



COMMUNITY DEVELOPMENT DEPARTMENT
501 Delta Avenue ♦ Marysville, WA 98270 ♦ (360) 363-8100

March 31, 2023

David Toyer
Toyer Strategic Advisors, Inc.
10519 20th Street SE, Ste. 3
Lake Stevens, WA 98258

Re: 51st Avenue – KM Capital, LLC – *Technical Review 1*
CPA23003

Dear David,

Thank you for your submittal. After preliminary review of the above-referenced proposal, the Planning Division has the following comments. Comments 1 through 3, and any forthcoming comments from the Public Works Department's Transportation Division, will need to be addressed prior to a State Environmental Policy Act (SEPA) determination being issued and a recommendation on the proposal being submitted to the Planning Commission:

1. The requested R-18 Multi-family, Medium Density zone allows for a base density of 18 dwelling units per net project acre and a maximum density of 27 dwelling units per net project acre through the application of the residential density incentive provisions set forth in Chapter [22C.090](#) MMC. The Trip Generation Analysis prepared by Kimley Horn dated February 15, 2023 anticipates approximately 684 multi-family residences will be constructed on the 48.01 acre site with a future project action. While there are significant critical areas encumbrances on-site, it still appears that this estimate may be conservative. If a 25 percent deduction for net project area is made, an estimated project yield might range from 648 (base) to 972 units (maximum). Should a higher unit count or range of units be contemplated in the Trip Generation Analysis? If not, please provide a brief description of why the provided figure is a reasonable estimate. If so, please amend the Trip Generation Analysis and applicable sections of the SEPA checklist accordingly.
2. The following revisions or supplemental information is requested for the SEPA checklist:
 - 1 Earth (g) – Include a reference to the maximum 70 percent impervious surface which would be allowed if the property is rezoned to R-18.
 - 3 Water (a)(1) – It is indicated that the consultant is not aware of any surface water body on or in the immediate vicinity of the site (including year-round and season streams, saltwater, lakes, ponds, wetlands); however, the Technical Memorandum prepared by Soundview Consultants, LLC dated February 17, 2023 and supporting critical areas documentation identifies the following surface water bodies on or in the vicinity of the site: Wetland AH and Edgecomb Creek. Please amend to reflect.
 - 3 Water (a)(2) – Reviewing the critical areas documentation that was provided, it is recommended that this section be revised to include a statement that future project actions may require work over, in, or adjacent to Wetland AH and Edgecomb Creek which will be analyzed during future project action review.
 - 3 Water (a)(3) – Amend to briefly summarize the fill of the 51st Avenue NE ditch, impacts to Wetland AH, and realignment of Edgecomb Creek that are anticipated to accompany a future project action.

- 3 Water (c)(1) – Recommend indicating that a future project action will require stormwater facilities be constructed in accordance with the 2019 Stormwater Management Manual for Western Washington or then-current regulations.
- 5 Animals (a) – The list of animals in the vicinity is very limited. Have animals such as hawk, deer or eagle been observed in the vicinity?
- 5 Animals (b) – The City’s GIS indicates Chinook, Coho, Cutthroat, and Chum are present within Edgecomb Creek. Reviewing the National Oceanic and Atmospheric Administration (NOAA) Fisheries website ([Chinook Salmon \(Protected\) | NOAA Fisheries](#)), it appears Chinook are ESA Threatened in Puget Sound and that the checklist may need to be amended to reflect this.
- 5 Animals (d) – This section should mention the realignment of Edgecomb Creek and wetland buffer mitigation that is anticipated with a future project action, and that it is anticipated that the critical areas and buffers will be placed in a Native Growth Protection Area (NGPA) tract or easement for future protection.
- 8 Land and Shoreline Use (g) – It should be noted that Edgecomb Creek is not subject to the Shoreline Master Program.
- 8 Land and Shoreline Use (h) – Provide a brief description of the on-site critical areas, Wetland AH and Edgecomb Creek.
- 8 Land and Shoreline Use (i) – Recommend that an estimate of the number of future residents that would be live in a future project be provided that is consistent with the preliminary Trip Generation Analysis.
- 8 Land and Shoreline Use (l) – A landscape buffer along the eastern property line will be required to screen the anticipated future project from adjacent single family residential areas.
- 9 Housing (a) – Recommend an estimated range of housing units that are projected with a future project action be noted that is consistent with the requested zoning and the preliminary Trip Generation Analysis.
- 10 Aesthetics (a) – Cite the allowable height of 45 feet in the R-18 zone.
- 10 Aesthetics (b – second one that should be c) – Recommend that it be indicated that future project actions will be subject to design standards and landscaping as required by code.
- 12 Recreation (c) – Future residential project actions will be required to provide open space on-site and pay park mitigation fees.
- 13 Historic and Cultural Preservation (d) – Future project actions will be required to follow the Department of Archaeology and Historic Preservation’s Inadvertent Discovery protocols in the event that a cultural resource is encountered.
- 14 Transportation (d) – While certain transportation improvements will not be identified until a project action is submitted, it is anticipated that frontage improvements will be required along the property’s 51st Avenue NE and 152nd Street NE frontages.
- 14 Transportation (f) – Recommend citing the estimate of trip generation for a future project action from the Trip Generation Analysis.
- 15 Public Services (a) – Future project actions would increase the need for the variety of public services listed in this section
- 15 Public Services (b) – Future project actions will require the payment of school, traffic and park mitigation fees, and water, sewer and storm capital improvement charges to help mitigate the project’s impacts.

- 15 Public Services (c) – Future project actions will require connections, and extensions where necessary, of water, sewer and storm infrastructure.
- 3. Please review and address the attached comments from Ms. Kinnamon dated March 2, 2023. The comments pertaining to the review and approval process have been addressed.
- 4. An initial Planning Commission work session on this Comprehensive Plan map amendment and rezone request is anticipated in late April or early May.
- 5. Critical areas and associated buffers are anticipated to provide significant buffering along the majority of the eastern property line. Pursuant to MMC 22C.120.120, Table 1, a 10 foot wide, Type L1 landscape buffer with a six foot tall, sight-obscuring fence or wall will be required along property lines abutting single family zoned properties. Reductions in the landscape buffer would not be supported as the deciduous trees along the railroad right-of-way become quite sparse during the fall and winter providing more limited screening. Fencing may be conditioned to be a good neighbor or picture frame style fence that is aesthetically pleasing to abutting properties.
- 6. Comments are anticipated from the Transportation Division of Public Works and will be forwarded upon receipt.
- 7. An Olympic Pipeline easement is located on the property. Past residential projects adjacent to the pipeline have required coordination with the pipeline on appropriate setbacks for residential uses.
- 8. The Planning Division is contemplating concurrently rezoning the small area of R-4.5 Single Family, Medium Density that is immediately south of the subject site and west of the Burlington Northern Santa Fe railroad to R-18 Multi-family, Medium Density.

Enclosed please find comments from other departments, agencies and the public. After you have had an opportunity to review the comments, please let me know if you would like to set up a meeting to discuss them further. If you have any questions, please contact me at 360.363.8240 or by email at agemmer@marysvillewa.gov.

Sincerely,

Angela Gemmer

Angela Gemmer
Principal Planner

cc: Haylie Miller, Community Development Director
Chris Holland, Planning Manager

From: Kristin Kinnamon <bikenbus@gmail.com>
Sent: Thursday, March 2, 2023 1:32 PM
To: Angela Gemmer
Subject: Re: [External!] 51st Ave. rezone proposal - process questions
Attachments: [image001.png](#)

Dear Angela,

Thank you for that information. Please add to the record my concern about school impacts of this big zoning change . How is the school district supposed to plan for and teach students when a new development attracts a new elementary school worth of students that weren't expected?
Kristin

On Thu, Mar 2, 2023, 11:48 AM Angela Gemmer <agemmer@marysvillewa.gov> wrote:

Hi Kristin,

Thank you for your comments. They will be part of the record.

The submittal has been routed to Public Works and the Washington State Department of Transportation for review. It's anticipated that the City's Traffic Engineering Manager will have comments on impacts to 51st Avenue NE and adjacent roads and intersections. The review comments for all impacted departments and agencies will be provided to the applicant to review and address.

The first public meeting will be a Planning Commission workshop where the proposal will be discussed and questions from the Planning Commission will be addressed. Typically public testimony is not taken at workshops; however, written comments from the public will be provided to the Planning Commission. After workshopping the proposal (this may be one or more meetings depending on the questions and the discussion), a Public Hearing will be set before the Planning Commission where public testimony will be received. At the Public Hearing, the Planning Commission will consider city staff's recommendation and any public testimony, and then formally make a recommendation on the proposal to City Council.

The proposal will then be discussed at the City Council workshop meeting (first meeting of the month). It would then typically be scheduled for the following City Council meeting for action; however, sometimes more meetings or a hearing are necessary (although typically a second hearing does not occur unless determined necessary by City Council).

The earliest this will likely be workshopped with the Planning Commission is the second meeting in March (although April is likelier). Planning Commission packets are available at the following link ([Public folder \(marysvillewa.gov\)](#)) and are usually ready late on Wednesday the week before the Planning Commission meeting.

Please let me know if you have any questions.

Thank you,



Angela Gemmer, Principal Planner

CITY OF MARYSVILLE

Community Development Department

501 Delta Avenue, Marysville, WA 98270

360.363.8240 or agemmer@marysvillewa.gov

Please note we have now relocated to 501 Delta Avenue.

From: Kristin Kinnamon <bikenbus@gmail.com>

Sent: Thursday, March 2, 2023 10:48 AM

To: Angela Gemmer <agemmer@marysvillewa.gov>

Subject: [External!] 51st Ave. rezone proposal - process questions

External Email Warning! Use caution before clicking links or opening attachments.

Dear Angela,

I have briefly reviewed the application for a Comprehensive Land Use Map Amendment by Toyer & Associates for 48 acres on 51st Avenue. This proposed change from light industrial to multifamily is very significant - in terms of traffic generation as well as employment and other goals for the Cascade Industrial Center.

Reading through the Environmental Checklist however was extremely disappointing. The applicant simply repeated "non project action" and put no work into assessing how this change will impact current and future city residents or workers.

