of the subject development on the south side of Paradise Lake Road. Pedestrian crossings do not currently exist and have not been proposed. Monroe High School is approximately 7.6 miles away.

Due to the vicinity of these attractors, Snohomish County did not agree with the original trip distribution as shown in the TIA. The traffic study received on June 28, 2018, used the Puget Sound Regional Council (PSRC) Travel Demand Model and Snohomish County has accepted the trip distribution methodology.

Traffic Study Completeness

As specified to Clay White (with LDC) during the following time intervals: the initial application (Nov. 18, 2016), in the 1st transportation review memo (dated February 28, 2017), during subsequent meetings/emails (dated July 25, 2017), and phone conversations, a future LOS analysis is needed in order to make a concurrency determination. The County accepted the initial traffic study with the assurance from Clay White that the future LOS analysis would be submitted that afternoon or the following day, but the analysis was not submitted until June 28, 2018.

As specified in SCC 30.66B.025, a development's traffic study shall not be considered complete until all traffic studies or data required in accordance with SCC 30.66B.035 are received. Per SCC

30.66B.035(1), a development adding more than fifty peak-hour trips shall be required to provide a traffic study to enable the department of public works to make a concurrency determination in accordance with SCC 30.66B.125. As indicated in the first transportation review memo dated February 28, 2017, a forecast year of 2022 was needed, upon further analysis of county code, the requirement is six (6) years from a “complete” traffic study which was officially submitted on June 28, 2018. The June 28, 2018, study is determined complete and sufficient for further traffic review.

LOS Forecast

Pursuant to DPW Rule 4220.100(2), a future level of service forecast will analyze traffic impacts for arterial units for the developments “forecast year”, which is the sixth year of the adopted Transportation Improvement Program (TIP) from the year in which the development’s traffic study is determined complete and sufficient for traffic review. Based on this, the forecast year for the proposed development is 2024 instead of 2022. This is adequately shown on the revised TIA submitted on April 29, 2019.

Critical Arterial Unit

As stated in an email dated May 8, 2018, to Jessica Lambert with Transpo Group, the application was vested to the critical list printed on October 24, 2016. The critical list was good for 90 days and expired on January 22, 2017. The proposed development made application on November 18, 2016, so that is the list the applicant is vested to. The development’s initial traffic study showed 50+ directional peak hour trips on Paradise Lake Road. In accordance with DPW Rule 4220.100(1), any development that will generate more than fifty (50) net new PHT will be required to include a future level of service analysis in their traffic study to determine the developments impact to arterial units impacted with 50+ directional trips and 3+ directional trips on a critical arterial unit. Also stated in DPW Rule 4220.100(4), an arterial unit NOT identified as critical at either the pre-submittal or traffic scoping meeting, is not considered to be within the scope of either the required future LOS analysis or the concurrency determinations except if any of the following applies: (b) If between the time of initial application submittal and the concurrency determination the County becomes aware of possible LOS deficiencies on arterial units and conducts its own LOS analysis as the basis of the concurrency determination.

During the period between the development’s initial, but incomplete traffic study on November 18, 2016, and submittal of a complete traffic study on June 28, 2018, Snohomish County identified the following **Critical Arterial Units (CAU): 330** (Broadway Ave from SR 524 to 164th Street SE – due to a recon travel time in **November 2017**), **354** (Paradise Lake Road from SR 522 to King County Line – due to a travel time in **February 2017**), and **471** (Yew Way from Broadway Ave to SR 524 – due to a travel time study completed in **March 2017**). In response to the applicant’s mitigation proposal dated March 27, 2018, the County required in its May 8, 2018 email, the applicant to provide a future LOS analysis for these arterial units impacted with three (3) or more directional peak hour trips. The initial future LOS analysis was received by PDS on June 28, 2018.

LOS Results

The applicant’s TIA submitted on June 28, 2018, indicates the following:

| AM Peak Hour Arterial Analysis | | | |
|---------------------------------------|----------------------|----------------------------------|---------------------------------|
| Arterial | Existing 2018 | Future 2024 W/out-Project | Future 2024 With-Project |
| | | | SB: 12.10 mph |

| | | | |
|---------------------------|------------------------|------------------------|---|
| AU 471 – Yew Way | SB: 17.52 mph LOS D | SB: 12.64 mph LOS F | LOS F With WSDOT Signal SR 524@Yew Way 17.21 mph (LOS D) |
| AU 330 – Broadway Ave | - | - | - |
| AU 354 – Paradise Lake Rd | WB: 27.27 mph LOS C | WB: 23.94 mph LOS C | WB: 22.43 mph LOS C |

| PM Peak Hour Arterial Analysis | | | |
|---------------------------------------|------------------------|----------------------------------|---------------------------------|
| Arterial | Existing 2018 | Future 2024 W/out-Project | Future 2024 With-Project |
| AU 471 – Yew Way | - | - | - |
| AU 330 – Broadway Ave | NB: 14.59 mph LOS E | NB: 11.88 mph LOS F* | NB: 11.84 mph LOS F* |
| AU 354 – Paradise Lake Rd | WB: 18.99 mph LOS D | WB: 15.31 mph LOS E | WB: 13.13 mph LOS E |

*As stated in the applicant's traffic study, Broadway Avenue is anticipated to fall below the County's LOS standards (per SCC 30.66B.100). For additional information, see the Concurrency Status section above.

Inadequate Road Condition (IRC) [SCC 30.66B.210]

Regardless of the existing level of service, any development which adds three or more P.M. peak-hour trips to a location in the road system determined to have an existing inadequate road condition (IRC) at the time of imposition of mitigation requirements, or any development whose traffic will cause an IRC at the time of full occupancy of the development, must eliminate the IRC.

The County received 200+ emails from public citizens concerned with existing traffic in the Maltby vicinity and how the roads will be effected by the forecasted trips from the proposed development. Based on this, Snohomish County conducted an IRC study along Snohomish County's segment of Paradise Lake Road. The Paradise Lake Road segment was performed from the eastern edge of the WSDOT right-of-way near the 91st Ave SE-Paradise Lake Road (spur road) and extended southeast to the King County line. Results of this analysis were completed on December 20, 2017, and it was determined that this segment is NOT an inadequate road condition. The collision history did not show a distinct pattern that would indicate a clear inadequacy that would fix the collisions along the corridor.

Additionally, many of the emails received by neighboring citizens proclaimed their concerns with the existing traffic on SR 522, Maltby Road (SR 524), as well as the portion of Paradise Lake Road within WSDOT right-of-way. Since these roadways are under the jurisdiction of WSDOT, Snohomish County does not have any authority to declare an IRC on these roadways.

Road System Impact Fee [SCC 30.66B.310]

A development shall mitigate its impact upon the future capacity of the Snohomish County road system by paying a road system impact fee reasonably related to the impacts of the development on arterial roads located in the same transportation service area as the development, at the rate identified in SCC 30.66B.330 for the type and location of the proposed development. A development's road system impact fee will be equal to the development's new average daily traffic

(ADT), based on the latest edition of the ITE Trip Generation report published by the Institute of Transportation Engineers, times the per trip amount for the specific transportation service area identified in SCC 30.66B.330 or acceptable specific trip generation information provided by the applicant or their Traffic Engineer.

The estimates of trip generation for the development are based on the 9th edition of the ITE Trip Generation Report as follows:

ITE Land Use Category: Apartments / Single Family Detached
 ITE Land Use Code: 220 / 210
 Applicable Measurement Unit (ITE Independent Variable): Living Unit / SFR
 Number of applicable measurement units for this development: 360 / 2

AM & PM Peak Hour Trip Calculations:
Trip Generation Based on Average Rates

| Type of Trip | Calculations | | | | | | | | |
|-------------------------------------|--------------|---|----------------|---|-----------------|---|---------------------|---|----------------|
| | Total DU* | | AM PHT per DU* | | 5% TDM Credit** | | Less existing trips | | Net New AM PHT |
| Net New AM Peak-Hour Trips (AM PHT) | 360 | X | 0.51 | X | 0.95 | - | 1.50 | = | 172.92 |
| Net new PM Peak-Hour Trips (PM PHT) | Total DU* | | PM PHT per DU* | | 5% TDM Credit** | | Less existing trips | | Net New PM PHT |
| | 360 | X | 0.62 | X | 0.95 | - | 2.00 | = | 210.04 |

* Dwelling Units (DU)

** See Transportation Demand Management section below for TDM percentage determination.

Road System Impact Fee Calculation

All of the existing dwelling units on the site shall be removed.

| | | |
|---|--|----------|
| 1 | Number Of Dwelling Units in development: | 360 |
| 2 | ADT per Dwelling Unit: | 6.65 |
| 3 | New ADT (Line 1 x Line 2): | 2,394 |
| 4 | TDM Credit* (Line 3 x 5%): | 119.70 |
| 5 | Gross New ADT (Line 3 – Line 4): | 2,274.30 |
| 6 | ADT Credit For Existing Trips (2 existing DU x 9.52 ADT/DU): | 19.04 |
| 7 | Net New ADT (Line 5 – Line 6): | 2,255.26 |

| | | |
|----|--|--------------|
| 8 | TSA E mitigation rate per ADT: | \$230.00 |
| 9 | Total Road System Impact Fee (Line 7 x Line 8): | \$518,709.80 |
| 10 | Number Of New Dwelling Units to be Constructed: | 360 |
| 11 | Amount to be paid per New Dwelling Unit: (Line 9 ÷ Line 10) | \$1,440.86 |

* See Transportation Demand Management section below for TDM percentage determination.
 Payment of this road system impact fee shall be made consistent with SCC 30.66B.340.

