AGENDA
Veneta Planning Commission

TUESDAY – September 6, 2016 – 6:30 p.m.
Veneta City Hall

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1. REVIEW AGENDA

2. PUBLIC COMMENT

If you wish to address the Planning Commission; state your name, address, and limit your comments to 3 minutes. Maximum time 20 minutes. The Planning Commission will not engage in any discussion or make any decisions based on public comment at this time; however, they may take comments under advisement for discussion and action at a future Planning Commission meeting.

3. APPROVAL OF MINUTES

a. August 2, 2016 (pgs.)

4. LEGISLATIVE DECISION, CONTINUED FROM AUGUST 2, 2016 – PROPOSED COMPREHENSIVE PLAN DIAGRAM AND ZONING MAP AMENDMENTS, FILE #CP-ZC-1-16, SARTO VILLAGE

1. Planning Commission Deliberation and Recommendation

5. QUASI-JUDICIAL PUBLIC HEARING, CONDITIONAL USE PERMIT, FILE # CUP-2-16 VALLEY UNITED METHODIST CHURCH (DAY CARE FACILITY)

1. Open Hearing
2. Declaration of Conflict of Interest or Ex-Parte Contacts
3. Staff Report (Lisa Garbett)
4. Applicant/Proponents
5. Opponents
6. Neutral testimony
7. Applicant rebuttal
8. Questions from the Planning Commission
9. Close of Public Hearing
10. Deliberation and Decision

6. OTHER

7. ADJOURN

Location is wheelchair accessible (WCA). Communication interpreter, including American Sign Language (ASL) interpretation, is available with 48 hours' notice. Contact Darci Henneman; Phone (541) 935-2191, FAX (541) 935-1838 or by TTY Telecommunications Relay Service 1-800-735-1232.

THIS MEETING WILL BE DIGITALLY RECORDED.

The Planning Commission considers all public comments, staff reports, and City ordinances in arriving at a final decision. **Staff reports are available for review at Veneta City Hall - 88184 8th Street - Veneta, Oregon.**

LAND USE DECISIONS - Veneta Municipal Code Chapter 18.05
Whenever this chapter is in effect, the following procedures or procedure similar thereto shall be followed by the city staff and applicable decision-making body: (1) Preparation of brief statement setting forth the criteria and standards considered relevant to the decision of the city staff. Such shall utilize criteria and standards found in the applicable ordinance, the comprehensive plan, and other ordinances and rules and regulations now in effect as from time to time adopted by the city council and appropriate decision-making body.

PUBLIC HEARINGS - Please observe the following rules.

WRITTEN TESTIMONY:
Written comments received seven (7) days prior to the meeting have been incorporated in the staff report. All comments, including those received up until the meeting, are presented to the Planning Commission members to be considered in their decision.

ORAL TESTIMONY:
If you wish to testify with regard to a matter which has been set for ***Public Hearing*** please observe the following rules:

1. **State your name and address.**
2. **Indicate if you are in favor of or opposed to the proposal.**
3. **Limit your testimony to three (3) minutes. Testimony must be specific to the issue at hand. Keep your comments brief and to the point.**

The Planning Commission considers all public comments, staff reports, and City ordinances in arriving at a final decision. **Staff reports are available for review at Veneta City Hall - 88184 8th Street - Veneta, Oregon.**

Minutes of the Veneta Planning Commission
August 2, 2016

Present: James Eagle Eye, Kevin Conlin, Len Goodwin, and Lily Rees

Others: Kay Bork, Community Development Director; Carrie Connelly, Legal Counsel; Lisa Garbett, Planner; Ric Ingham, City Administrator; Claudia Denton, Economic Development Specialist; Lane Branch, Branch Engineering; Darci Henneman, City Recorder; Mick Bryant; Anthony Clemons; Karen Wickham; Jim Haddock; Clint Beecroft, EGR & Associates Engineering; Raymond Yancy; Chris Murphy; Father Trevor Burfitt; Greg Demers; Angela Demers; Bob Gordon; Jackie Burnett; Andrea Larson; Trishawn Hodurski; Sherrie Head; Dean Schlett; Jerome Poulin; and Joan Mariner, Fern Ridge Review

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I. REVIEW AGENDA

Chair James Eagle Eye opened the Veneta Planning Commission meeting at 6:30 p.m. and reviewed the agenda.