What are the next steps in this process? Will the Planning Commission or City Council have a hearing? Will someone (city or applicant) provide some analysis of the impact of this proposed change? The traffic analysis cites 2,500 new weekday trips requiring \$1.5 million in additional mitigation (and for some reason assumes vehicles will only go north or west, not south). This is a huge change and the written documentation to date does nothing to justify it.

Sincerely,

Kristin Kinnamon

Marysville, WA

Kristin Kinnamon

Sharing Wheels Community Bike Shop, board member

McClinchy Mile Camano Climb, coordinator 2023

B.I.K.E.S. Club of Snohomish County, member

425-923-7868 (personal cell)

From: Kacey Simon
Sent: Friday, March 10, 2023 7:43 AM
To: Angela Gemmer
Subject: RE: 51st Avenue Comprehensive Plan Amendment and Rezone

Hi Angela,

We do not have any comments on this review.

Thanks,

Kacey Simon

***We have moved to the new Marysville Civic Campus.
Please note our new address below***



Kacey Simon
Civil Plan Reviewer
City of Marysville
501 Delta Ave
Marysville, WA 98270
360.363.8280 Office

-----Original Appointment-----

From: Angela Gemmer <agemmer@marysvillewa.gov>

Sent: Friday, February 24, 2023 5:41 PM

To: Angela Gemmer; Jesse Hannahs; Ken McIntyre; Shane Whitney; Kacey Simon; Adam Benton; Matthew Eyer; Brooke Ensor; Mike Snook; anderdm@wsdot.wa.gov; Doug Gresham; knelson@tulaliptribes-nsn.gov; Todd Gray; City of Arlington Planning; Martin Wray; Robert.larson@ziply.com; Robert.nance@ziply.com; Wicklund, Mary; DFW R4Cplanning; gregg_kuehn@msvl.k12.wa.us

Subject: 51st Avenue Comprehensive Plan Amendment and Rezone

When: Friday, March 10, 2023 12:00 AM to Saturday, March 11, 2023 12:00 AM (UTC-08:00) Pacific Time (US & Canada).

Where: THIS IS NOT A MEETING INVITE - THIS IS AN RFR WITH COMMENTS REQUESTED 3.10.23



MARYSVILLE
WASHINGTON

THIS IS NOT A MEETING INVITE – THIS IS A REQUEST FOR REVIEW (RFR) WITH COMMENTS REQUESTED TO BE RETURNED BY 3.10.23.

| | |
|-----------------------|---|
| File Number: | PA23003 |
| Project Title: | 51 st Avenue Comp. Plan Amendment and Rezone |

From: Mike Snook
Sent: Tuesday, February 28, 2023 12:57 PM
To: Angela Gemmer
Cc: Jordan Sanchez
Subject: PA23003 51st Avenue Comp. Plan Amendment and Rezone

Follow Up Flag: Follow up
Flag Status: Completed

Hi Angela,

Building has no comments at this time.

Thank you,

Michael Snook, CBO
Building Official
CITY OF MARYSVILLE – Community Development Department
501 Delta Avenue, Marysville WA 98270
360.363.8210
msnook@marysvillewa.gov



From: Brooke Ensor
Sent: Tuesday, February 28, 2023 3:45 PM
To: Angela Gemmer
Cc: Matthew Eyer
Subject: CPA23-003 51st Avenue Comp. Plan Amendment and Rezone

Angela,
There are no surface water comments on CPA23-003 51st Avenue Comp. Plan Amendment and Rezone.

Thank you!

Brooke Ensor

City of Marysville
NPDES Coordinator
Office: 360-363-8288
Cell: 425-754-8480



MEMORANDUM

TO: Angela Gemmer – Senior Planner

FROM: Jesse Hannahs, P.E. – Traffic Engineering Manager

DATE: April 20, 2023

SUBJECT: PA 23-003 – 51st Ave NE Comp Plan Amendment & Rezone

I have reviewed the 51st Ave NE Comp Plan Amendment and Rezone for the proposed rezone of land east of 51st Ave NE and south of 152nd ST NE and have the following comments which shall be addressed with a future project action:

- 1) Traffic impact fees will be required from the City and depending on trip generation/distribution, may be required from the County and State.
 - a. Traffic Impact Fee (TIF) calculation improvement projects upon frontage to be constructed by development shall be allowed for credit against Traffic Impact Fees up to the maximum amount of development TIF including:
 - i. 51st Ave NE (frontage improvements) from 152nd ST NE to Northern City Limits
 - ii. 152nd ST NE (51st Ave NE to east City limits)
 - iii. Intersection signalization of 51st Ave NE & 156th ST NE/152nd ST NE
 - iv. Intersection signalization of 152nd ST NE & 59th Ave NE
 - b. Projects included within TIF calculations near development are:
 - i. 156th ST NE (Smokey Point Blvd. to 51st Ave NE)
 - ii. Intersection signalization of 156th ST NE/152nd St NE & 51st Ave NE
 - iii. Intersection signalization/roundabout of 156th ST NE & 47th Ave NE
 - iv. Intersection signalization of 152nd ST NE & 47th Ave NE
 - v. Intersection signalization of 51st Ave NE & 160th ST NE
- 2) A Traffic Impact Analysis (TIA) will be required.
 - a. This would include, for City approval, development of trip generation/distribution followed after City review/approval by identification of impacts and, where required, mitigation approaches.
 - i. Development TIA shall evaluate if/at what time during development phasing, signalization of intersections of 51st Ave NE & 156th ST NE/152nd ST NE and 152nd ST NE & 59th Ave NE shall be required.
 - ii. Existing all-way stop controlled intersection of 51st Ave NE & 132nd ST NE to the south is very near to concurrency failure and shall be evaluated closely to determine if/when subject

development will require signal construction to meet concurrency.

- b. TIA should follow City guidelines to be provided.
 - c. Trip Distribution shall follow representations to be provided for neighboring areas developed based upon Comprehensive Plan Traffic Model.
 - i. Horizon Year analysis shall NOT include completion of 152nd ST NE from 67th Ave NE to SR 9.
- 3) New roadway construction and frontage improvements to existing roadway shall be required per Comp Plan.
- a. 51st Ave NE:
 - i. Three lane principle arterial with bike lanes, landscape strips, sidewalks and street lighting.
 - b. 152nd ST NE:
 - i. Five lane minor arterial with two-way left turn lane, 12' multi-use trail on north side, 5' sidewalk on south side, landscape strips and City owned decorative street lighting.
 - c. Intersection of 152nd ST NE & 59th Ave NE
 - i. Ultimate intersection shall be signalized.
 - ii. Additional ROW will likely be required behind sidewalk for signal components.
- 4) Per EDDS 3-301, access management standards shall apply.
- a. One access to arterials only per 500' of frontage.
 - b. Spacing of accesses shall be per EDDS.
 - c. Access(es) preferred/shall be provided to lower volume roadway.
 - i. Access points are preferred to align with existing or planned access locations on opposing side of roadways.
 - d. Signalization shall be assumed for purposes of access management standards at all public street intersections within/fronting proposed development.
- 5) Per EDDS 3-506, street lighting will be required.
- a. Street lighting upon 152nd ST NE shall be City owned decorative street lighting per 156th ST NE standard including powder coated poles, cobra head luminaires, junction boxes, wiring, etc. to match existing street lighting upon 156th ST NE to the west.
 - i. Development street lighting design engineer shall request City specifications from Traffic Engineering Manager and complete design as part of civil construction plan submittal process.
 - b. Street Lighting upon all three lane arterials (51st Ave NE) and other public roadways shall be PUD installed fiberglass pole installation type street lighting.
 - i. Street lighting shall be designed as minor arterial utilizing 250 watt equivalent LED fixtures.
 - ii. Spacing of fixtures should be approximately 180'-220'.
 - iii. As part of civil construction approval proposed PUD street lighting locations shall be provided by the City for incorporation into the PUD site electrical plans.
 - iv. Contact Eddie Haugen of Snohomish County PUD at (425) 783-8276 or wehaugen@snopud.com for more information regarding PUD design.

- 6) Signing and Channelization Plans shall be required as part of Civil Construction plans.



MEMORANDUM

FROM: Jesse Hannahs, P.E. – Traffic Engineering Manager

DATE: December 22, 2021

SUBJECT: City of Marysville - Traffic Impact Analysis Guidelines

All major new developments within City boundaries will require a Traffic Impact Analysis (TIA). Developments generating trips greater than defined Impact Thresholds shall have a TIA prepared to analyze impacts to the transportation system and to identify appropriate mitigation measures, if necessary.

Purpose of TIA:

The required Traffic Impact Analysis (TIA) has the following purposes:

1. Ensure that City policy for the provision of safe and adequate access and allocation of responsibility for immediate or future road improvements necessitated by new development is fairly and consistently applied to all developments.
2. Establish impact on road system capacity.
3. Establish impact on specific level of service deficiencies.
4. Establish impact on specific inadequate road condition locations.
5. Establish and/or evaluate access and transportation system circulation requirements.
6. Establish impact on other jurisdictions' roadway system.
 - a. The City has an inter-local agreement (ILA) with Snohomish County which sets standards and requirements for City development TIA's to satisfy county data and analysis requirements.
 - b. WSDOT and/or surrounding jurisdictions such as Cities of Lake Stevens and Arlington may be provided information relevant to their roadway systems for review.
7. Establish transportation demand management measures including:
 - a. Establish pipeline trip values for development projects at key City intersections.
 - b. Identify locations which need to be addressed within the City six (6) year TIP and GMA concurrency horizon.
 - c. Establish if there is a project nexus for improvements.

Definitions:

- *Major New Developments* are defined as any development generating ten (10) or more trips (total of entering and existing) during the p.m. peak hour or other hours as defined by the City.
 - Developments generating less than ten (10) or more trips (total of entering and existing) during the p.m. peak hour or other hours as defined by the City shall perform trip generation only when TIA scoping deems distribution and analysis necessary, such as proximity to other jurisdictions, known inadequate roadway condition, etc.
- *Impact* is defined as any intersection including site access driveways in which the development generates ten (10) or more trips during the designated peak hour in the horizon year or as defined within TIA scoping.
- *Opening Year* is defined as the anticipated year in which the development will be complete and open to the public.
- *Horizon Year* is defined as the future forecast year at which the future conditions without the proposed development and compared to future conditions with the proposed development in order to determine the impacts of the proposed development on levels of service and capacity. The horizon year for each phase of the development shall be six (6) years from anticipated opening/completion of the development.
- *Mitigation Measures* are defined as any combination of street improvements or reduction of development size which reduces the number of trips generated by the development at an impacted intersection below the impact threshold values in Table 1.
- *Level of Service* are defined by the current version of the Highway Capacity Manual and are shown in Table 2.