Frontage Improvements [SCC 30.66B.410]

All developments will be required to make frontage improvements along the parcel's frontage on any opened, constructed, and maintained public road. The required improvement shall be constructed in accordance with the EDDS, including correction of horizontal and vertical alignments, if applicable.

DPW Rule 4222.020(1) requires full urban frontage improvements along the subject parcel's frontage on Paradise Lake Road which consist of:

- Asphalt concrete pavement consisting of 23 feet width from *right-of-way centerline to the face of curb which includes a 5 foot bike lane
- Cement concrete curb and gutter
- Planter strip with a width of 5 feet
- Cement concrete sidewalk with a width of 7 feet

*It appears that the right-of-way centerline and the roadway centerline vary along the subject developments frontage. As shown on the site plan, there will approximately be 2-18 feet of new pavement along the development's frontage on the north side of Paradise Lake Road if the improvements are based upon the right-of-way centerline. The development will generate 221 PM peak hour trips (PHT), a large portion of them will turn left to enter to the site. In existing conditions typical PM peak hours queue on westbound Paradise Lake Road extends in front of the site will make it difficult for left turn access to the site. To facilitate safe left turn access to the site and to minimize mainline traffic impact on Paradise Lake Road, the proposed development frontage should require left turn storage area (center turn lane) on Paradise Lake Road. As stated in the Pedestrian Facilities section below, the County Traffic Engineer is requiring RRFB crossing sign(s) and raised median (Refuge Island) at the school crossing located on Paradise Lake Road, near the southwest property corner. The proposed crossing and raised median needed to be located east of the westerly access, far enough to the east to allow commercial trucks to make a southbound left turn out of the westerly access point onto Paradise Lake Road. These improvements will require a three travel lane pavement section along the developments frontage on the west side of the site and extending to STA 102+00, with taper to a two lane section to the east.

It appears there are locations with enough existing pavement to accommodate this, but additional pavement is required in some areas per SCC 30.66B.420. The additional pavement shown on the south side of Paradise Lake Road from 102+80 and extending to the southeast is not required to accommodate the taper and can be striped to taper back to the two travel lanes earlier than shown. However, Snohomish County has no objections to the additional pavement widening as

shown on the proposed channelization plan received on April 29, 2019, as it has the benefit of providing for a two-way turn lane adjacent to the easterly church driveway therefore providing benefit to westbound through traffic adjacent to the site.

Paradise Lake Road, on which the development's frontage improvements are required, is not in the impact fee cost basis (Appendix D of the Transportation Needs Report), therefore credits towards the applicant's impact fee for any frontage improvements that can be used in the ultimate build-out of the road are not applicable.

Construction of frontage improvements is required prior to any final inspection or occupancy.

Right-of-way Classification / Access and Circulation [SCC Title 13, EDDS 3-02 and 30.66B.420]

Internal Road Classification:

Private Drive Aisle(s)

External Road Classification:

Per the adopted Snohomish County Arterial Circulation map, effective July 2, 2015, Paradise Lake Road is classified as a Major Collector Arterial. All Arterial roads are public. The posted speed for Paradise Lake Road is 35 MPH.

SCC 30.66B.420 Access and Circulation Requirements

(1) All developments will be required to:

- (a) Provide for access and transportation circulation in accordance with the comprehensive plan and this chapter applicable to the particular development,
- (b) Design and construct such access in accordance with the EDDS, and
- (c) Improve existing roads that provide access to the development in order to comply with adopted design standards, in accordance with SCC 30.66B.430.

(2) Access to state highways and city streets shall be in accordance with the applicable state or city standards and requirements.

(3) All developments that propose to take access via an existing public or private road which, for the vehicle trips projected to use the road after full occupancy of the development, is not designed and constructed in accordance with the EDDS, will be required to improve such road to bring it into compliance with the EDDS when the director of public works determines it necessary to provide for safety and the operational efficiency of the road. The extent of improvements will be established by the director of public works in accordance with SCC 30.66B.430.

The proposed development will take access from Paradise Lake Road. Sight distance was evaluated at the proposed access point(s) and was found to meet the minimum requirements of EDDS 3-08.

Snohomish County has concerns with the turning movement conflicts on Paradise Lake Road between SR 522 and the eastern access of the Chevron Gas Station (on the south side of Paradise Lake Road). This location would satisfy Snohomish County's IRC threshold if it were within Snohomish County right-of-way. However, this location is within the right-of-way of the WSDOT. Please see the State Highway Impacts section below for additional comments.

The ADA ramps at the intersections of all the roads in the development must show compliance with minimum ADA standard requirements for grades and landings as detailed in the current EDDS Section 4-05 D and WSDOT Standard Plans F-40 series. A detail of each ADA ramp will be required in the construction plans. It is our understanding that the current requirements do not grant any leeway for design and construction of ADA ramps for new intersections.

Extent of improvements [30.66B.430]

In determining the extent of improvements required, the director of public works will consider, with other relevant factors, the following:

- (a) Extent of the development proposed;
The applicant is proposing to develop a 360 unit apartment complex with 15 buildings. The site encompasses three parcels totaling 16.91 acres in the PCB zone. There are two (2) existing SFRs on site. According to the site plan, the SFRs will be removed. Credit will be applied to the existing SFRs.
- (b) Priority of improvements to involved county roads in the county's six-year transportation improvement plan;
No improvement projects are shown on the Transportation Needs Report (TNR), six year Transportation Improvement Program (TIP), or 2019 County overlay list.
- (c) Condition of existing transportation facilities in comparison to adopted standards;
Urban improvements will be constructed along the developments frontage on Paradise Lake Road. There are approximately 780 feet of rural frontage improvements on the south side of Paradise Lake Road in front of the church located directly across from the proposed development. No other frontage improvements exist.
- (d) Existing and projected land uses and development densities;
The existing use is Agriculture/Residential and the proposed use is Multi-Residential.
- (e) Current and projected levels of service on the affected road system;
As stated above, the applicant submitted a letter expressing its intent to offer to remedy the LOS on northbound Broadway Avenue but did not provide a construction plan as required by SCC 30.66B.170(1) and conditioned the offer upon assuming sufficient right-of-way is available and on a latecomers agreement process that the applicant has not initiated under chapter 39.95 SCC. Therefore, the proposed development does not meet Snohomish County's LOS standards.
- (f) Availability of public transit;

The authority to create, eliminate or modify a transit route or transit stop lies with the transit agency within whose service area the development is located in or nearby to. The two county transit agencies that serve the residents of Snohomish County are Community Transit and Everett Transit. Sound Transit currently has routes that provide express bus service to King County from hubs such as Everett Station, the Ash Way Park & Ride. Everett Transits boundaries are all within their city limits and Sound Transits routes are in incorporated areas of the UGA. Community Transit is the only transit agency that has routes and stops in both the urban area and the rural area. The county has no authority to require any transit authority to service a subject property or development. The only authority the County does have is to approve the location of a transit stop along a county right-of-way if the transit authority chooses to install one. According to a National Personal Transportation Survey, conducted by the American Planning Association, the average person is willing to walk about 1,500 feet to a transit stop.

Currently there are no public transit routes or stops that service the subject development. The closest transit stop is located approximately 2.8 miles south of the proposed development at the intersection of NE Woodinville-Duvall Road and 176th Ave NE.

- (g) Any traffic study submitted;

The original traffic study by Transpo Group, dated November 15, 2016, was received by Snohomish County on November 18, 2016. A subsequent traffic study was received on June 28, 2018. An informal Vissim analysis was received via email on September 28, 2018 and October 23, 2018. The recent Traffic study dated April 19, 2019 was received by Snohomish County on April 29, 2019.

- (h) Availability of a specific improvement program;

No improvement projects are shown in the County's Transportation Needs Report (TNR), six year Transportation Improvement Program (TIP), or 2019 County overlay list. There is a WSDOT freeway interchange design for the intersection of SR 522 and Paradise Lake Road/SR 524 proposing to replace the existing traffic signal. At this time, the WSDOT is conducting feasibility studies to help improvements at the SR 522/SR 524/Paradise Lake Road, per section 5.3.e of the ILA.