II. PUBLIC COMMENT

Mick Bryant, 25263 E. Bolton Rd., Veneta, OR

Mr. Bryant thanked the City for paving the section of Bolton Rd. from Territorial Rd. to the stop sign but he would like to see sidewalks on Bolton Rd. in front of the Church and school. He said a lot of people, either Church goers or community members walk on that section of roadway where there is no shoulder and deep ditches on both sides of the road. He said when he built his house, he donated 14 ft. for future sidewalks and he wanted to know when will that happen?

Chair James Eagle said staff will contact Mr. Bryant during office hours.

Anthony Clemons, 25156 Cherry Ln., Veneta, OR

Mr. Clemons said the section of Perkins between Oak Island and Territorial is really bad and he wanted to know when it would be fixed. He also said he liked the name of the Transportation Utility Fee (TUF) and doesn't want it changed to Street Utility Fee (SUF). He also said he noticed a chemical smell coming from the sewer and he wanted to know what phone number he can call to report it in case he can identify where it's coming from. He also said he's glad to see so many people attending tonight's meeting. He said this is the place to come and he's so glad there are so many people here.

Karen Wickham, 25363 E. Bolton Rd., Veneta, OR

Ms. Wickman said she runs a business from her home on Bolton Rd. and she said the street signage at the four way intersection of E. Bolton Rd., Pine and Trinity Terrace is not clearly marked. She said when traveling east on E. Bolton Rd. from Territorial, it's hard for people to find her business. She said there's no sign indicating E. Bolton turns to the right and it would be nice to have a sign there.

Jim Haddock, 87949 Sherwood St., Veneta, OR

Mr. Haddock said a visitor to Veneta told him the same thing - the sign on E. Bolton Rd. indicates E. Bolton goes in the opposite direction. Also, he wanted to know if the City has sniffers for finding the illegal dumping. He said since its happened three times, it doesn't sound like it was an accident.

III. APPROVAL OF MINUTES

MOTION: Len Goodwin made a motion to approve the June 7, 2016 minutes. Kevin Conlin seconded the motion which passed with a vote of 4-0.

Chair James Eagle Eye said in order to avoid any possible bias as a adjacent property owner, any comments he makes tonight will be as a resident and not as the Planning Commision Chair.

Therefore, he is stepping down from chairing the meeting and asked Vice Chair Len Goodwin to chair tonight's public hearing.

Vice Chair Len Goodwin agreed to chair the public hearing.

IV. LEGISLATIVE PUBLIC HEARING – PROPOSED COMPREHENSIVE PLAN DIAGRAM AND ZONING MAP AMENDMENTS, FILE #CP-ZC-1-16 SARTO VILLAGE

1. Vice Chair, Len Goodwin opened the Public Hearing at 6:32 p.m.

2. Declaration of Conflict of Interest or Ex-Parte Contacts
   Kevin Conlin said he had one brief contact from someone who asked a question about the public hearing process.

   Lily Rees said she attended the applicant's neighborhood presentation last week.