TABLE 1: INTERSECTION ANALYSIS IMPACT THRESHOLDS

| | | |
|---|--|--|
| SR529/State Avenue/Smokey Point Blvd. Corridor | | Threshold for intersection Analysis/LOS Criteria |
| Site Generated Traffic | | 25 vehicles transversing through intersection during any defined peak hour |
| Minimum Level of Service | Signalized, Roundabout or Stop Controlled Intersection | E (mitigated) |
| State Route 528 (4th Street/64th Street NE | | Threshold for intersection Analysis/LOS Criteria |
| Site Generated Traffic | | 25 vehicles transversing through intersection during any defined peak hour |
| Minimum Level of Service | Signalized, Roundabout or Stop Controlled Intersection | E (mitigated) |
| State Route 531 (172nd St NE)* | | Threshold for intersection Analysis/LOS Criteria |
| Site Generated Traffic | | 25 vehicles transversing through intersection during any defined peak hour |
| Minimum Level of Service | Signalized, Roundabout or Stop Controlled Intersection | D |
| All other intersections of two arterial/arterial or functionally classified streets on signalized/roundabout intersections | | Threshold for intersection Analysis/LOS Criteria |
| Site Generated Traffic | | 25 vehicles transversing through intersection during any defined peak hour |
| Minimum Level of Service | Signalized, Roundabout or Stop Controlled Intersection | D |

* = WSDOT intersections which prior to a development submittal have an existing historical LOS failure of E, shall be required to mitigate only upon falling below a LOS E, such as the historical case for the intersection of SR 531 (172nd St NE) & 27th Ave NE.

Exceptions to Intersection Analysis Impact Thresholds for developments meeting the following criteria:

- 1) Development having a total net building square footage of greater than 1 million square feet and/or
- 2) Any peak hour required for analysis having greater than 1000 development generated trips after determination of any acceptable trip reductions.
- 3) Developments meeting these criteria may be allowed to utilize the following to determine intersections for Intersection Analysis:
 - a) Intersections greater than 3 miles from development boundary as measured upon roadways (not straight line) may utilize a Intersection Analysis Impact threshold of:
 - i) 50 Development generated trips for each analysis periods required, unless

- (1) If greater than 50% of the intersection trips are turning rather than through trips, an intersection between 25 and 50 trips shall be evaluated.
- b) Intersections greater than 5 miles from development boundary as measured upon roadways (not straight line) may utilize a Intersection Analysis Impact threshold of:
 - i) 100 Development generated trips for each analysis periods required, unless
 - (1) If greater than 50% of the intersection trips are turning rather than through trips, an intersection between 50 and 100 trips shall be evaluated.
- c) Intersections in which a project is identified and included within the Traffic Impact Fee (TIF) calculation formula yet analysis beyond 3 miles from development is warranted may at the discretion of the City be excluded from Intersection Analysis.

TABLE 2: LEVEL OF SERVICE

| Level of Service | Unsignalized Intersections (Average Delay per Vehicle in Seconds) | Signalized Intersections (Average Delay per Vehicle in Seconds) |
|------------------|--|--|
| A | < 10.0 | < 10.0 |
| B | 10.0 – 15.0 | 10.0 – 20.0 |
| C | 15.0 – 25.0 | 20.0 – 35.0 |
| D | 25.0 – 35.0 | 35.0 – 55.0 |
| E | 35.0 – 50.0 | 55.0 – 80.0 |
| F | > 50.0 | > 80.0 |

Traffic Impact Analysis (TIA) Contents:

- Review and approval of Traffic Impact Analysis (TIA) shall be subject to meeting the criteria set forth by the City.
- The TIA shall be prepared under the direction of a Professional Civil Engineer with experience in traffic engineering and registered in the State of Washington. Final documents shall bear the seal of the responsible Professional Engineer.
- TIA review shall be a stepped process with the first step being review and approval of trip generation and distribution to evaluate “Intersection Analysis Impact Thresholds” and determine full TIA requirements.

The following outline should be used in order to facilitate review by the City:

Existing vs. Proposed Conditions:

- 1) Inventory Existing and Proposed Land Use
 - a) Existing Land Use
 - i) Proposed Site's Land Use
 - ii) Proposed Site's Physical Location
 - iii) Proposed Site's Physical Characteristics.
 - iv) Design constraints to proposed development.
 - b) Proposed Land Use
 - i) Change in Land Use.
 - ii) Other developments approved within the vicinity. City will provide this listing.
- 2) Inventory Existing and Planned Transportation System
 - a) Scope of Impact Analysis
 - i) Describe the location of new facilities and existing facilities impacted by increased traffic. Increased traffic is defined as ten (10) or more trips during the p.m. peak hour, unless other timeframes are required, including all intersections created by driveways serving the site, local street segments used by the development to access the collector and arterial street network and all intersections of arterial streets.
 - b) Existing Transportation System
 - i) All pertinent data in the City's possession will be supplied by the City upon request.
 - ii) All other data required for the TIA shall be provided by the applicant.
 - iii) The TIA shall address all or a combination of the following:
 - (1) Street Network by Functional Classification
 - (2) Geometrics of network and intersections
 - (3) Traffic control locations.
 - (4) Signal timing and operations
 - (5) Site access points
 - (6) Existing right of way (ROW)
 - (7) Traffic Counts
 - a) Traffic counts shall be no more than 18 months old and include peak hour factors and percentage of trucks.
 - (8) Collision data - Three (3) calendar years of data.
 - (9) Transit Service - Existing and planned facilities including bus stop locations.
 - (10) Bicycle facilities - Existing and planned.
 - (11) Pedestrian facilities - Existing and planned.

Trip Generation and Distribution:

1) Trip Generation:

- a) The latest version of the ITE Trip Generation Manual shall be used.
- b) Trip Generation shall be based upon “average rate” for “peak hour of adjacent street traffic”.
 - (1) Trip Generation Values:
 - a) Values for City TIF and other impact fee calculations shall be carried to one (1) figure past the decimal point.
 - (i) Examples:
 1. 20.657 = 20.7
 2. 15.146 = 15.1
 - b) Values for operational analysis should be rounded to the nearest whole number.
- c) Identify Critical Hours:
 - i) Typically p.m. peak hour.
 - ii) In conjunction with City staff, if the hours of largest impact are outside of the p.m. peak hour, other hour analysis may be required:
 - (1) A.M. Peak Hour
 - (2) Generator Peaks
 - (3) Saturday Peak
 - (4) Sunday Peak
- d) City Adopted Trip Generation Rate Policy exceptions to ITE Trip Generation Manual:
 - i) The following residential units per MMC Chapter 22A.020 definition shall generate 1.0 PM Peak Hour trips per unit:
 - (1) Accessory dwelling units
 - (2) Attached housing (triplex, Quadplex, etc.)
 - (3) Duplex
 - (4) Single-family, detached
 - ii) Apartment developments shall be per Edition 11 of the ITE Trip Generational Manual – Land Use Code 220, Multifamily housing (Low-Rise)
 - iii) Townhome developments shall be per Edition 11 of the ITE Trip Generational Manual – Land Use Code 215, Single Family Housing - Attached
 - iv) For Hotel Type developments, Business Hotel may only be utilized for proposals consistent with the ITE description for Business Hotel and use shall require:
 - (1) Occupancy rate study shall be performed consisting of:
 - a) Four (4) similar style hotels within Marysville or surrounding vicinity within the I-5 corridor of central/northern Snohomish County.
 - b) At least two (2) of study locations must be located within City of Marysville or Tulalip Tribes jurisdictional boundaries.

- v) For land uses not listed in the ITE Trip Generation Manual, the following shall be required:
 - (1) Trip generation study to include at least three (3) sites of similar type/style development in similar regions/locations.
 - (2) Comparison sites must be reviewed and approved by City staff.
- e) Development project proposals, in which phased development or contiguous parcel ownership are proposed or present, shall include the entire project and/or all contiguously owned parcels within the trip generation for the development project.
 - i) If only a portion of the subject property is proposed for development, trip generation shall include full buildout of the remainder of the property under current zoning.
 - ii) Or, if the proposal involves a zoning change, buildout under the proposed zoning.
- 2) Trip Distribution:
 - a) The applicant shall provide trip distribution data for approval of City staff BEFORE doing extensive TIA analysis.
 - b) Trip Distribution Maps have been developed by the City based upon the adopted City Transportation Comprehensive Plan for the highest probability development locations.
 - i) Some Developments may need to provide a hybrid trip distribution proposal utilizing multiple maps based upon proposed development location which shall be reviewed and approval by the City.
- 3) Redistribution of Existing Traffic:
 - a) Lakewood Neighborhood Area Projects:
 - i) For Horizon Year Analysis, with planned roadway network and 156th ST NE Interchange construction assumed complete existing traffic may be assumed to divert from 172nd ST NE east of 19th Ave NE (designation of 172nd St NE Interchange and south), south through Lakewood Neighborhood arterial roadways to 156th ST NE Interchange and south at rate of 25% diversion.

Trip Reduction Policy:

- 1) The City should be consulted on the acceptability of any proposed trip reductions or the appropriateness of a proposed ITE trip generation code BEFORE doing extensive TIA analysis.
- 2) Pass-by Trips:
 - a) Pass-by trip rates will be allowed only based on rates in the latest version of the ITE Trip Generation Manual or
 - b) those set forth based upon Snohomish County ILA (PM Peak pass-by rates) as follows:
 - i) Drive Thru Only Espresso Stands = 100%
 - ii) Daycare (located on Arterials only) = 75%
 - iii) Specialty Retail = 25%
 - iv) Health Club = 54%
 - v) Drive-In Bank = 47%
 - c) City policy based upon past precedent dating prior to 2013 allows following pass-by rates:
 - i) Automobile Sales = 25%
- 3) Diverted Link Trips will not be allowed.
- 4) Multi-use development shall be reviewed based upon Chapter 7 of the ITE Trip Generation Handbook.
 - a) Internal Capture:
 - i) May only be used for projects over 100,000 square footage of total floor space constructed at one time by a single owner conforming to criteria cited in ITE (multiple, differing land uses with applicable capture rates), or
 - ii) For projects having mixed use zoning with multiple use types.
- 5) Relocation of Existing Business:
 - a) A development project that relocates from an existing building to a new building shall not receive traffic mitigation credits if the existing building is not demolished or removed.
 - b) Credits shall be based upon the latest version of the ITE Trip Generation Manual for the demolished or removed building.