- (i) The number of dwelling units currently using the road system that must be improved and projected to use the road system after full occupancy of the development;

Approximately 1,100-1,500 dwelling units plus a significant amount of pass through traffic.

- (j) The needs of low-income persons for decent, affordable, low-cost housing;

The subject development is not a low income housing project. There are no low income housing measures or design features associated with this development.

- (k) Transportation system or demand management measures proposed by the developer;

The applicant has submitted a TDM plan which satisfies half of the TDM obligation. The remaining half (5%) TDM obligation will be met by cash payment of \$72,540.00.

- (l) The need for pedestrian and bicycle facilities

Paradise Lake Road is on the Countywide Bicycle Facilities Map. The required urban frontage improvements will include improvements within the right-of-way to accommodate pedestrian and bicycle facilities.

- (m) Continuity with existing and proposed improvements;

Frontage improvements do not exist along the development's side of Paradise Lake Road. Urban frontage improvements will be constructed along the development's frontage.

- (n) Development standards of adjacent cities;

It should be noted that Snohomish County cannot impose another jurisdiction's requirements without the benefit of an ILA, which is an agreement that is voluntarily entered into by the jurisdiction.

- (o) The need for safety improvements for school children;

Comments from the Monroe School District were received by PDS on December 21, 2016 and provided to the applicant with the first review comments. Additional comments are provided in the Pedestrian facilities section below. In their December 21, 2016 comments, the school district provided the developer the following options to address school children:

- Off-site pedestrian facilities to both the elementary and middle school,
- On-site walkway to the elementary school adjacent to the NE corner of the property,
- An on-site easement for bus access and turnarounds or a bus pullout along the frontage.

The applicant has elected to construct an off-site pedestrian facility to the middle school on the south side of Paradise Lake Road and to provide an on-site easement for bus access and turnarounds for the elementary and high school students.

- (p) The types, sizes and performance of vehicles generated by the development, including but not limited to large trucks;

The proposed development is for a 360 unit apartment complex. The majority of the types and sizes of vehicles associated with this type of development are passenger cars and trucks. Other less prevalent types are larger commercial vehicles such as buses, semi-trucks, fire trucks, utility trucks and delivery trucks that provide goods and/or services to the residential occupants or customers of business in the area.

Right-of-Way Requirements [SCC 30.66B.510, SCC 30.66B.520]

A development shall be required to dedicate, establish or deed right-of-way to the county for road purposes as a condition of approval of the development, when to do so is reasonably necessary as a direct result of a proposed development, for improvement, use or maintenance of the road system serving the development.

The road serving this development, Paradise Lake Road, is designated as a Major Collector Arterial and requires a right-of-way width of 40 feet on each side of the right-of-way centerline. Currently, 30 feet of right-of-way exists on the development's side of the right-of-way. Therefore, the development is required to deed 10-feet of additional right-of-way. This is adequately shown on the site plan.

Paradise Lake Road is not in the impact fee cost basis (Appendix D of the Transportation Needs Report), therefore credit towards the applicant's impact fee for the deeded right-of-way is not applicable.

Transportation Demand Management (TDM) [SCC 30.66B.630]

TDM is a strategy for reducing vehicular travel demand, especially by single occupant vehicles during commuter peak hours. TDM offers a means of increasing the ability of transportation facilities and services to accommodate greater travel demand without making expensive capital improvements. The County requires TDM of developments inside the UGA and developments that impact arterial units designated as ultimate capacity.

All new developments in the urban area shall provide TDM measures. Sufficient TDM measures shall be provided to indicate the potential for removing a minimum of five (5) percent of the development's P.M. peak hour trips from the road system. This requirement shall be met by the provisions of on-site design requirements under SCC 30.66B.640, as applicable, except where the development proposes construction or purchase of specific offsite TDM measures or voluntary payment in lieu of site design, in accordance with SCC 30.66B.620 and SCC 30.66B.625.

All new developments adding three or more directional peak hour trips to an arterial unit designated as ultimate capacity (Snohomish-Woodinville Road) are required to provide an additional five (5) percent TDM obligation, in accordance with SCC 30.66B.160(2)(c)(ii). Therefore, the TDM trip reduction percentage for this development is 10%. The applicant provided a TDM Plan with their initial submittal which meets half of the TDM obligation. The remaining TDM obligation for this development is therefore equivalent to 5% of the 223.20 total PM peak hour trips x \$6,500.00 which equals \$72,540.00 (\$201.50/living unit). It will be a recommended condition of approval that the remaining TDM obligation is met by cash payment of \$72,540.00 (\$201.50/living unit).

State Highway Impacts [SCC 30.66B.710]

A developer is required to mitigate impacts on roads under the jurisdiction of the Washington State Department of Transportation (WSDOT) that are part of the road system, in accordance with SCC 30.66B.177. Mitigation requirements for impacts to state highways are established consistent with the terms of the interlocal agreement (ILA) between the County and the Washington State Department of Transportation, SCC 30.66B.710. This development is subject to the ILA between Snohomish County and the WSDOT that became effective on December 21, 1997, and as amended through the date of completeness for this application. The ILA constitutes the policies and procedures of the WSDOT and the County under SEPA. SCC 36.61.230(6).

If a developer proposes measures to mitigate impacts on the roads under the jurisdiction of the WSDOT, the developer must provide a written proposal to the County describing those measures pursuant to SCC 30.66B.055.

Under Section 5.2 of the WSDOT ILA, a developer may contribute a proportionate share of the programmed capacity improvements to mitigate development impacts. Under Section 5.2, the applicant has proposed the following contribution for its proportionate share of programmed capacity improvements:

Payment of \$85,824.00 based on standard rate of \$36/ADT

In accordance with SCC 30.66B.035(8), developments impacting roads under the jurisdiction of the WSDOT shall provide a traffic study to address impacts of the development, as may be required in an interlocal agreement with the WSDOT pursuant to SCC 30.61.230(6). The developer provided their original traffic impact analysis on November 18, 2016. A subsequent traffic study was received on June 28, 2018. An informal submittal of a VISSIM analysis was received via email on September 28, 2018 and revised on October 23, 2018. The recent traffic study dated April 19, 2019 was received by Snohomish County on April 29, 2019 which summarizes the results.

PDS received 1st review comments from WSDOT dated December 21, 2016 and 2nd review comments on August 14, 2018. WSDOT's 2nd review comments requested additional information with respect to the development's TIA and VISSIM analysis submitted. The applicant has provided a response to the WSDOT's comments in the submittal received on April 29, 2019.

In accordance with Section 5.3(b) of the ILA, any development which will add ten or more PM peak hour trips to an existing LOS "F" condition at state highway intersections with a county road or another state highway, the WSDOT shall request that the estimated delay for signalized and unsignalized intersections "be no worse than the pre-development condition."

Pursuant to the WSDOT ILA, the County received comments from the WSDOT on December 21, 2016, requesting the applicant to evaluate the following:

The list of State intersections affected by this development for which traffic impacts are to be evaluated must include the intersections of (a) Paradise Lake Road at 91st Ave SE/Bostian Road, (b) SR 524 at W. Bostian Road/Yew Way, (c) SR 524 at Yew Way and (d) SR 524 at Broadway Avenue. The TIA already analyzed conditions at the intersections of SR 522/Paradise Lake Road and of SR 9/SR 524.

Mitigated impacts on Paradise Lake Road (east of SR 522)

As specified above, Snohomish County has identified safety concerns on Paradise Lake Road between SR 522 and the eastern access of the Chevron Gas Station (located on the south side of Paradise Lake Road). This location would qualify as an IRC under Snohomish County's IRC standards if it were within Snohomish County right-of-way. However, this location is within the right-of-way of the WSDOT. Based on this, Snohomish County does not have the authority to declare this location as an IRC. During the review process, Snohomish County requested the WSDOT analyze this segment to determine whether it would meet the States threshold for a high accident location (HAL) per the ILA. Based on a conference call with the WSDOT, WSDOT staff stated that this location does not meet its requirements for a high accident location because the volume and fatalities/injuries does not meet their typical thresholds for a state highway. However, the WSDOT's first review comments on December 21, 2016, state, "Snohomish County has expressed concerns over the congested related accidents that has been occurring between Paradise Lake Road/91st Ave SE/Bostian Road intersection and SR 522/Paradise Lake Road intersection. We request that the developer address the County's concerns and propose appropriate mitigation measures."

On November 8, 2018, Snohomish County and the Washington State Department of Transportation (WSDOT) jointly reviewed the results of the revised traffic analysis submitted by the applicant via email on October 23, 2018 using VISSIM and the proposed mitigation options.

Both the County and the WSDOT have collectively agreed that mitigation Option 2B identified in the applicant's October 23, 2018, VISSIM analysis, with several minor changes, will provide acceptable safety, LOS and access control for all vehicles and pedestrians for the intersections east of SR 522 impacted by the development.

