

## West Ridge Addition Phase VII - XI Traffic Analysis

Proposed Development Characteristics: A 58.75+/- acre single-family development is proposed for annexation and preliminary platting upon a parcel of land lying generally north of 40<sup>th</sup> Avenue NE, between 1<sup>st</sup> Street NE and 4<sup>th</sup> Street NE. The first phase (Phase VII) will include 38 lots along the full southern edge of the parcel, with future phases continuing in a replicated pattern northward block-by-block to 43<sup>rd</sup> Avenue NE. At full build-out, the subdivision will include 171 single-family lots.

Existing Conditions: 2<sup>nd</sup> and 4<sup>th</sup> Streets currently connect to the proposed development on the south. The proposed “Thaniel Addition,” adjoining the proposed development on the west, will construct connecting avenues extending westward. No immediate development is anticipated on the properties bordering the property on the north or the east.

Nearby roadways under the jurisdiction of Cascade County (the western portion of Skyline Drive NW and the upper segments of 6<sup>th</sup> Street NW) are substandard, narrow roadways. Although the roads are able to carry current traffic, they will need upgrade at some future date. These segments do not abut the subject development proposal.

36<sup>th</sup> Avenue NE/NW serves as an east-west collector roadway for this area of Great Falls, and has been identified as a potential roadway for traffic calming by the neighborhood. However, the City’s traffic calming program is implemented through initiation by the neighborhood, with costs for any improvement to be borne by the area property owners or residents. As no petition has been received, and no improvements or related funding has been identified, no changes to the avenue are planned at this time.

Future Improvements: Although somewhat distant from the subject development, the far eastern end of 36<sup>th</sup> Avenue NE will be upgraded by the City of Great Falls, including wider travel lanes and an upgraded travel surface.

A future collector roadway is projected at the far northern end of the subdivision (43<sup>rd</sup> Avenue NE) will be designed and constructed within the subdivision as part of Phase XI by the developer to accommodate this classification.

Trip Generation: From the ITE Trip Generation Manual (9<sup>th</sup> edition), the average trip generation rate for detached single-family residential units is 9.52 trips per occupied dwelling unit on a weekday, resulting in 1,628 estimated daily trips from the 171 units.

### Trip Distribution:

Primary access to and from the lots in Phases VII through XI will be via 2<sup>nd</sup> and 4<sup>th</sup> Streets NE. 2<sup>nd</sup> Street NE will be the main north-south access to the area, connecting to 36<sup>th</sup> Avenue NE, Division Road, Skyline Drive and other area outlets to higher-classification roadways.

Because it extends further south, 2<sup>nd</sup> Street NE is estimated to likely accommodate 60% of the subdivision’s traffic, with 4<sup>th</sup> Street NE 40%. However, after additional connections are built, volumes on 4<sup>th</sup> and 2<sup>nd</sup> will likely level out or even slightly decrease.

The segments of 2<sup>nd</sup> Street NE and 4<sup>th</sup> St NE north of 36<sup>th</sup> Avenue NE are low-volume, and have adequate capacity to accommodate the trips to be generated by the development. Depending upon the origins/destinations of vehicles, the vehicles will take various routes - trips will not be concentrated on one specific route. Dispersion will occur as soon as vehicles encounter 36<sup>th</sup> Avenue NE, eastward and westward. 2<sup>nd</sup> Street NE will likely eventually function as a low-level collector roadway, and future prohibition on parking may be advisable.

Eventual build-out of the subdivision to the west and development of the vacant land east of the subject development will provide additional outlets. Avenues will extend westward to 6<sup>th</sup> St NE; Streets will connect to a projected major collector at 43<sup>rd</sup> Avenue NE/NW; and, 3<sup>rd</sup> Street NW will be built south to connect to Skyline Drive NW. However, these connections are not projected to be made for 10 years or more.

Transit and Non-motorized Travel:

Sidewalks will be constructed along each lot frontage at the time of home construction, and will connect to a fully built-out sidewalk network.

No extension of transit service to the development is proposed, as the area is outside of the Transit District boundary. However, a transit route is relatively nearby – at the corner of 33<sup>rd</sup> Avenue NE and 2<sup>nd</sup> Avenue NE.

Bike routes are expected to be established in the area, and City staff will work to establish routes as connections are made and as future phases are built.

Conclusion and recommendations:

The existing transportation network and proposed roadway layout is expected to have sufficient capacity to accommodate traffic generated by the Phases VII through XI, as well as traffic generated by the first phases of the Thaniel Addition (up to 88 single-family units).

To better quantify the impact of the proposed subdivision upon the broader road network in the immediate vicinity, the developer will be required to contribute to a larger transportation study for North Great Falls.

The following recommendations are based upon review of the proposed development:

- The developer agrees to contribute to a region-wide traffic modeling study, and agree to contribute its proportional share to any transportation improvements that come out of the study and that can be attributed to the development. The amount of contribution shall be as agreed upon in the development's Improvements Agreement.
- 43<sup>rd</sup> Avenue NE will be a collector roadway, and designed and constructed to collector standards. The developer will pay for the cost of the roadway, with reimbursements due the developer at such time as the property adjacent to the roadway on the north is annexed. Sidewalks on the north side of 43<sup>rd</sup> Avenue NE are not anticipated to be a responsibility of the developer.
- All curb cuts connecting to and sidewalks adjacent to City streets must be approved by the City of Great Falls prior to beginning construction.