TIA Analysis:

- 1) Highway Capacity Manual procedures shall be used.
- 2) Opening Year of the development or each phase shall be analyzed for capacity and level of service with and without the development traffic.
- 3) Horizon Year of the development or each phase shall be analyzed for capacity and level of service with and without the development traffic.
 - a) Planned and Committed Improvements on Affected Transportation Network:
 - i) All WSDOT funded projects may be assumed to be completed in Horizon Year, however WSDOT impact fees may be required to be paid by the developer.
 - ii) All City projects contained within the Transportation impact Fee (TIF) calculation may be assumed are completed in Horizon year.
 - iii) Only funded or approved development projects may be assumed to be completed.
 - b) If Mitigation Measures are required:
 - (1) Signal/Roundabout Revisions/Construction Required:
 - a) If required mitigation of transportation impacts for any phase of the development includes new/modified intersection control or a signal/roundabout, Horizon Year conditions shall be forecast and analyzed.
 - (2) Comprehensive Plan revisions required:
 - a) If required mitigation of transportation impacts for any phase of the development requires revisions to the most current approved version of the City Comprehensive Plan, conditions shall be analyzed for the Horizon year and the currently adopted City Transportation Comprehensive Plan.
- 4) Annual Growth Rate:
 - a) When available the City will supply pipeline traffic data and a growth rate of 2% per year shall be used for operational analysis.
 - b) Where pipeline data does not exist or cannot be provided by the City, a growth rate of 3% per year shall be used.
- 5) Added impacts of Adjacent Major Developments:
 - a) Only funded or approved development projects may be used for future condition analysis to establish that a project has no adverse traffic impacts.
 - b) Pipeline data will be provided by the City in the form of available copies of applicable TIA's.
 - i) Pipeline data will consist of approved development projects distributing 25 or more trips to an arterial/arterial or signalized intersection.
 - ii) PDF's, or other electronic medium, will be required of each development for inclusion into the pipeline database.

- 6) Intersection Analysis Tools:
 - a) Synchro Version 10 for stop controlled and signalized intersection analysis.
 - b) Single lane roundabouts can be analyzed in Synchro, however locations on State Routes shall require analysis utilizing Sidra or other WSDOT approved software.
 - c) Multi-lane Roundabouts shall be analyzed in Sidra.
 - i) Comparison of signalized alternatives to a multi-lane roundabout shall also be performed in Sidra.
- 7) Intersection Analysis Guidelines:
 - a) Ideal saturation flow rates greater than 1900 vehicles per hour of green per lane should not be used unless otherwise measured in the project vicinity.
 - b) Signal Timing for Analysis:
 - i) Existing timings must be used for existing conditions.
 - ii) Optimization for future conditions is accepted practice.
 - (1) Where a coordinated signal system exists or is to be implemented, optimization for future conditions must include all coordinated signals.
 - (2) Optimized cycle lengths must not create queuing that exceeds available storage lengths unless an accompanying proposal is presented to lengthen the storage length.
 - iii) Pedestrian Clearance Times:
 - (1) Minimum phase lengths for future operational analysis shall allow for adequate pedestrian crossing time per MUTCD/ITE standards.
 - (2) Left Turn Phasing:
 - a) Minimum phase lengths for future operational analysis shall allow for a minimum of 15 seconds for protected only left turns.
 - b) Minimum phase lengths for future operational analysis shall allow for a minimum of 10 seconds for protected/permitted left turns.
 - c) Lead/lag optimization shall only be allowed for coordinated systems at intersections with flashing yellow arrow (FYA) or protected only left turn phasing.
 - iv) Existing Condition Peak Hour Factors (PHF):
 - (1) Signalized intersections:
 - a) Existing PHF's by intersection, or
 - b) Utilize the peak 15 minute period for the entire intersection and multiple those volumes by 4.
 - (2) Unsignalized intersections:
 - a) Approach PHF's.
 - v) Queuing:
 - (1) Queuing analysis may be required in areas of known queue constraints.
 - (2) Queue lengths shall be calculated at the 95th percentile.
 - (3) All impacted intersections shall be analyzed.

- c) Access Management Standards:
 - i) City standards are summarized in EDDS Section 3-201..
 - ii) On State Highways, the minimum spacing is 250 feet or as shown in Table 3, whichever is greater.
- 8) Identify Safety Related Constraints:
 - a) Any road condition whether existing or created by a development which jeopardizes the safety of road users including pedestrians and bicyclists.
 - b) Warranted left and/or right turn lanes.
 - c) Sight distance deficiencies.
 - d) Collision History:
 - i) Identify all collisions within past 3 calendar years.
 - ii) Safety Inadequacies:
 - (1) Collision rate of more than 1.0 collisions per million entering vehicles at an intersection.
 - (2) Collision rate of more than 10.0 collisions per million entering vehicles on a roadway segment.

Mitigation Measure Evaluation:

- 1) Issues to be Considered:
 - a) Design vehicle Requirements.
 - b) New Facilities (all modes).
 - c) Geometric Modifications.
 - d) Traffic Control Modifications.
 - e) Timing of Implementation with Respect to Phases of Development.
 - f) Sight Distance Requirements.
 - i) When required by the City, sight distance analysis per City Engineering Design & Development Standards (EDDS) shall be performed.
- 2) On Site Improvements:
 - a) Improvements to streets abutting the development shall be in accordance with City ordinances and design standards.
- 3) Off Site Improvements:
 - a) All improvements shall be in accordance with City ordinances and design standards.
 - b) If a development project is assessed for a portion of a Local Improvement District that constructs a project that the traffic mitigation fees are based on, the payment of the fees shall be credited toward the development's mitigation fees.

- 4) Local Streets & Collectors:
 - a) The use of traffic control devices to reduce impacts on residential streets is encouraged within City EDDS 3-525.
 - b) Traffic calming devices should be negotiated with City staff with the goal of reducing neighborhood infiltration of development generated spillover traffic.
 - c) City policy does not allow installation of new speed humps however allows for speed tables, traffic circles, curb bulb outs, etc..
- 5) New or Modified Traffic Signals:
 - a) Signals proposed as mitigation shall meet at least one MUTCD warrant for signalization in the applicable horizon year.
 - b) Left turn phasing shall be provided for new or modified signals at all locations where left turn lanes are present or warranted.
 - c) Left run phasing shall be via flashing yellow arrow (FYA) displays unless for purposes of safety, protected only left turn phasing is required.
- 6) Turn Lanes:
 - a) Left Turn Lanes:
 - i) Warrants shall be per ASHTO 9-75 or the Harmelink source graphs.
 - ii) WSDOT Design Manual Figure 910-12 shall be used for storage length calculations.
 - iii) Generally, all signalized approaches should have left turn lanes where left turns are permitted on two-way streets.
 - b) Right Turn Lanes:
 - i) WSDOT Design Manual Figure 910-12 should be used for right turn lanes at unsignalized intersections, ignoring the note exempting multi-lane approaches.
 - ii) Guidelines for Right Turn Treatments at Signalized Intersections published within the February 1995 ITE Journal should be used for right turn lane warrants at signalized intersections.
- 7) Internal (On Site) Transportation System:
 - a) All systems shall be in accordance with City ordinances and design standards.
 - b) Consideration should be given to:
 - i) Design Vehicle Requirements:
 - (1) Turning radii.
 - (2) Vertical clearances.
 - ii) Facility Requirements (all modes)
 - iii) Traffic Control Requirements:
 - (1) Signing.
 - (2) Striping.
 - iv) Driveway Design:
 - (1) Width.
 - (2) Throat length.
 - v) Parking Requirements.
 - vi) Special Features.

Appendices:

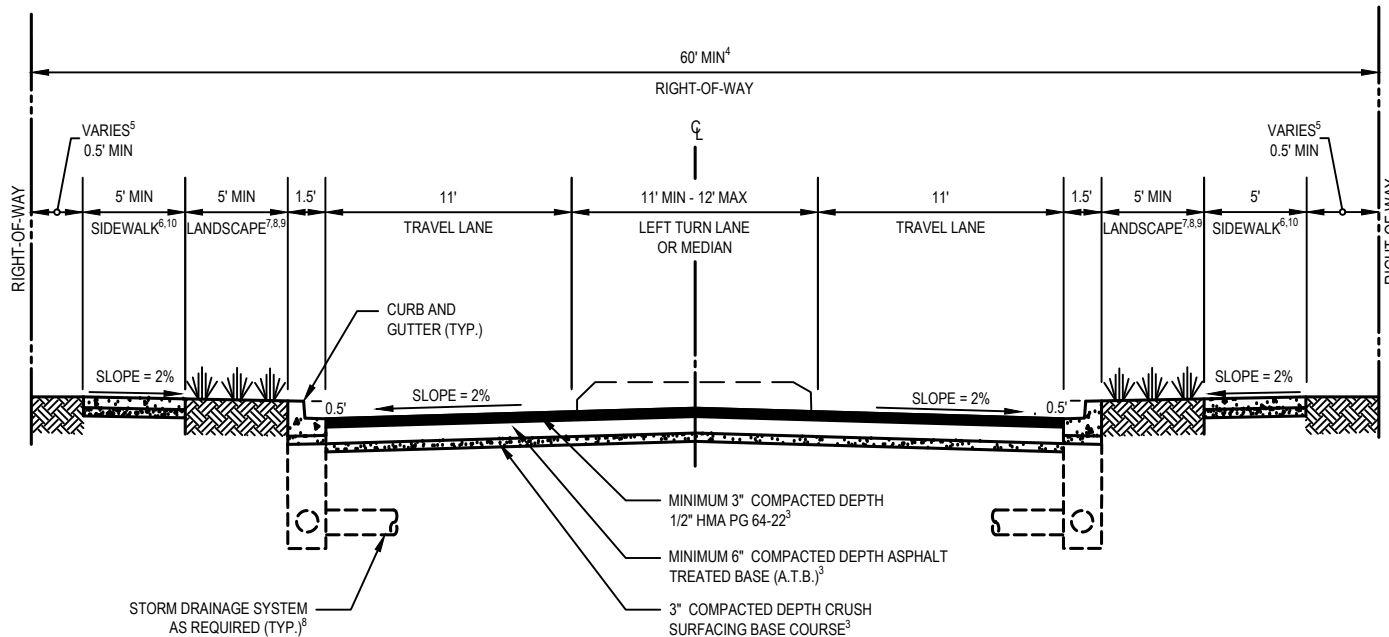
- 1) Maps not contained in the body of the report.
- 2) Count data used for analysis.
- 3) Level Of Service (LOS) calculations:
 - a) Detailed summary sheet from HCS signalized is ok.
 - b) Software output must explicitly state all input and phase lengths used in the analysis.
- 4) Warrant worksheets for signals, all-way stops, protected turn phasing, right and left turn lanes, intersection sight distance, etc.
- 5) Signal progression analysis.
 - a) All input and output.