3. Staff Report
   Garbett said the applicant is requesting a Zone and Comprehensive Plan designation (map only) amendment of approximately 50 acres, comprising three tax lots, from Rural Residential and Low Density Residential to Medium Density Residential and accompanying zone change from Rural Residential and Singly Family Residential to General Residential. The site is located south of Hunter Rd., east of where Trinity Terrace stubs to the east. The approval criteria includes the Veneta Comprehensive Plan (Comp Plan), Chapter 3 and 5, Article II of the Veneta Land Development (VLD) Ordinance No. 493 and also four statewide planning goals: Goal 1 - Citizen Involvement, Goal 2 - Land Use Planning, Goal 10 – Housing; and Goal 12 Transportation. The applicant intends to develop the site with a senior living project, consisting of a mix of housing options for seniors 55 years and older. The project will consist of 130 to 150 detached and attached single family residential units and a residential facility consisting of independent assisted living and memory care units. Tonight's public hearing is not for an approval of the development plan but re-designation of the Comprehensive Plan Diagram. The approval criteria allows Rural Residential designated land to convert to urban densities as long as the applicant can show that City services are available. Garbett said notice of the public hearing was sent and published in accordance with VLD Ordinance No. 493 and referral comments were received from Lane Branch, Branch Engineering, and four written public comments were included in the staff report. A primary issue is transportation which the applicant submitted a Transportation Impact Analysis (TIA) to show compliance with the Transportation Planning Rule. The information provided by the applicant is a worst case scenario, so for the land to be re-designated, the TIA study analyzed the site in terms of impacts for worst case scenario development. The TIA applied a trip generation rate that was the worst case development scenario and in order to avoid impacts and required mitigation to the Huston Rd. and Highway 126 intersection, the City Engineer recommended a trip cap and made it a condition of approval for 97 PM peak hour trips which is the maximum allowed in terms of the zone change. The applicants' TIA also indicated the development would be limited to age restricted housing based on their analysis but we did not include that as a condition of approval because we didn't want to limit future development, if age restricted housing was not what the property owner wanted in the future. In terms of sewer capacity, the initial analysis found that a pump station would likely be required upon development and not at the time of this amendment request. She said likely that would be a condition of approval that the future pump station would serve capacity for future development but that would take place during development review.

   Lily Rees said staff is stating that the City cannot restrict development types that are allowed in a zoning district but this is being presented as an age restricted development and as such a lower number of daily trips are expected and that is the trip cap that was used. She said but we can't require an irrevocable development agreement restricting the development to age related but at the same time we're using the age related development expectation as a way to calculate the

number of trips. She said this is confusing – if we're saying older people make less trips but we can't require the applicant sign an irrevocable development agreement yet we're basing approval on that.

Carrie Connelly, Legal Counsel said the first step is that the trip cap ties to a direct criteria; assuring that sufficient urban services are available up to the cap amount proposed by the applicant. While the use isn't restricted it could be used for any use in the rezone. If a higher density use or type of use were built there they would still be subject to that cap.

In response to a question from Lily Rees, Ms. Connelly said enforcement would be based on the number of houses going in.

Bork said the condition would be applied to the zone change so developers would know that they are still subject to a specific trip cap regardless of the kind of development. She said at the time the subdivision plan is submitted, they would need to explain how it meets that trip cap at the time of development.

In response to a question from Lily Rees, Garbett said she meant to include the greenway and flood zone language in the staff report, however, it would not change the existing greenway over lay or the flood plain overlay. She said the asterisk at the bottom of the table indicates that.

Lily Rees said E. Hunter Rd. is identified as a major collector, but not its built to the major collector standards. She suggested maybe it should be brought to that standard before the development.

Bork said there are several major collectors designated in the City that aren't currently built to City standards but the City requires any portion of development that fronts a street to be brought to City standards. She said it doesn't make sense to bring a section of a collector to City standards until the entire street is built out. She said the City's adopted Transportation System Plan (TSP) identified East Hunter to be built out to full urban standards at some point in the future. She said usually the City constructs the road improvements and the sidewalk pieces are assessed to abutting property owners. She said the applicant will be required to improve to City standards all of the local streets they are constructing as well as Baker Lane. At the time of development the Planning Commission may require the Hunter Rd. street frontage to be improved or require the applicant to sign an irrevocable development agreement but we can't require the applicant to develop the remainder of Hunter Rd. She said generally collectors get improved through some type of City initiated project.

Lane Branch said Hunter Rd. was identified in the TSP as being approved as a capital project but we just haven't gotten to it yet.

In response to a question from Lily Rees, Lane Branch said as properties are developed we are either requiring them to build the improvements or sign an irrevocable petitions for improvements. He said as we collect more of these we'll have more authority to build a full street improvement.

In response to a question from Len Goodwin, Lane Branch said the distance from Baker Lane to Huston Rd. is about 2000 ft.

In response to a question from Len Goodwin, Bork said the Fern Meadows Ln. residents likely all signed irrevocable petitions as part of that subdivision.