The applicant's proposed Option 2B includes the following improvements at the intersection of SR 522 and Paradise Lake Road: a northbound right turn-lane, a second westbound left turn-lane, and signal modifications that would include a northbound right turn overlap phase. The proposed Option 2B would include the following improvements to the Paradise Lake Road Corridor east of SR 522: widening of Paradise Lake Road to provide left turn channelization and diverting some conflicting movements from the intersection of 91st Ave SE/Bostian Road and Paradise Lake Road to utilize the intersection of 91st Ave SE (spur) and Paradise Lake Road. This would include having a portion of 91st Ave SE approaching Paradise Lake Road as one-way southbound and restrict the eastbound left turn, northbound through, westbound right turn, southbound through and left turn movements at the intersection of 91st Ave SE/Bostian Road and Paradise Lake Road. A new signal will be installed at this intersection, which will be designed and operated as an interconnected signal to the existing signal control at the intersection of SR 522 and Paradise Lake Road to maximize the green wave for arterial traffic. The 91st Ave SE (spur) and Paradise Lake Road intersection would be used to facilitate these movements and be realigned with the gas station driveway to the south. The recent traffic study received on April 29, 2019, refers to a span wire signal being installed at the intersection of 91st Ave SE/Bostian Road and Paradise Lake Road. The WSDOT has accepted the signalization of this intersection, but the detailed design of the signal, including whether or not a span wire will be allowed will be subject to WSDOT standards and approval at a later time.

The changes to mitigation Option 2B are to allow full movements (right, through, and left movements) on the southbound approach on 91st Ave SE. The applicant's proposal to restrict the left and through movements on the southbound approach on 91st Ave SE and redirect those movements to the intersection of 91st Ave SE (spur) and Paradise Lake Road will cause a southbound LOS F condition during the AM peak hour, as shown on the applicant's Attachment M LOS Summary Table, provided below. Therefore, the modification is needed to satisfy the ILA and not create an LOS F condition, if the AM peak hour delay is being considered. Option 2B provides similar benefit as Option 3, 3B1, and 3B1a which are shown to reduce the PM peak hour intersection delay at SR 522 and most of the intersections east of SR 522. However, with the channelization and signal shown in Option 2B, the proposed mitigation will reduce the turning movement conflicts, improve overall safety and driver awareness, and allow the ability to accommodate movements that will be re-routed. In contrast, the other mitigation options would exacerbate the existing turning movement conflicts for northbound and southbound drivers due to the additional westbound lanes on Paradise Lake Road. As stated in the 2nd transportation review memo dated September 5, 2018:

The development's traffic study shows 90% of the developments vehicular trips (2,137.46 ADT and 199.08 PM PHT) impacting this segment. The existing accident history indicates there is approximately 3.2 collisions/year with a total of 16 reported collisions in the past five years (between 3/1/13 — 2/28/18) with 9 injuries. The majority

of the collisions are “enter-at-angle” or “one left turn — one straight” movement(s). During a recent turning movement count at this location there were 20 traffic conflicts (or near collisions) during the PM peak hour. These items will be considered by the County and the State in evaluating the acceptability of mitigation for impacts at the Paradise Lake Road and Bostian Road/91st Ave SE intersection.

Based on the delay information provided by the Applicant, Option 2B would bring the following intersection(s) back to pre-development conditions during the PM Peak Hour: Paradise Lake Road at SR 522, Paradise Lake Road at 91st Ave SE/Bostian Road, and Paradise Lake Road at 91st Ave SE (spur). The proposed mitigation offered by the applicant at these intersections satisfy the requirements of the Reciprocal Transportation Impact Mitigation Agreement between Snohomish County and the WSDOT, which was adopted, in part, under the authority of the State Environmental Policy Act (SEPA) for purposes of mitigating transportation system impacts from new development. Both the Snohomish County and the WSDOT agreed and have accepted the proposed mitigation Option 2B with some minor changes. Option 2B will realign the 91st Ave SE (spur)/Paradise Lake Road intersection into a two-way stop control intersection at 91st Ave SE Spur/Paradise Lake Road/Chevron Driveway, recognizing that this intersection realignment may result in some additional delay for some movements compared to the existing alignment. However, because the County and WSDOT are requiring several changes to Option 2B to provide full southbound turning movements on 91st Ave SE, it can be expected that the 22 seconds southbound AM Peak Hour intersection delay shown in the analysis at 91st Ave SE (spur)/Paradise Lake Road will be reduced to an acceptable level. In addition, Mitigation Option 2B was accepted by the County and WSDOT because it will reduce the turning movement conflicts, improve overall safety and driver awareness, and allow the ability to restrict turning movements at Paradise Lake Road and 91st Ave SE/Bostian Road due to the proposal to add additional lanes.

Non-Mitigated Intersection(s) west of SR 522

Based upon the WSDOT’s initial comments dated December 21, 2016, as provided above, the State requested the applicant to evaluate the following intersections west of SR 522: Maltby Road (SR 524) at Yew Way, and SR 524 at W. Bostian Road. It appears there are discrepancies between Attachment A (Detailed Simulation Worksheet) and Appendix M (LOS Summary Tables) provided by the Applicant with regard to the LOS and delay referenced in the studies. In “Attachment A”, the study shows that the existing intersection(s) are at LOS F and the PM Peak Hour delay at the above intersections increase by 14 seconds and 28 seconds from the 2024 Baseline to the 2024 with Mitigation 2B condition, respectively.

AM Peak Hour Intersection LOS (Attachment A: Detailed Simulation Worksheet)

| NAME | TYPE | AM Peak Hour | | | | | | | |
|---|------------------------------|--------------|----------|--------------|-------------------------|-------------------------|--------------------------|-------------------------|--------------------------|
| | | Existing | Baseline | With-Project | With-Project (Mit Op 1) | With-Project (Mit Op 2) | With-Project (Mit Op 2B) | With-Project (Mit Op 3) | With-Project (Mit Op 3U) |
| Yew Way / SR 524 (Maltby Road) | TWSC/Signalized ¹ | F | F | F | F | F | F | F | F |
| Yew Way (SR 524) / Paradise Lake Road | TWSC | F | F | F | F | F | F | F | F |
| SR 522 / Paradise Lake Road | Signalized | F | F | F | F | F | F | F | F |
| Bostian Road (91st Ave SE) / Paradise Lake Road | TWSC/Signalized ² | F | F | F | F | C | C | F | F |
| 91st Ave SE / 91st Avenue SE Spur | TWSC | A | F | F | C | A | F | A | A |
| 91st Ave SE Spur / Paradise Lake Road | TWSC | B | F | F | D | C | F | D | D |

1. Yew Way / SR 524 (Maltby Road) intersection is assumed as signalized under all future AM & PM scenarios except for AM With-Project Mit Op 3U.
 2. Bostian Road (91st Ave SE) / Paradise Lake Road intersection is assumed as signalized under With-Project Mit Op 2 and Mit Op 2B for both AM and PM scenarios.

PM Peak Hour Intersection LOS (Attachment A: Detailed Simulation Worksheet)

| NAME | TYPE | PM Peak Hour | | | | | | | | | |
|---|------------------------------|--------------|----------|--------------|-------------------------|-------------------------|--------------------------|-------------------------|--------------------------|---------------------------|----------------------------|
| | | Existing | Baseline | With-Project | With-Project (Mit Op 1) | With-Project (Mit Op 2) | With-Project (Mit Op 2B) | With-Project (Mit Op 3) | With-Project (Mit Op 3B) | With-Project (Mit Op 3B1) | With-Project (Mit Op 3B1a) |
| Yew Way / SR 524 (Maltby Road) | TWSC/Signalized ¹ | F | F | F | F | F | F | F | F | F | F |
| Yew Way (SR 524) / Paradise Lake Road | TWSC | F | F | F | F | F | F | F | F | F | F |
| SR 522 / Paradise Lake Road | Signalized | F | F | F | F | F | F | F | F | F | F |
| Bostian Road (91st Ave SE) / Paradise Lake Road | TWSC/Signalized ² | F | F | F | F | B | B | F | F | F | F |
| 91st Ave SE / 91st Avenue SE Spur | TWSC | B | F | C | A | A | A | A | F | F | F |
| 91st Ave SE Spur / Paradise Lake Road | TWSC | F | F | F | F | F | F | F | F | F | F |

1. Yew Way / SR 524 (Maltby Road) intersection is assumed as signalized under all future AM & PM scenarios except for AM With-Project Mit Op 3U.
2. Bostian Road (91st Ave SE) / Paradise Lake Road intersection is assumed as signalized under With-Project Mit Op 2 and Mit Op 2B for both AM and PM scenarios.