Concurrency:

- 1) The department shall make a concurrency determination for each development application.
- 2) The determination may change based upon revisions in the application.
- 3) Any change in the development after approval will be resubmitted to the director, and the development will be re-evaluated for concurrency purposes.
- 4) Concurrency shall expire 6-year after the date of the concurrency determination, or, in the case of approved residential subdivisions, when the approval expires or when the application is withdrawn or allowed to lapse.
- 5) If concurrency expires prior to building permit issuance, the director shall at the request of the developer consider evidence that conditions have not significantly changed and make a new concurrency determination.

Reference Document Recommendations (Not all inclusive and in no particular order):

- ITE Trip Generation Manual
- ITE Trip Generation Handbook
- City of Marysville Engineering Design and Development Standards (EDDS)
- City of Marysville Municipal Code
- WSDOT Standard Specifications for Road, Bridge and Municipal Construction 2012
- WSDOT Design Manual
- WSDOT Standard Plans
- MUTCD as adopted by State of Washington
- ITE Journal
- AASHTO "Green Book"
- City of Marysville Comprehensive Plan and Sub-Area Plans
- Snohomish County EDDS Chapter 30.66B - Concurrency & Roadside Impact Mitigation
- Highway Capacity Manual



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LANDSCAPE WIDTH

| MASTER PLAN | WIDTH |
|--------------|---------|
| LAKEWOOD | 5' MIN* |
| DOWNTOWN | 3' MIN* |
| 88TH ST | 5' MIN* |
| SMOKEY POINT | 6' MIN* |
| STATE AVENUE | 5' MIN* |

*SHALL BE PER CITY ENGINEER OR DESIGNEE.

SIDEWALK WIDTH

| MASTER PLAN | WIDTH |
|--------------------------------|---------|
| EAST SUNNYSIDE - WHISKEY RIDGE | 8' MIN* |
| LAKEWOOD | 5' MIN* |
| DOWNTOWN | 5' MIN* |
| SMOKEY POINT | 6' MIN* |
| STATE AVENUE | 5' MIN* |

*SHALL BE PER CITY ENGINEER OR DESIGNEE.

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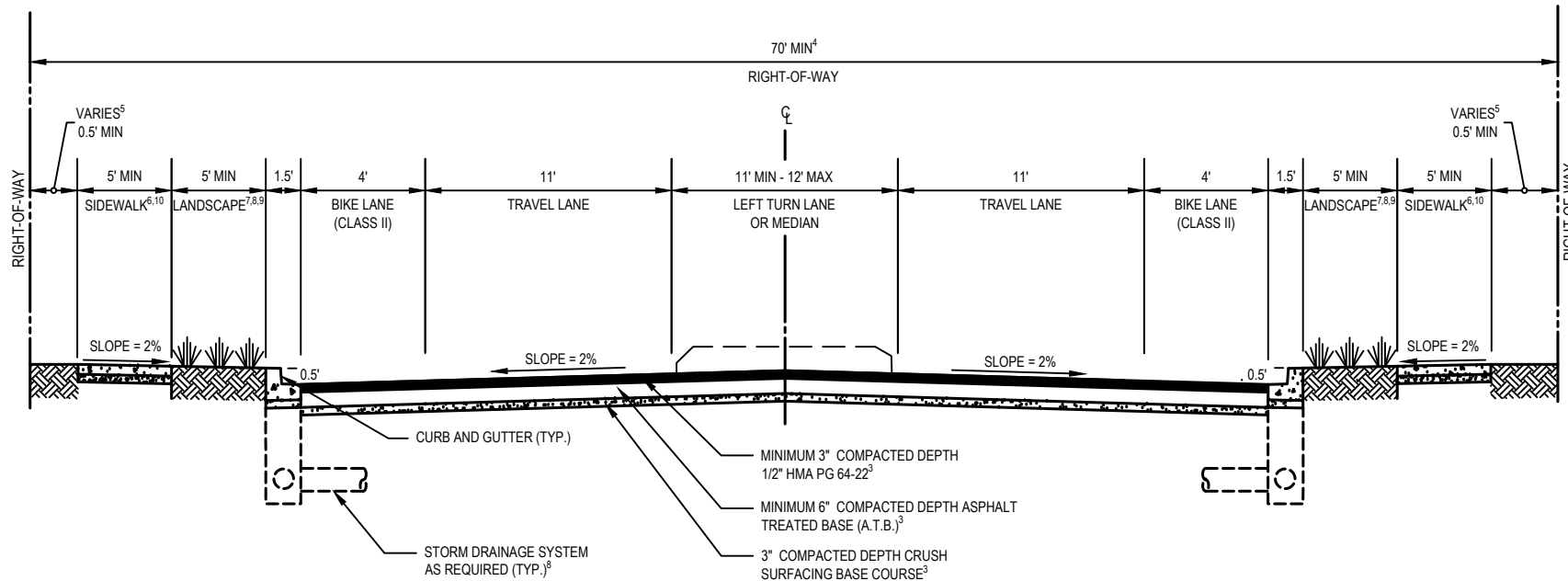
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3-LANE ARTERIAL



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LANDSCAPE WIDTH

| MASTER PLAN | WIDTH |
|--------------|---------|
| LAKEWOOD | 5' MIN* |
| DOWNTOWN | 3' MIN* |
| 88TH ST | 4' MIN* |
| SMOKEY POINT | 6' MIN* |
| STATE AVENUE | 5' MIN* |

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SIDEWALK WIDTH

| MASTER PLAN | WIDTH |
|--------------------------------|---------|
| EAST SUNNYSIDE - WHISKEY RIDGE | 8' MIN* |
| LAKEWOOD | 5' MIN* |
| DOWNTOWN | 5' MIN* |
| SMOKEY POINT | 6' MIN* |
| STATE AVENUE | 5' MIN* |

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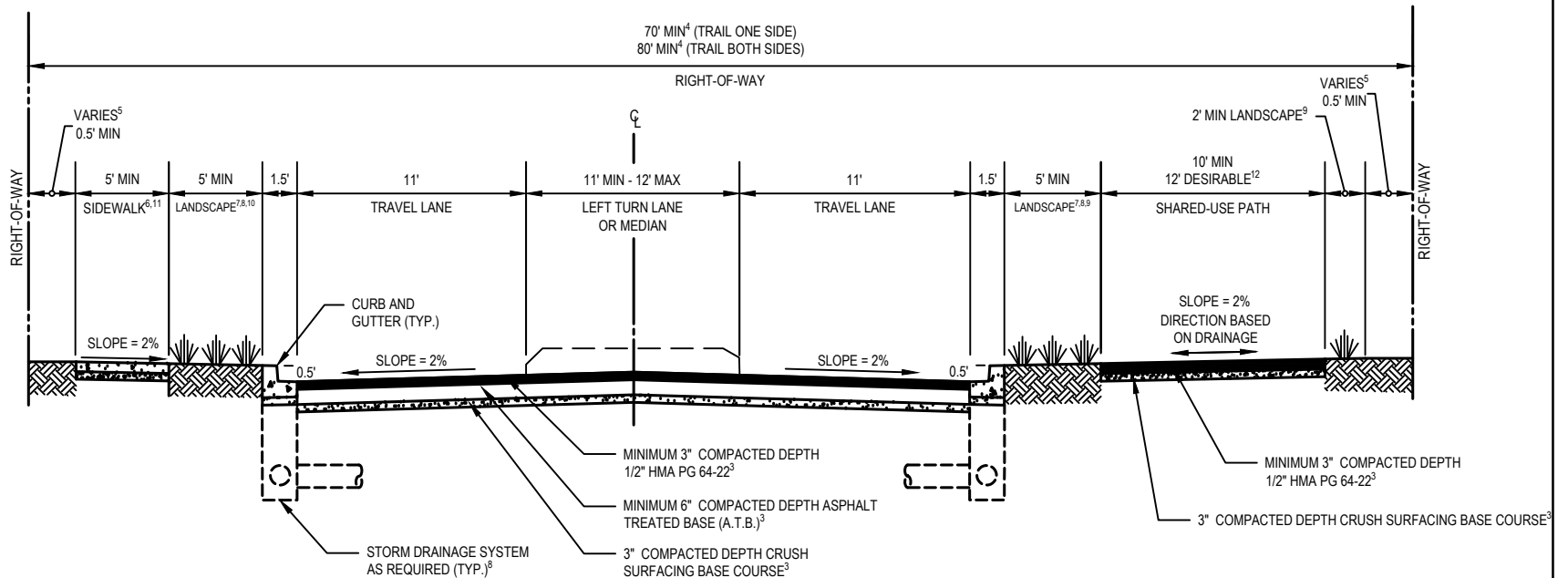
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3-LANE ARTERIAL

BICYCLE
CONFIGURATION



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| LANDSCAPE WIDTH | |
|-----------------|---------|
| MASTER PLAN | WIDTH |
| LAKEWOOD | 5' MIN* |
| DOWNTOWN | 3' MIN* |
| 88TH ST | 5' MIN* |
| SMOKEY POINT | 6' MIN* |
| STATE AVENUE | 5' MIN* |