Len Goodwin said page 11 of the Traffic Impact Analysis (TIA) indicates there will be a substantial increase of traffic at the intersection of Huston Rd. and Highway 126 and no similar substantial increase at the intersection of Hunter Rd. and Territorial Rd. He said he reviewed the details of the TIA and noticed there is substantial increased northbound/eastbound movement at the corner of Territorial and Huston Rd. [sic] (Hunter Rd.) and small limited increase at Territorial and Highway

126. He said that suggests that most of the movement from this site will be along Hunter Rd. east to Huston Rd. and there are virtually no other are reasonable exits from this development. He said given the split of increased traffic if it is reasonable that we can continue to leave the portion of Hunter Rd. from Baker Ln. east to Huston Rd. not upgraded to City standards.

Lane Branch said the criteria for the zone change looked at the vehicle capacity for that system and based on the TIA there is adequate capacity for that system and vehicles. Regarding pedestrian and bicycle facilities they didn't see that was an item they could identify as a need.

Len Goodwin said we can't require them to bring it above standards but it suggested a level of congestion that could raise safety concerns.

Lane Branch said the proposed mitigation to that is the trip cap or limited to age restricted housing. He said identifying that mitigation, it keeps the threshold as far as the capacity is concerned. He said .84 is unmitigated.

Len Goodwin said the applicant will be required to install a pump station to serve the development. He asked if we know the size and extent of the basin which the main line serving that development currently serves. He asked what's the risk to the City of further development in that basin to require extensive alternations; either expansion of a pump station, duplicate lines or massive expansion of the lines.

Lane Branch said the Wastewater Master Plan (WWMP) was adopted by the City Council in 2009 and it identified about a third of the site with gravity drain toward Trinity Terrace and two-thirds of the site, primarily the northeast, would likely drain toward the east pump station. He said that infrastructure is not in place at this moment. He said the City's wastewater engineer reviewed this and commented that the existing gravity main from Pine St. to Lindsay Ln. is likely to have some capacity constraints to serve the area. As part of the proposal, when it comes in, the applicant would be required to review the capacity and if it cannot serve the proposed development, they would need to upsize the portion of that system. He said they would be required to have a pump station to pump into that gravity system and likely the pump station would be on their property and they would be obligated to construct as a public improvement to serve as much area as possible.

Len Goodwin said he questions how much of that area to the east toward the Urban Growth Boundary (UGB) will present a capacity challenge beyond this development. He said we must presume ultimate build out of the UGB as part of the Comprehensive Plan and he understands what the potential need for further expansion of the system will be when and if we reach build out.

Ingham said the City adopted a Wastewater Master Plan (WWMP) in 2009 that outlined the collection and transmission system. Two thirds of that property will flow east, to Huston Rd., down Highway 126 to Jeans Rd. and eventually to the Jeans Rd. lift station. He said the wastewater engineers recently submitted a revision to 2009 WWMP and Council will review and adopt this fall with the intent to have this plan included in the WWMP. He said at that point, the City has reached a critical mass to build out the east side.

Len Goodwin asked staff to include the planning goals in the staff report.

Garbett pointed out a typographical error in Exhibit A of the Final Order, on page 13, Finding No. 6 should read "55 and older" and not "65 and older".

4. Applicant/Proponents
Raymond Yancy, Sarto Village
Mr. Yancy thanked the Planning Commission for their time and also thanked staff for their assistance to this point. He said Jerome Poulin, Sarto Village, Clint Beecroft, EGR & Associates, Engineering, and Mike Weishar, Access Engineering put together the criteria for the project. He

said they are requesting a zone change in order to accommodate Sarto Village - a proposed 55 plus senior living development. He said as part of the application they included a memo that included the current master plan which was presented at the neighborhood meeting. He said as they continue with the process, there will be additional steps that will include input from the City and residents so this is not the only aspect to approving this project. He said they are asking for the zone change due to the changing demographics and as our population ages, there is a need and that is why they are requesting this zone change tonight. He said they've studied the services to support the zone change and believe the services are available to meet the need. He said the cap for the TIA is a condition of approval, and they are requesting a slight modification to that language to read as follows: "a trip cap mitigation shall be implemented for this site that will require the applicant to record a restrictive covenant for Assessor's map/Tax No. 17-05-31-00-00501 and 17-05-31-34-00600, in a form acceptable to the City Attorney, stipulating any future development on the property is subject to a trip cap. This trip cap from the site shall be determined to an amended TIA technical memorandum from the Applicant's Traffic Engineer. The supporting memorandum will substantiate that the final trip cap shall maintain the functional performance standard of the intersections as studied for the TIA. This memorandum will be presented to the City Engineer for review and recommendation to the City Council during the City Council hearing for this zone change for final approval."