AM Peak Hour Intersection Delay (seconds)

| NAME | TYPE | AM Peak Hour | | | | | | | | |
|---|------------------------------|--------------|----------|--------------|-------------------------|-------------------------|--------------------------|-------------------------|--------------------------|---------------------------|
| | | Existing | Baseline | With-Project | With-Project (Mit Op 1) | With-Project (Mit Op 2) | With-Project (Mit Op 2B) | With-Project (Mit Op 3) | With-Project (Mit Op 3B) | With-Project (Mit Op 3B1) |
| Yew Way / SR 524 (Maltby Road) | TWSC/Signalized ¹ | 149 | 405 | 458 | 357 | 370 | 361 | 360 | 972 | |
| Yew Way (SR 524) / Paradise Lake Road | TWSC | 180 | 246 | 257 | 208 | 221 | 222 | 210 | 202 | |
| SR 522 / Paradise Lake Road | Signalized | 143 | 271 | 280 | 233 | 222 | 225 | 234 | 239 | |
| Bostian Road (91st Ave SE) / Paradise Lake Road | TWSC/Signalized ² | 87 | 375 | 541 | 217 | 26 | 22 | 152 | 142 | |
| 91st Ave SE / 91st Avenue SE Spur | TWSC | 7 | 98 | 146 | 18 | 6 | 50 | 6 | 9 | |
| 91st Ave SE Spur / Paradise Lake Road | TWSC | 12 | 56 | 143 | 27 | 25 | 78 | 31 | 28 | |

1. Yew Way / SR 524 (Maltby Road) intersection is assumed as signalized under all future AM & PM scenarios except for AM With-Project Mit Op 3U.
2. Bostian Road (91st Ave SE) / Paradise Lake Road intersection is assumed as signalized under With-Project Mit Op 2 and Mit Op 2B for both AM and PM scenarios.

PM Peak Hour Intersection Delay (seconds)

| NAME | PM Peak Hour | | | | | | | | | |
|---|--------------|----------|--------------|-------------------------|-------------------------|--------------------------|-------------------------|--------------------------|---------------------------|----------------------------|
| | Existing | Baseline | With-Project | With-Project (Mit Op 1) | With-Project (Mit Op 2) | With-Project (Mit Op 2B) | With-Project (Mit Op 3) | With-Project (Mit Op 3B) | With-Project (Mit Op 3B1) | With-Project (Mit Op 3B1a) |
| Yew Way / SR 524 (Maltby Road) | 66 | 165 | 179 | 167 | 180 | 179 | 176 | 178 | 170 | 157 |
| Yew Way (SR 524) / Paradise Lake Road | 74 | 328 | 317 | 436 | 324 | 356 | 402 | 383 | 447 | 434 |
| SR 522 / Paradise Lake Road | 86 | 312 | 334 | 293 | 289 | 290 | 289 | 288 | 288 | 291 |
| Bostian Road (91st Ave SE) / Paradise Lake Road | 160 | 199 | 178 | 139 | 15 | 14 | 113 | 122 | 96 | 103 |
| 91st Ave SE / 91st Avenue SE Spur | 13 | 84 | 21 | 7 | 5 | 6 | 6 | 141 | 61 | 80 |
| 91st Ave SE Spur / Paradise Lake Road | 72 | 101 | 96 | 77 | 115 | 65 | 65 | 60 | 55 | 59 |

1. Yew Way / SR 524 (Maltby Road) intersection is assumed as signalized under all future AM & PM scenarios except for AM With-Project Mit Op 3U.
2. Bostian Road (91st Ave SE) / Paradise Lake Road intersection is assumed as signalized under With-Project Mit Op 2 and Mit Op 2B for both AM and PM scenarios.

As shown above, the PM peak hour delay at the intersection(s) of SR 524 (Maltby Road) at Yew Way and SR 524 (Maltby Road) at W. Bostian Road are not brought back to pre-development conditions as required by Section 5.3(b) of the ILA. In addition, the tables above show that the intersection of Yew Way at SR 524 is an existing (TWSC) LOS F during the PM peak hour with 66 seconds of total delay and will increase to 179 seconds of delay (signalized) in 2024 with the project and Mitigation Option 2B (on the east side of SR 522) which is above the baseline (2024) condition of 165 seconds of delay.

The intersection of W. Bostian Road and SR 524 is also at an existing LOS F with 74 seconds of delay and will increase to 356 seconds of delay in 2024 with the project and Mitigation Option 2B (on the east side of SR 522) which is also above the baseline (2024) condition of 328 seconds of delay.

Based on these tables, the development and pipeline trips will exacerbate the existing PM LOS F condition by 271% at the intersection of Yew Way at SR 524, and 481% at the intersection of W. Bostian Road at SR 524. Based on the ILA, the 14 seconds and 28 seconds of additional delay beyond the baseline condition at the intersection of Yew Way at SR 524 and W. Bostian Road at SR 524, respectively, do not bring the LOS F intersection(s) back to pre-development (i.e. baseline) conditions per section 5.3(b) of the ILA.

The Highway Capacity Manual, 6th Edition, provides the level of service (LOS) criteria for signalized intersections. Under the LOS criteria, LOS for signalized intersections are categorized based on average control delay (seconds/vehicle) as follows: A: ≤ 10; B: 10 – 20;

C: 20 – 35; D: 35 – 55; E: 55 -80; and F: > 80. Under the LOS criteria, LOS for unsignalized intersections are categorized based on average control delay (seconds/vehicle) as follows: A: 0 – 10; B: 10 – 25; C: 15 – 25; D: 25 – 35; E: 35 – 50; and F: > 50. There are no LOS standards below F. However, using these standards for illustrative purposes, the 14 second additional delay caused by the development at the intersection of Yew Way at SR 524 would equate to a reduction in magnitude of an entire LOS gradient, assuming each LOS classification is measured in 15 seconds segments. Similarly, the additional 28 second delay caused by the development at the intersection of W. Bostian Road at SR 524 would equate to a reduction in magnitude of two LOS gradients if gradients were provided below LOS F.

The table provided below is referenced in Appendix M of the Traffic Study and conflicts with the LOS and delay as the table provided above.

AM Peak Hour Intersection LOS (Attachment M: LOS Summary Tables)

| AM Peak Hour Intersection | Future (2024) Without-Project | | | Future (2024) With-Project | | | Change in Delay | Future (2024) With-Project Mitigated | | |
|---|-------------------------------|--------------------|-----------------|----------------------------|-------|----|--------------------|--------------------------------------|-------|-----------------|
| | LOS ¹ | Delay ² | WM ³ | LOS | Delay | WM | | LOS | Delay | Change in Delay |
| 24 Broadway Avenue/Maltby Road (SR 524) | B | 15 | SB | B | 15 | SB | 0 | - | - | - |
| 25 Yew Way/Maltby Road (SR 524) ⁴ | A | 8 | - | A | 8 | - | 0 | - | - | - |
| 26 Yew Way/W Bostian Road/Paradise Lake Road | F | 205 | SB | F | 227 | SB | 22 | - | - | - |
| 27 SR 522/Paradise Lake Road ⁴ | F | 113 | - | F | 135 | - | 22 | F | 111 | -24 |
| 28 91st Avenue SE/Bostian Road/Paradise Lake Road | F | 269 | NB | F | 554 | NB | 285 | B | 18 | -536 |
| 29 91st Avenue SE Spur/Paradise Lake Road | C | 21 | SB | D | 28 | SB | 7 | F | 54 | 26 |

PM Peak Hour Intersection LOS (Attachment M: LOS Summary Tables)

| PM Peak Hour Intersection | Future (2024) Without-Project | | | Future (2024) With-Project | | | Change in Delay | Future (2024) With-Project Mitigated | | |
|---|-------------------------------|--------------------|-----------------|----------------------------|-------|----|--------------------|--------------------------------------|-------|-----------------|
| | LOS ¹ | Delay ² | WM ³ | LOS | Delay | WM | | LOS | Delay | Change in Delay |
| 24 Broadway Avenue/Maltby Road (SR 524) | B | 15 | SB | B | 15 | SB | 0 | - | - | - |
| 25 Yew Way/Maltby Road (SR 524) ⁴ | B | 19 | - | C | 20 | SB | 1 | - | - | - |
| 26 Yew Way/W Bostian Road/Paradise Lake Road | F | 186 | NB | F | 212 | NB | 26 | - | - | - |
| 27 SR 522/Paradise Lake Road | F | 97 | - | F | 103 | - | 6 | F | 83 | -20 |
| 28 91st Avenue SE/Bostian Road/Paradise Lake Road | F | 173 | NB | F | 418 | NB | 245 | A | 10 | -408 |
| 29 91st Avenue SE Spur/Paradise Lake Road | C | 17 | SB | C | 21 | SB | 4 | D | 33 | 12 |

As shown above, the AM southbound directional delay at the intersection of W. Bostian Road and SR 524 (labeled as intersection #25 on the table) is shown to be at LOS F in the baseline 2024 condition with 205 seconds of delay and will increase to 227 seconds of delay with the project during the AM Peak Hour. During the PM Peak Hour the northbound directional delay is at LOS F in the baseline 2024 condition with 186 seconds of delay and will increase to 212 second of delay during the PM Peak Hour. The increase in PM Peak Hour delay without any additional mitigation on the west side of SR 522 does not demonstrate compliance with Section 5.3(b) of the ILA.