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| SIDEWALK WIDTH | |
|--------------------------------|---------|
| MASTER PLAN | WIDTH |
| EAST SUNNYSIDE - WHISKEY RIDGE | 8' MIN* |
| LAKEWOOD | 5' MIN* |
| DOWNTOWN | 5' MIN* |
| SMOKEY POINT | 6' MIN* |
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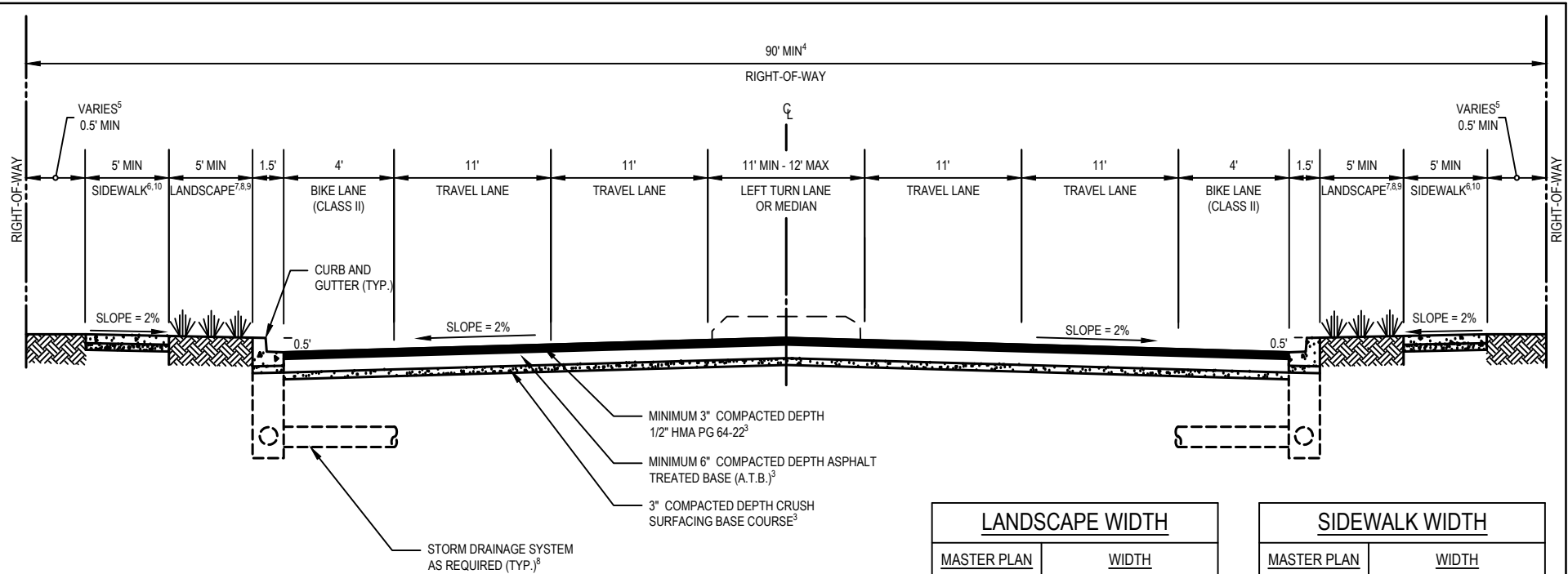
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3-LANE ARTERIAL

SHARED-USE PATH
 CONFIGURATION



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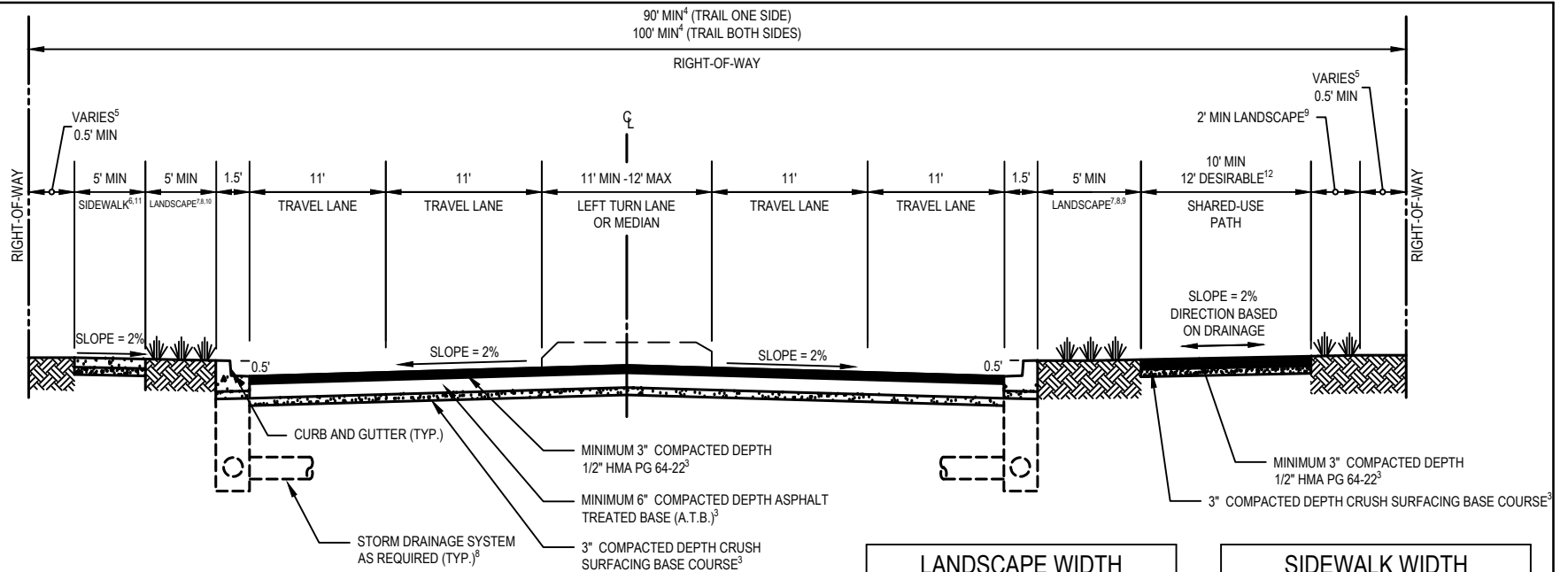
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07/14/20
 DATE



5-LANE ARTERIAL
 BICYCLE
 CONFIGURATION



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|-----------------|---------|
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| 88TH ST | 5' MIN* |
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| SIDEWALK WIDTH | |
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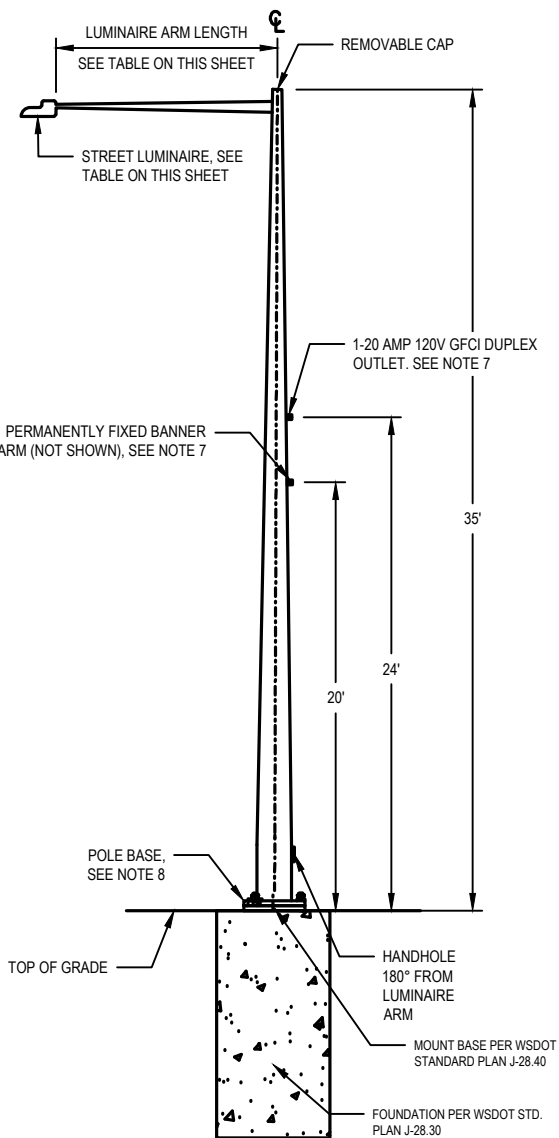
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 DATE



5-LANE ARTERIAL

SHARED-USE PATH
 CONFIGURATION



DECORATIVE STREET LIGHT
STANDARD AND BASE DETAIL
FIXED BASE SHOWN

LAST REVISED 06/22/20

| STREET LUMINAIRE | | | | | | | | |
|------------------|------------|---------|------|--------------|---------|-------------------|------------|--|
| MANUFACTURER | MODEL | MODEL # | TYPE | DISTRIBUTION | WATTAGE | COLOR TEMPERATURE | ARM LENGTH | |
| LEOTEK | GREENCOBRA | GC2 | LED | 3 | 106 W* | 4,000K | 12 FT | |

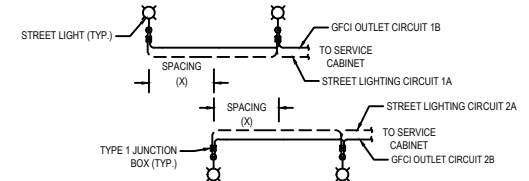
*ALTERNATE WATTAGE MAY BE USED AS APPROVED BY CITY ENGINEER OR DESIGNEE.

| MAXIMUM STREET LIGHT SPACING PER ROADWAY CLASSIFICATION** | X*** |
|---|--------|
| PRINCIPAL ARTERIAL - 5 LANES | 100 FT |

**SEE NOTE 5
***SEE NOTE 6

| CIRCUIT**** | VOLTAGE | CONDUCTOR | MAXIMUM STREET LIGHTS/GFCI OUTLETS PER CIRCUIT***** |
|-----------------|---------|-----------|---|
| STREET LIGHTING | 240 V | #8 AWG | 15 |
| GFCI OUTLET | 120 V | #8 AWG | 15 |

****STREET LIGHTING & GFCI OUTLET CIRCUITRY SHOWN FOR ONE SIDE OF ROADWAY.
*****IF MAXIMUM NUMBER OF STREET LIGHTS/GFCI OUTLETS PER CIRCUIT EXCEED THE QUANTITY SHOWN, A LARGER CONDUCTOR GAUGE MAY BE REQUIRED.