Len Goodwin said the applicable substantive criteria that applies to this application are contained in the written staff report and will be identified and discussed in the oral staff report. He continued with the language required prior to receiving public testimony.

James Haddock, 87945 Sherwood St., Veneta, OR
Mr. Haddock said he is in favor of the development. He said before he started his business, he spent months evaluating the need for such a business and he eventually fulfilled that need. There's a definite need for a retirement community and as he sees the influx of California license plates and people moving to Veneta. He said local businesses would benefit, jobs, etc. and it would be a benefit to the entire community because it fulfills a need we, as a growing community, need.

Chris Murphy, 25178 Cheney Dr., Veneta, OR
Mr. Murphy said he is favor of the zoning change. He said he and his wife were caring for her aging father and they were unable to find a facility to keep him close to this family. He said a project of this type is needed and would be a great benefit to keep our families and community together.

Mick Bryant, 25263 E. Bolton Rd., Veneta, OR
Mr. Bryant said he is in favor of this project because he is in favor of helping seniors and felt we should do anything we can to help our aging residents. He said we all have parents that live at home with their children or are not able to take care of themselves. In said he is in favor of seniors in that situation.

Father Trevor Burfitt, 25269 E. Bolton Rd., Veneta, OR
Fr. Burfitt said he is the Pastor at St. Thomas Beckett Catholic Church. He said he is in support of this project for a lot of reasons. He said each year the situation of our aging, religious and faithful becomes more pressing and availability of land near Veneta and their Church, prompted them to reconsider this project as a good fulfillment of helping their seniors of the faithful and also the priests who are a part of his order. They are looking at this as a national project for all priests in the United States to live here and the less aged priest would take care of them. It would allow the priests to live with other like-minded Catholics. He quoted John F. Kennedy.

Greg Demers, 24244 Sertic Rd., Veneta, OR
Mr. Demers said he is in favor of this project. He said as a community we constantly are talking about critical mass and to get Highway 126 improved. He said we deal with retail leakage to Eugene and the lack of identity for our community. He said the development offers good jobs and

as one of the largest property owner in the UGB, he talks to people all the time wanting to move here and establish a business or residence. He said this is a critical issue he hears daily that we don't have. In order to get critical mass, we need to be in favor of expansion and bringing in businesses and private people. He said this project would have significant impact on all of the above mentioned issues and as stated, would bring approximately 350 new residents to Veneta which would increase our population by about 10%. He said those are the types of things that will bring in retail, a McDonalds and a lot of things the community needs to help expand and increase our tax base and revenues. He said these are also tax paying/spending bodies brought to Veneta and the facility would bring about 60 skilled jobs when it's up and running which are badly needed and it would bring in badly needed infrastructure.

Angela Demers, 22992 Red Oak Ln., Veneta, OR
Ms. Demers said she was born and raised in this community and it's a great place to live. She wanted to reiterate what her dad said about expanding Highway 126 and bringing more people out here and increasing business. She said she attended the economic development meeting that was held a couple weeks ago and the common tone was we want to bring more jobs to Veneta. She said we lose a lot of people leaving to find work and a professional atmosphere but she just wants to keep business here and local and in our community.

Bob Gordon, 24241 Vaughn Rd., Veneta, OR
Mr. Gordon said he has lived in Veneta for 17 years and has worked for the Fern Ridge School District for the last five years. He has five children and two are full time care givers for families in Eugene. He said he believes a facility like the one proposed in Veneta it would be a win/win situation. He said it would bring business to our community and we need to take care of our elderly.

5. Opponents
Joan Mariner, 25712 Cochran Ct., Veneta, OR
Ms. Mariner said she opposes the development because it would be 50 acres of a very small community and it would put stress on the surrounding area. She said elderly people still drive and care givers would also contribute to traffic. She said the TUF is needed for maintenance to our streets but doesn't cover capital improvements. She said she attends all of the City Council meetings and she knows how the City struggles with street upkeep and improvements. She said if you add more cars to some of the already substandard streets; we'll have more problems.