The tables above (Attachment M in the traffic study) is showing the AM and PM peak hour delay at the intersection of SR 524 (Maltby Road) at Yew Way is LOS A and B, respectively. However, the delay at the same intersection is shown to be LOS F during the AM and PM peak hour in Attachment A (in the traffic study) also shown above. The County and WSDOT also considered the queuing data provided by the applicant. The 95th percentile queuing (in feet) are provided in the tables below. For queuing analysis the study indicated vehicle lengths are assumed at 25 feet per vehicle.

| Queuing Summary – AM Peak Hour | | | | | | | | | | |
|--------------------------------------|----------|------------|---------|-----------------------|---------------|-------------------|----------------------|-----------|-----------|----------|
| Intersection | Approach | Lane Group | Storage | | 2024 Baseline | 2024 With-Project | Mitigation Scenarios | | | |
| | | | (feet) | Existing ¹ | | | Option 1 | Option 2A | Option 2B | Option 3 |
| Yew Way/SR 524 (Maltby Road) | EB | LR | 725 | 575 | 4,375 | 4,875 | 3,825 | 4,175 | 4,025 | 3,825 |
| | NB | LT | 850 | 0 | 525 | 375 | 775 | 725 | 675 | 800 |
| | SB | TR | 1,300 | 750 | 2,925 | 3,475 | 2,325 | 2,575 | 2,475 | 2,450 |
| Yew Way (SR 524)/ Paradise Lake Road | WB | LR | 225 | 0 | 0 | 25 | 150 | 25 | 25 | 75 |
| | NB | TR | 600 | 225 | 250 | 250 | 225 | 225 | 225 | 225 |
| | SB | LT | 850 | 1,025 | 1,050 | 1,050 | 1,050 | 1,025 | 1,025 | 1,025 |

Based on the AM Peak Hour queuing table shown above, the intersection of Yew Way and SR 524 has an existing queue of 575 feet in the eastbound direction with a storage capacity of 725 feet and is shown to increase to 4,375 feet in the baseline 2024 condition and will decrease to 4,025 feet with the development and Mitigation Option 2B (on the east side of SR 522). The existing queue length in the southbound direction is 750 feet with a storage capacity of 1,300 feet and will increase to 2,925 feet in the baseline 2024 condition and will decrease to 2,475 feet with the development and Mitigation Option 2B (on the east side of SR 522). Overall the traffic study is showing the queuing will increase from the existing conditions by 700% in the eastbound direction, 675% in the northbound direction, and 330% in the southbound direction, but as shown on the previous tables above, the development will bring the AM Peak hour delay and queuing at this intersection back to pre-development conditions in the eastbound and southbound directions. However, the northbound queue length will increase from the 525 feet baseline 2024 condition to 675 feet with the development and Mitigation Option 2B. The increase in the northbound queuing attributable to development represents a 28% increase and is not brought back to pre-development condition.

| Queuing Summary – PM Peak Hour | | | | | | | | | | |
|--------------------------------------|----------|------------|---------|-----------------------|---------------|-------------------|----------------------|-----------|-----------|----------|
| Intersection | Approach | Lane Group | Storage | | 2024 Baseline | 2024 With-Project | Mitigation Scenarios | | | |
| | | | (feet) | Existing ¹ | | | Option 1 | Option 2A | Option 2B | Option 3 |
| Yew Way/SR 524 (Maltby Road) | EB | LR | 725 | 425 | 4,000 | 5,075 | 4,275 | 4,475 | 4,400 | 4,425 |
| | NB | LT | 850 | 0 | 700 | 600 | 625 | 600 | 625 | 600 |
| | SB | TR | 1,300 | 300 | 1,100 | 1,550 | 1,200 | 1,150 | 1,275 | 1,250 |
| Yew Way (SR 524)/ Paradise Lake Road | WB | LR | 225 | 25 | 150 | 150 | 175 | 125 | 200 | 150 |
| | NB | TR | 600 | 475 | 1,200 | 1,300 | 1,450 | 1,275 | 1,375 | 1,425 |
| | SB | LT | 850 | 475 | 1,025 | 1,025 | 1,025 | 1,025 | 1,025 | 1,025 |

Based on the PM Peak hour queuing table above, the queuing is anticipated to increase beyond the existing and 2024 baseline conditions at both intersections.

Yew Way at SR 524:

The existing eastbound queuing is 425 feet with a storage capacity of 725 feet and will increase to 4,000 feet in the baseline 2024 condition and further increase to 4,400 feet with the development and Mitigation Option 2B (on the east side of SR 522). The existing southbound queuing is 300 feet and will increase to 1,100 feet in the baseline 2024 condition and further increase to 1,275 feet with the development and Mitigation Option 2B, but the storage capacity is 1,300 feet. Overall the traffic study is showing the queuing will increase from the existing conditions by 1,035% in the eastbound direction and 425% in the southbound direction. The increases in queuing length attributable solely to development represent a 10% increase in the

eastbound direction, 16% increase in the northbound direction. The eastbound and southbound leg queue length are not shown to be brought back to pre-development conditions.

W. Bostian Road at SR 524:

The existing westbound queuing is 25 feet and will increase to 150 feet in the baseline 2024 condition and further increase to 200 feet with the development and Mitigation Option 2B (on the east side of SR 522), and the storage capacity is 225 feet. The existing northbound queuing is 475 feet and will increase to 1,200 feet in the baseline 2024 condition and further increase to 1,375 with the development and Mitigation Option 2B, but the storage capacity is only 600 feet. The existing southbound queuing is 475 feet and will increase to 1,025 feet in the baseline 2024 condition and will remain at that distance with the development and mitigation option 2B, but the storage capacity is 850 feet. Overall the traffic study is showing the queuing will increase from the existing conditions by 800% in the westbound direction, 289% in the northbound direction, and 216% in the southbound direction. The westbound and northbound legs are not shown to be brought back to pre-development conditions. Expressed in percentages, the change in queuing length attributable solely to the development are as follows: westbound 33% increase, northbound 14.6% increase, and southbound no increase. In addition, the significance of the queuing lengths that exceed storage capacity is that traffic may back up through other intersections and further impede movements and impact intersection and segment delay at other locations due to the lack of additional storage.

The traffic study indicates the following trip distribution at the intersection of SR 524 (Maltby Road) and W. Bostian Road:

| | Forecast Trip Distribution | Existing 2018 Condition | 2024 Without Project | 2024 With Project |
|--|---|--|--|--|
| LEGEND | | | | |
| (X) Study Intersection | | | | |
| (X) Weekday AM Peak Hour Traffic Volumes | | | | |
| x Weekday PM Peak Hour Traffic Volumes | | | | |
| (XX) County Key ID Number | | | | |
| | (26) Yew Way (SR 524) Paradise Lake Road (12) 20 (19) 22 (N/A) | (26) Yew Way (SR 524) Paradise Lake Road (49) (383) 311 (304) 994 (93) 30 (1) (70) 91 (16) 116 (N/A) | (26) Yew Way (SR 524) Paradise Lake Road (55) (522) 448 (444) 1,205 (105) 34 (1) (79) 102 (18) 131 (N/A) | (26) Yew Way (SR 524) Paradise Lake Road (55) (534) 468 (483) 1,227 (105) 34 (1) (79) 102 (18) 131 (N/A) |

Based on the cumulative impacts caused by the development with respect to total intersection delay, segment/directional delay, and the queuing as shown on the tables in the traffic study reproduced above, mitigation is required on the west side of SR 522 to bring the intersection(s) back to pre-development conditions. The proposed development has not adequately addressed these requirements per section 5.3(b) of the Snohomish County and the WSDOT ILA. The ILA constitutes the policies and procedures of the County and WSDOT under SEPA, SCC 30.66B.177; .710. Therefore, in the absence of a mitigation proposal by the developer, the proposed development does not satisfy the County’s SEPA policies pertaining to a development’s impacts on the road system.

Other Jurisdictions Streets and Roads [SCC 30.66B.720]

Mitigation requirements for impacts on streets inside cities and roads in other counties will be established consistent with the terms of a Reciprocal Traffic Mitigation ILA between the County and the other jurisdiction(s).

There are no city jurisdictions that have an ILA with the County that will be impacted by new trips from the subject development

Pedestrian Facilities (SCC 30.66B.430(3)(o)):

The County is required to make findings regarding safe walking conditions for school children who may reside in the subject development. Comments from the Monroe School District dated December 21, 2016, have been received and were provided to the applicant with our first review comments. In their comments the District indicates that the students who live in the development will attend the following schools and how they will get to those schools:

| School Type | Elementary | Middle School | High School |
|--|-------------------------------|-------------------------------|-------------------------------|
| School Name | Maltby | Hidden River | Monroe |
| Walk to School | * | * | No |
| Walk to a Bus Stop | * | * | Yes |
| Will busses pick up children within/adjacent to this project | * | * | Yes |
| Bus Stop Locations | Within or adjacent to complex | Within or adjacent to complex | Within or adjacent to complex |

*Students could walk if appropriate facilities are installed.