TANGENT ROADWAY STREET LIGHT SPACING AND CIRCUITRY DESIGN

NOTES

- DECORATIVE STREET LIGHTING STANDARD SHOWN ON THIS SHEET SHALL BE USED FOR THE FOLLOWING ROADWAY SEGMENTS AS DIRECTED BY THE CITY ENGINEER OR DESIGNEE:
 - 156TH ST NE (23RD AVE NE TO EASTERN CITY LIMIT).
- ALL STREET AND PEDESTRIAN LIGHT STANDARDS, FIXTURES, AND BASES SHALL BE POWDER COATED COLOR RAL7022TX (UMBRA GREY).
- SEE CITY OF MARYSVILLE SPECIAL PROVISIONS FOR ADDITIONAL STREET LIGHTING STANDARD SPECIFICATIONS.
- ORIENT STREET LIGHTING STANDARD PERPENDICULAR TO ROADWAY CENTERLINE UNLESS OTHERWISE APPROVED BY CITY ENGINEER OR DESIGNEE.
- MAXIMUM STREET LIGHT SPACING SHOWN IS FOR TANGENT ROADWAY SEGMENTS ONLY WITH LIGHTING ON BOTH SIDES OF THE ROAD AT STAGGERED OFFSET FROM ONE ANOTHER. CURVED ROADWAYS SEGMENTS SHALL REQUIRE PHOTOMETRIC EVALUATION THE CITY OF MARYSVILLE ENGINEERING DESIGN AND DEVELOPMENT STANDARDS.
- MAXIMUM STREET LIGHT SPACING WAS EVALUATED FOR MINIMUM AVERAGE MAINTAINED LIGHT LEVEL OF 1.4 FOOT CANDLES AND MAXIMUM UNIFORMITY RATIO (AVERAGE LIGHT LEVEL / MINIMUM LIGHT LEVEL) OF 4:1 USING THE 106W LEOTEK GREENCOBRA LUMINAIRE PER INTERMEDIATE AREA CLASSIFICATION FOR PRINCIPAL ARTERIAL BASED ON THE CITY OF MARYSVILLE CHAPTER 3-506 ENGINEERING DESIGN AND DEVELOPMENT STANDARDS. USE OF AN ALTERNATE FIXTURE/WATTAGE, ROADWAY CLASSIFICATION, AREA CLASSIFICATION, AND/OR TYPICAL SECTION SHALL REQUIRE PHOTOMETRIC EVALUATION PER THE CITY OF MARYSVILLE ENGINEERING DESIGN AND DEVELOPMENT STANDARDS.
- BANNER ARM AND GFCI OUTLET AT A MINIMUM SHALL BE PLACED ON EVERY OTHER STREET LIGHT STANDARD ALONG ROADWAY SEGMENT.
- POLE BASE SHALL BE DETERMINED BASED ON CLEAR ZONE REQUIREMENTS PER WSDOT DESIGN MANUAL CHAPTER 1600.

APPROVED BY

[Signature]
MARYSVILLE CITY ENGINEER

07/14/20
DATE



STREET AND PEDESTRIAN
LIGHTING STANDARDS -
SEGMENT 5

NOT TO SCALE

STANDARD PLAN 3-506-005

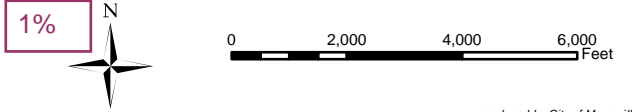
MIC NORTH - EXISTING



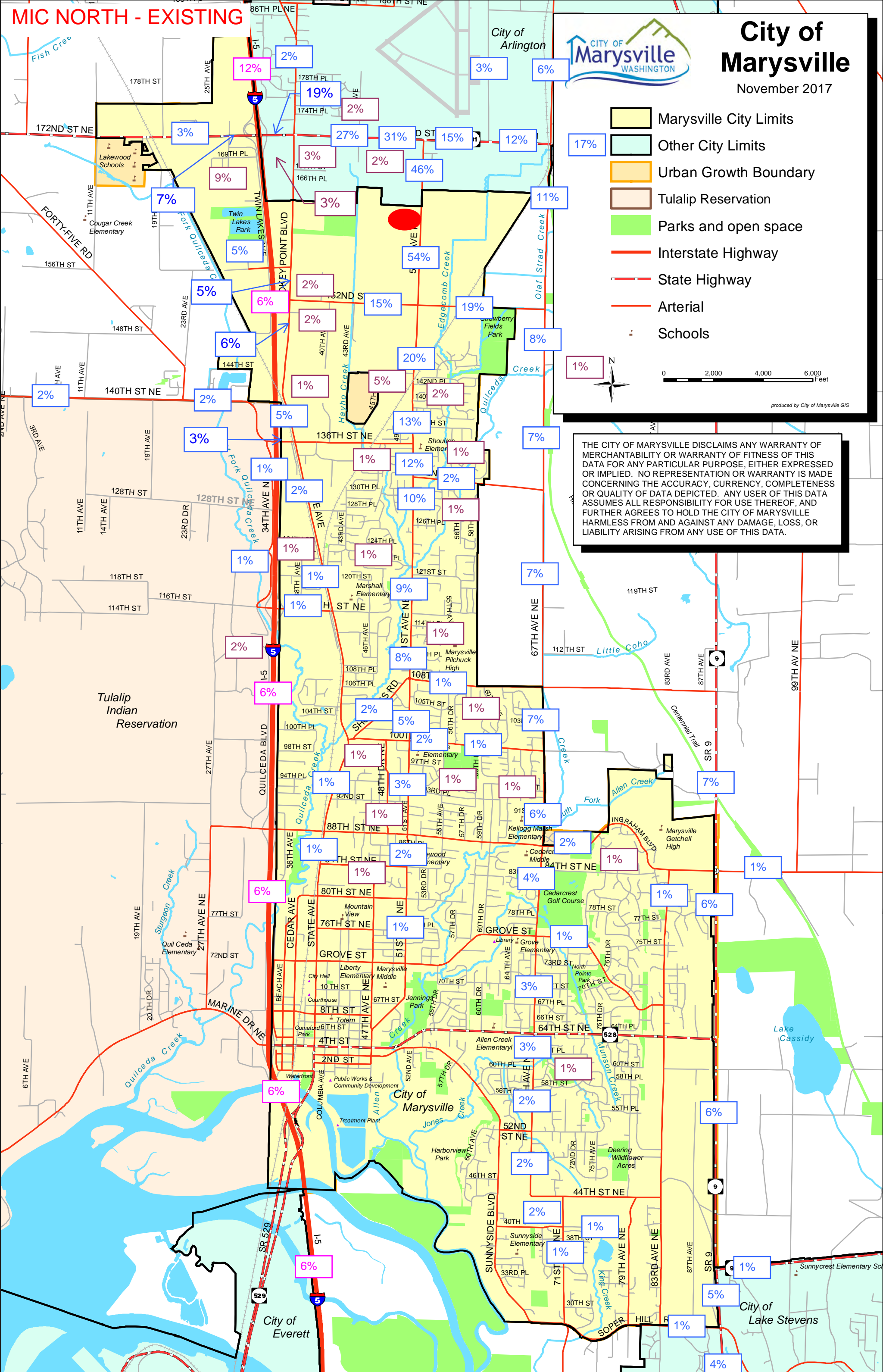
City of Marysville

November 2017

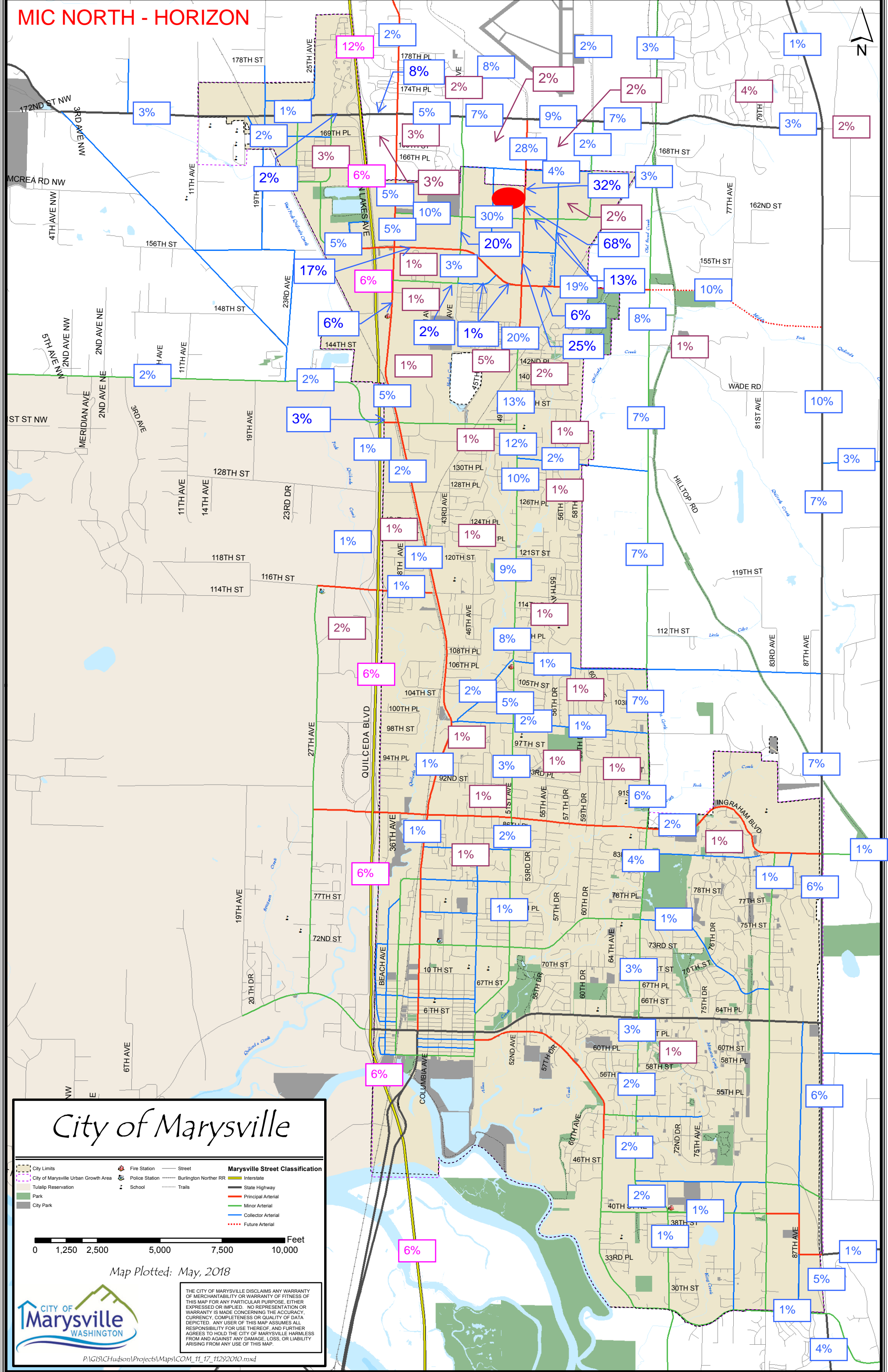
- Marysville City Limits
- Other City Limits
- Urban Growth Boundary
- Tulip Reservation
- Parks and open space
- Interstate Highway
- State Highway
- Arterial
- Schools