Also, a letter attached to the above chart from the Monroe School District was received by PDS on December 21, 2016. The letter was dated December 15, 2016, and a copy of the letter is provided below:

The District has reviewed the project and determined that the Paradise Lake Road Garden Apartments project would have an impact on busing and school operations.

According to the SEPA checklist, the project is 360 units and would house approximately 3.1 people per unit, or 1,116 people total. Using the student generation rates¹ provided in the current Monroe School District Capital Facilities Plan 2016-2021 (as adopted by Snohomish County), this project would generate 168 students. Broken down by grade span, we would anticipate:

- *Elementary (K-5) - 64.08 students*
- *Middle (6-8) - 39.6 students*
- *High (9-12) - 64.08 students*

Based on the District's standard classroom capacity that would mean an additional 1-3 elementary classrooms, 2 middle school classrooms and 2-3 high school classrooms. Furthermore, this number of students would create an increased need of approximately 2 elementary and 2 secondary bus routes.

(Note: ¹The current student generation rate for multi-family 2+ bedroom units is 0.466 students per unit.)

With these anticipated impacts, the District would like to request the following improvements from the developer:

Impacts to Elementary - Maltby Elementary School

Students from this project would attend Maltby Elementary School, which currently has sufficient capacity to support the additional 64 students. Students would be within walking distance of the school; however, there are no safe walkways along Paradise Lake Road. The subject property abuts the Maltby Elementary property (diagonally) in the northeast corner. The District would like to request that the developer install some type of pedestrian connection directly to the school property.

If a direct pedestrian connection is not possible, students will have to be bussed. The District would need adequate improvements on the shoulder of Paradise Lake Road to allow for two buses to safely pull off of the roadway simultaneously to pick up students. A paved pull out deep enough to pull the buses completely out of the roadway, with an additional improved area for students to gather and await bus pickup, would meet this need. Another option would be to provide an area within the apartment complex for students to be picked up. This would also mean providing adequate drive width, sufficient turning radius clearance, and pavement strength to support a 35-foot long bus weighing up to 36,200 pounds.

The applicant has elected to provide a school bus stop on-site near the southwest corner of the development. A sidewalk will be required from the pedestrian waiting area to the internal road network and is not adequately shown on the plans. This will be further addressed during construction plan review.

Impacts to Middle School -Hidden River Middle School

Hidden River Middle School is located across Paradise Lake Road, just to the southwest of the project. This school currently has adequate capacity to house the additional 40 middle school students. Students would have to cross the busy roadway to reach the school, which would be unsafe with the current conditions. In order to cross Paradise Lake Road safely, there would need to be a crosswalk with adequate lighting and warning signals or installation of a traffic signal with crosswalks. This would also require adequate walkways on either side of Paradise Lake Road to get the students from the apartment complex to the school. Ideally there would also be a speed reduction in this area.

The other option would be to bus students to the school, in which case we would need the bus requirements as specified in the previous section.

The applicant has elected to provide an RRFB crossing near the developments western access point on Paradise Lake Road. The Hidden River Middle School has preliminary approval for an expansion of the school (which satisfies the County's definition of "development") and requires the school district to construct urban standard frontage improvements along their frontage with Paradise Lake Road. Once the apartment buildings construct their frontage there will be approximately 46 feet from curb-to-curb at the proposed RRFB crossing. Based on this, the County Engineer is requiring a raised center-lane median at the RRFB crossing in order to provide better visibility for drivers/pedestrians and to provide a

buffer for the safety of the school children. As specified above, this needs to be further addressed in a channelization plan

School Impact Mitigation Fees

The District's current Capital Facilities Plan calculates impact fees for multi-family 2+ bedroom units as \$3,032 per unit. For this project, the impact fee would be \$1,091,520 based on 360 units.

Other Issues or Items:

New signing and striping needs shall be determined during construction plan review and installed by County forces. This signing and striping shall be paid for by the applicant, SCC 13.10.180.

Bicycle Facilities:

The County's current adopted County Wide Bicycle Facility System Map became effective on July 2, 2015. The subject development does border on a right-of-way that has been identified on the adopted Bicycle Facility System Map. A bicycle path is required along the developments frontage on Paradise Lake Road. The required frontage improvements will fulfill this requirement.

Summary of the outstanding Code compliance issues that have not been addressed by the applicant:

1. A construction plan for intersection improvements offered by the applicant to address the LOS deficiency for concurrency on Broadway Avenue at the intersection of 164th Street SE and Elliot Road per SCC 30.66B.170.
2. A written offer and plan to address how the intersection of SR 524 (Maltby Road) and Yew Way will be brought back to pre-developed conditions per Section 5.3(b) of the ILA.
3. A written offer and plan to address how the intersection of SR 524 (Maltby Road) and W. Bostian Road will be brought back to pre-developed conditions per Section 5.3(b) of the ILA.

Please note that resolving all the issues identified in this transportation impact, mitigation and concurrency review memo does not necessarily mean that the proposal will not have probable significant, adverse environmental impacts under SEPA.

cc: Elbert Esparza, DPW

ATTACHMENT C



Snohomish County
Planning & Development Services

MEMORANDUM

TO: Tom Barnett

FROM: Don Beckwith

DATE: June 18, 2019

SUBJECT: 16 120252 SPA - Paradise Lake Road Garden Apts

The Fire Marshal's Office has reviewed the above referenced development proposal for compliance with Snohomish County Code (SCC) Chapter 30.53A Fire Code and Chapters 30.24.100 General Development Standards – Fire Lane Requirement.

General Information

The application for the above referenced Land Use application was received by Planning and Development Services on November 18, 2016.

Description: PCB Preliminary Plan approval for a 360 unit apartment complex; includes URDS site plan approval.

Location: 9509 PARADISE LAKE RD SNOHOMISH

30.53A.512 Fire Apparatus Access Roads

Fire apparatus access shall comply with the requirements of Snohomish County Code 30.53A.512 as follows:

1. Fire apparatus roads shall be provided to any portion of an exterior wall of the first story of a building located more than 150 feet as measured by an approved route around the exterior of the facility or building.
2. Fire apparatus access roads shall have an unobstructed width of not less than 26 feet and an unobstructed vertical clearance of not less than 13 feet 6 inches.
3. Vertical clearances of 13 feet 6 inches in height or widths of 20 feet shall be increased when in the opinion of the fire marshal vertical clearances or widths are not adequate to provide fire apparatus access.
4. Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet, exclusive of shoulders, in the immediate vicinity of the building or portion thereof. At least one of the required routes meeting this condition shall be located within a minimum of 15 feet and a maximum of 30 feet from the building, and shall be positioned parallel to one entire side of the building.

5. More than one fire apparatus road shall be provided when it is determined by the fire marshal that access by a single road might be impaired by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.
6. Buildings exceeding 30 feet or three stories in height shall have at least two means of fire apparatus access for each structure.
7. Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the property or area to be service, measured in a straight line between accesses.
8. Roadways shall be constructed of either gravel, asphalt some other all-weather surface capable of supporting vehicles consistent with Engineering Design and Development Standards (EDDS).
9. Due to aerial apparatus requirements, turns, bends or sweeps shall be designed at not less than 25 feet inside-turning radii nor less than 45 feet outside-turning radii.
10. Gradient for roads shall not exceed 15%.
11. Approved signs that include the words "No Parking – Fire Lane" shall be provided for fire apparatus road to identify such roads or prohibit the obstruction thereof. The means by which fire lanes are designated shall be maintained in a clean or legible condition at all times and be replaced or repaired when necessary to provide adequate visibility. (Note: All permanent signs and markings will be installed by County forces on public roads. If it is a private road all signs and markings shall be installed by the developer.)
12. All fire apparatus access road shall be constructed of asphalt, concrete, or other approved driving surface capable of supporting the imposed load of fire apparatus weighting at least 75,000 pounds.
13. All underground vaults must be rated to support a gross vehicle weight (GVW) of 75,000 pounds and a point load of 45,000 pounds.
14. A permit is required for the installation of or modification to a gate or barricade across a fire apparatus access road. If the road is a public right-of-way, a permit cannot be issued without prior approval from Public Works.

Building heights regarding the requirements for aerial apparatus access will be determined at building plan review. Height is determined from the apparatus access lane to the eave of a pitched roof or the intersection of the roof to the exterior wall, whichever is greater.

Coordinate fire lane marking on site with the Fire Marshal prior to installation.

The use of grasscrete pavers is conditionally approved subject to an engineered specification that is being prepared by Fire District #7 that they can approved for the use by their equipment.