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MIC NORTH - HORIZON



City of Marysville

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| | | | Marysville Street Classification |
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0 1,250 2,500 5,000 7,500 10,000 Feet

Map Plotted: May, 2018

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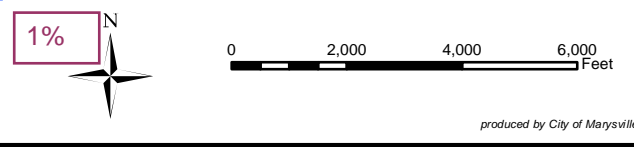
MIC SOUTH - EXISTING



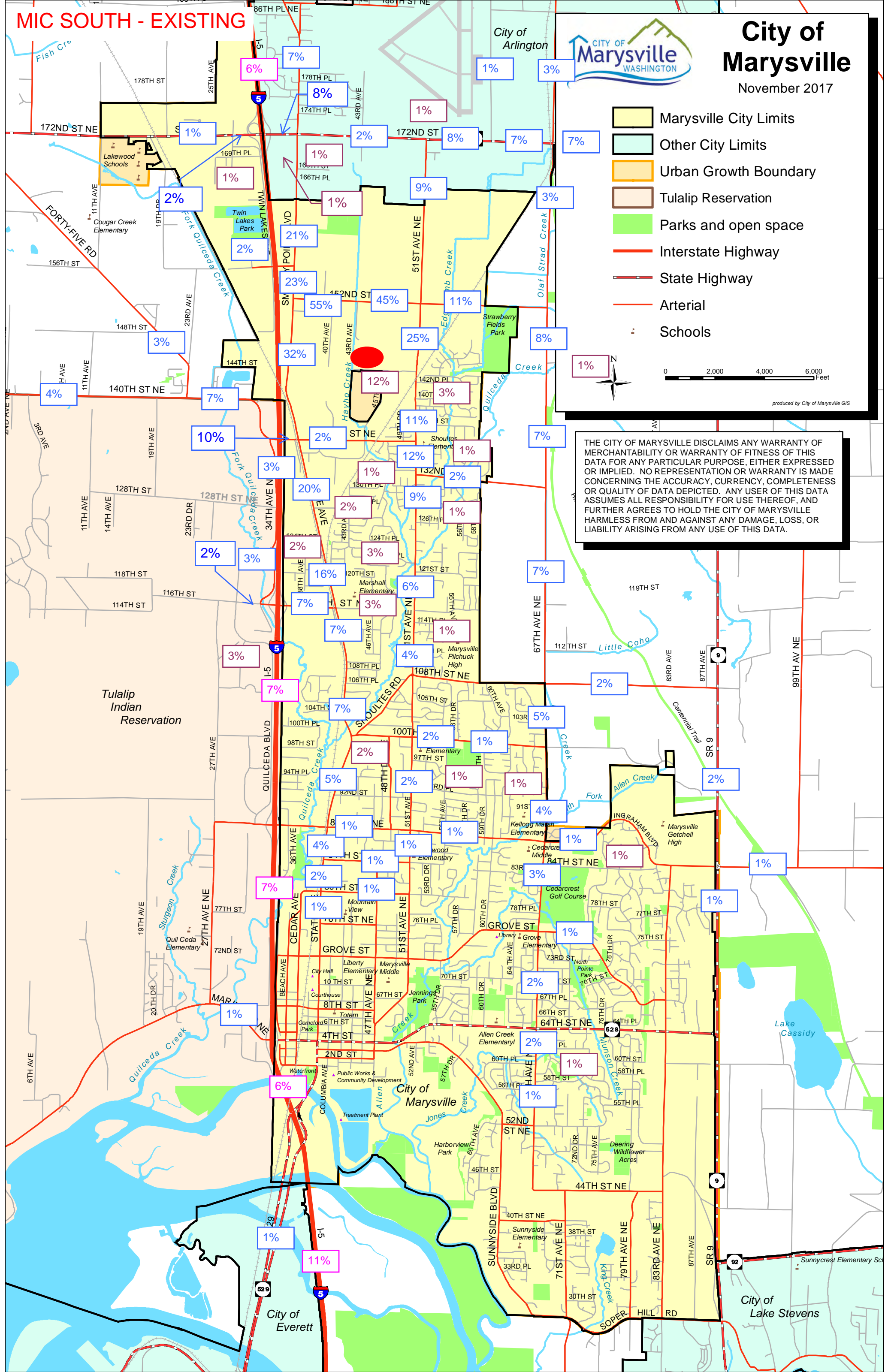
City of Marysville

November 2017

- Marysville City Limits
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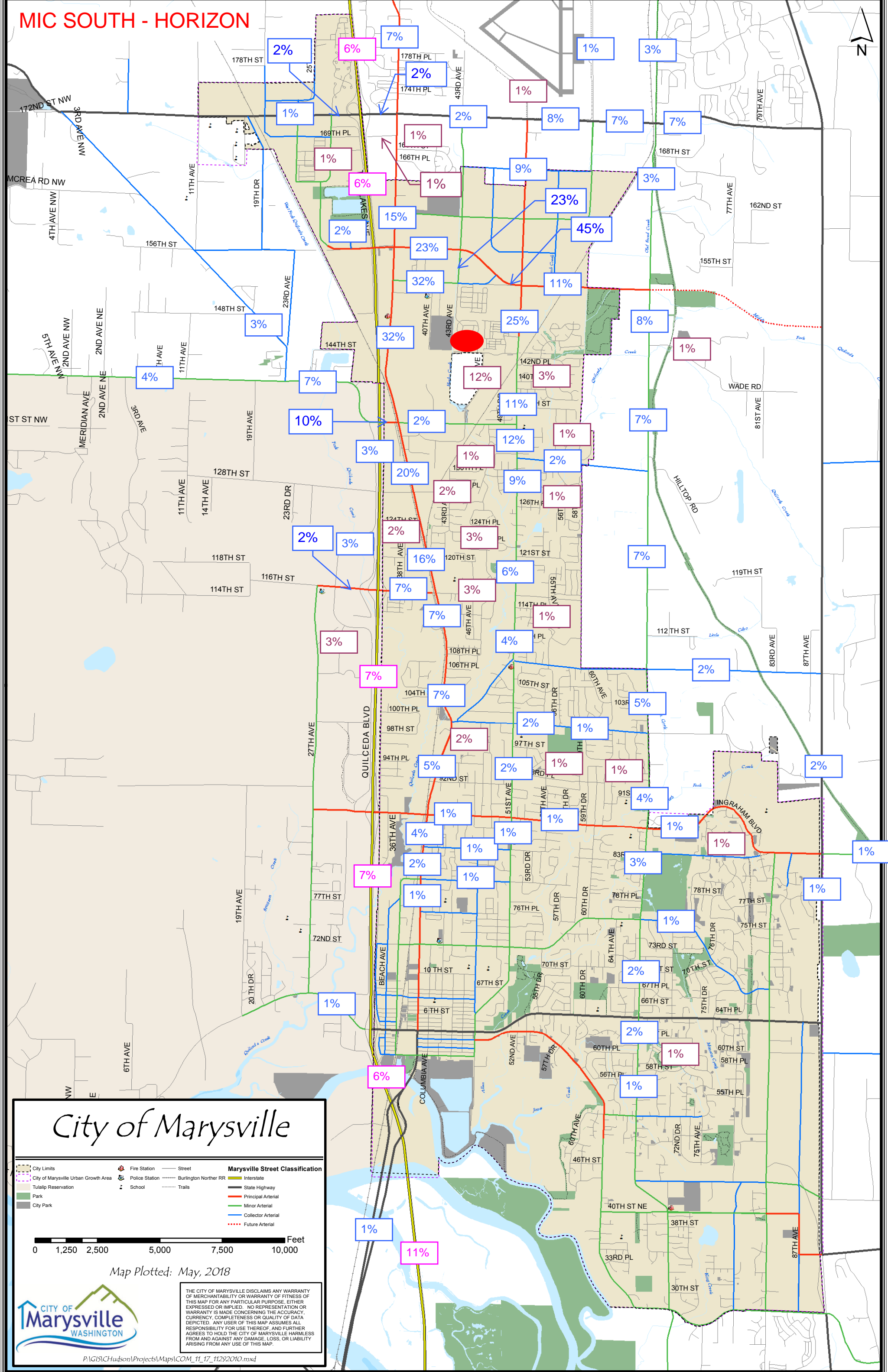
Tulip Indian Reservation

City of Marysville

City of Everett

City of Lake Stevens

MIC SOUTH - HORIZON



City of Marysville

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| | | | Marysville Street Classification |
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Map Plotted: May, 2018

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