30.53A.513 Address Identification

Approved numbers or addresses shall be placed on all new and existing buildings in such a position as to be plainly visible and legible from the street or road fronting the property. Street signage shall be in place prior to occupancy. Numbers shall contrast with their background, be Arabic numerals or alphabetical letters with a minimum stroke width of 0.5 inch, and shall be sized pursuant to Table 30.53A.513(1), except the minimum size for commercial occupancies is 6 inches.

Table 30.53A.513(1) Address Numbering Size Table

| Distance From Road (in feet) | Minimum Size (in inches) |
|-------------------------------------|---------------------------------|
| 0-50 | 4 |
| 51-100 | 6 |
| 101-150 | 8 |
| 151-200 | 10 |
| 201-300 | 12 |
| 301 and up | 18 |

For townhouse and apartment development, each building shall be identified with an alphabetical identifier a minimum of 18 inches in height and shall be plainly visible and contrast with the background it is placed upon. Therefore, each building shall be identified as building A, B, C, etc. For multiple building complexes, letter designations shall be visible from the primary drive path.

For apartment dwelling units, each dwelling unit shall be identified with an alpha-numeric identifier identifying the building and floor number. Therefore, each dwelling unit shall be identified as A101, A102, A103 etc.; A201, A202, A203, etc.; B101, B102, B103, etc.; B201, B202, B203, etc.

Please note our office will not accept silver letters/numbers on a gray background.

The buildings have been assigned letters by the Snohomish County Addressing Specialist. Please change all of the building references to reflect the letter designations to avoid future confusion.

30.53A.514 Fire Protection Water Supply

Water mains and fire hydrants shall meet the required minimum standards for water mains and fire hydrants. These requirements shall apply to land use and construction permit actions subject to this title, or to any other existing or future code provision in which compliance with the fire code is specifically required.

All land upon which buildings or portions of buildings are or may be constructed, erected, enlarged, altered, repaired, moved into the jurisdiction, or improved, shall be served by a water supply designed to meet the required fire flow for fire protection as set out in Appendix B of the International Fire Code (IFC).

Appendix B Fire-Flow Requirements for Buildings

The minimum required fire flow for this project cannot be determined until actual building square footages are available. A preliminary calculation shows that you may require 4250 GPM at 20 psi for a 4-hour duration. With installation of an NFPA 13R automatic sprinkler system a 50% reduction may be calculated.

You are required to provide written confirmation from the water purveyor that the minimum required flow and duration per Appendix B can be provided.

We are in receipt of a water availability certificate stating that 2125 gpm will be available for a two hour or more duration. This availability is predicated on the

“developer connecting to 12” existing main at two locations and installing 12” DCIP at drive A and B then transitioning to 8” DCIP at the tees” per the comments by Cross Valley Water.

We do not see the locations of the FDC’s for each building shown on the water plans. They should be located away from the building, within 50’ of a hydrant, but no closer than 4’, and they should be on the same side of a drive aisle as a hydrant.

30.53A.516 Fire Hydrant Spacing

Fire hydrant locations shall be determined by the fire marshal, in coordination with the water purveyor, and pursuant to the requirements of Appendix C of the IFC subject to the following exceptions:

1. Where the buildings are protected by an approved automatic sprinkler system, the spacing requirements may be modified, if in the opinion of the fire marshal, the level of fire protection is not reduced.
2. For dead-end streets or roads the fire marshal may make adjustments to the lateral spacing requirements to facilitate locating the hydrant at or near the street intersection and hydrants shall be located at, or near street intersections whenever possible.
3. All hydrants shall be accessible to the fire department by roadways or accesses meeting the requirements of section 503 of the IFC.

30.53A.518 Hydrant systems

Where a portion of the facility or building hereafter constructed or moved into the jurisdiction is more than 150 feet from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site hydrants and mains shall be provided.

Exception:

1. For Group R-3 and Group U occupancies, the distance requirements shall be 300 feet.
2. For buildings equipped throughout with an approved automatic sprinkler system installed the distance requirement shall be 300 feet.

30.53A.520 (Hydrant) Inspection, Testing and Maintenance Requirements

The following requirements shall apply to the installation or replacement of any required hydrant:

1. Hydrants shall be installed, tested and charged prior to the start of construction, unless otherwise approved by the fire marshal.
2. All elements of fire hydrant installation including water mains, pipes, valves, and related components shall conform to the fire code, National Fire Protection Association (NFPA) Standard 24 2007 edition, and American Water Works Association (AWWAA) Standard C502.94.
3. Four (4) inch Storz type steamer port fittings shall be provided on new hydrants.
4. Hydrants shall stand plumb and be set to the finished grade. There shall be a 36 inch radius of clear area about the hydrant for the operation of a hydrant wrench on the outlets and the control valve. The pumper port shall face the street, or where the street

cannot be clearly identified, the port shall face the most likely route of approach of the fire apparatus while pumping. The hydrant shall be installed within 15 feet of the street or access roadway.

5. Hydrants shall be a minimum of 50 feet from a commercial structure to be served and no further than 100 feet from a fire department connection (FDC) if present.
6. Hydrants shall not be obstructed by structures, fences, the parking of vehicles, or vegetation. Hydrant visibility shall not be impaired within a distance of 75 feet in any direction of vehicular approach.
7. The top(s) of the hydrant(s) shall be colored coded to designate the level of service being provided by that hydrant. If the fire flow is 1,000 gpm to 1,499 gpm the top(s) of the hydrant(s) shall be painted green. If the fire flow is 1,500 gpm or greater the top(s) of the hydrant(s) shall be painted light blue. For all new hydrant installations, either public or private, the developer shall install blue street reflectors to indicate hydrant locations. Installation of blue street reflectors shall be completed prior to final approval of any development or new constructions and shall be located hydrant side of center line on the driving surface.
8. Vehicles shall not be parked within 15 feet of a fire hydrant, or fire department connection, or a fire protection system control valve.

905 IFC Standpipe Systems

Standpipe systems shall be installed throughout buildings where the floor level of the highest story is located more than 30 feet above the lowest level of the fire department vehicle access, or where the floor level of the lowest story is located more than 30 feet below the highest level of fire department vehicle access.

30.53A.1120 NFPA 13R Sprinkler Systems

1. Where allowed in buildings of Group R, up to and including four stories in height, automatic sprinkler systems shall be installed throughout in accordance with NFPA 13R.
2. Sprinkler protection shall be provided for exterior balconies, decks and ground floor patios of dwelling units where the building is of Type V construction, provided there is a roof or deck above. Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch to 6 inches below the structural members and a maximum distance of 14 inches below the deck of the exterior balconies and decks that are constructed of open wood joist construction.

30.52A.1155 Fire Department Connections

The location of the fire department connections (FDC) shall be approved by the fire marshal.

IFC 912.1 Installation. Fire department connections shall be installed in accordance with the NFPA standard applicable to the system design and shall comply with Sections 912.2 through 912.7.

IFC 912.2 Location. With respect to hydrants driveways, buildings and landscaping, fire department connections shall be so located that fire apparatus and hose connected to supply the system will not obstruct access to the buildings for other fire apparatus. The location of the FDC shall be approved by the fire marshal.

IFC 912.2.1 Visible Location. FDCs shall be located on the street side of buildings, fully visible and recognizable from the street or nearest point of fire department vehicle access or otherwise approved by the fire marshal.

IFC 912.4 Access. Immediate access to FDCs shall be maintained at all times and without obstruction by fences, bushes, trees, walls or any other fixed or moveable object.

IFC 912.5 Signs. A metal sign with raised letters not less than 1 inch in size shall be mounted on all FDCs serving automatic sprinklers, standpipes or fire pump connections. Such signs shall read: AUTOMATIC SPRINKLERS or STANDPIPES or TEST CONNECTION or a combination thereof as applicable. Where the FDC does not serve the entire building, a sign shall be provided indicating the portions of the building served.

Items to be addressed prior to final recommendation:

1. Building heights regarding the requirements for aerial apparatus access will be determined at building plan review. Height is determined from the apparatus access lane to the eave of a pitched roof or the intersection of the roof to the exterior wall, whichever is greater. Site adjustments may need to be made.
2. Coordinate fire lane marking on site with the Fire Marshal prior to installation.
3. The use of grasscrete pavers is conditionally approved subject to an engineered specification that is being prepared by Fire District #7 that they can approved for the use by their equipment.
4. The buildings have been assigned letters by the Snohomish County Addressing Specialist. Please change all of the building references to reflect the letter designations to avoid future confusion.
5. We are in receipt of a water availability certificate stating that 2125 gpm will be available for a two hour or more duration. This availability is predicated on the “developer connecting to 12” existing main at two locations and installing 12” DCIP at drive A and B then transitioning to 8” DCIP at the tees” per the comments by Cross Valley Water.
6. We do not see the locations of the FDC’s for each building shown on the water plans. They should be located away from the building, within 50’ of a hydrant, but no closer than 4’, and they should be on the same side of a drive aisle as a hydrant.