Jackie Burnett, 88154 Lindsay Ln., Veneta, OR
Ms. Burnett said she lives off of Hunter Rd. and there are always moms pushing babies in their strollers with kids on bikes and walking to school. She said that is a very dangerous street and there are no plans to fix it. She said based on that, she feels this is not a good undertaking because the infrastructure isn't here yet. She realizes we need development in order to get the infrastructure but Highway 126 needs a lot of improvement first because she's also concerned about getting back and forth to Eugene. Ms. Burnett thinks this development should be put on hold for now.

Andrea Larson, 25456 Hunter Rd., Veneta, OR
Ms. Larson agrees that Hunter Rd. is at its capacity and it's a dangerous road for pedestrians, bikers and drivers because there's nowhere for people to go. She said many drivers are not conscious about others on that road and she felt the City does not have basic services on Hunter Rd. She said getting where you need to go should be a basic safety concern for all residents and we don't have that. Ms. Larson suggested imposing an actual moratorium on any zoning changes that would allow more cars on Hunter Rd. and Huston Rd. She agrees we need more homes and care facilities for seniors, however, people don't realize that the developer is a non-profit agency so the City would receive no property taxes from any of the development to offset the infrastructure costs. Also, a pump station would be required and as Joan Mariner said, we are already at

capacity for expenditures and to add to the infrastructure without any other funds coming in to pay for it, seems like unfair treatment for those of us who already live here.

Trishawn Hodurski, 25010 Meadowdale Ln., Veneta, OR
Ms. Hodurski said she agreed that Hunter Rd. is not adequate, even for the turkeys. She invited people who think it is adequate to travel on Hunter Rd. especially during school hours. She's all for taking care of the elderly and surprisingly, this area has many private care facilities. She said the development will be tax exempt and she felt our community is not healthy enough or large enough to support this development.

Sherrie Head, 88130 Huston Rd., Veneta, OR
Ms. Head said she has lived 1/10 of a mile from Highway 126 for 37 years and traffic has increased drastically. She said when the Fern Meadows subdivision went in, her zoning changed. She said the development is beautiful but it flooded her out because someone didn't do their job. She said there is a flood zone next to Baker Ln. and she asked how more streets and density will effect it. She said she is concerned about the developers' contribution to the tax base. She said Highway 126 needs to be improved but how are they going to widen it with a reservoir and a wetland on either side.

6. Neutral testimony
Anthony Clemons, 25165 Cherry Ln., Veneta, OR
Mr. Clemons said he doesn't mind building to go on, that's what we're supposed to do and he would like to see our elders taken care of but at what cost? He said he jogs on Hunter Rd. and safety is a concern for him as well as the fact that the area is in a flood zone and includes wetlands. He said he can't see a fire truck being able to turn around and also keep the wetlands and there should be no building on wetlands, so a variance is needed and there should be a concerted effort to preserve wetlands. He said the City contracts with Lane County Sheriff's Office to provide public safety to Veneta but because there are going to be more people, the developer should pay its share of taxes and for sidewalks on the property fronting Hunter Rd. He said there can always be a compromise that helps the City and all citizens.

James Eagle Eye, 25456 Hunter Rd., Veneta, OR
Mr. Eagle Eye said he wanted to talk about the applicant's proposed verbiage changes to the 97 PM trip cap for the property. He said he's assuming based on potential improvements to the intersections discussed and the road in general, that the Commission and the City need to think about that. He said the 97 trip count was proposed and supported by the City Engineer for current conditions on the ground. He said that's not to say if, before build out, somehow Hunter Rd. was improved and the intersections were approved they could not come back to the City. He said putting an open end on that trip count without conditions actually changed, would be wrong for the City and the wrong direction to go. He said we need to consider the 97 PM trip count was recommended by staff and the Engineer for current conditions.

Dean Schlett, 25363 E. Bolton Rd., Veneta, OR
Mr. Schlett asked Father Burfitt about his testimony that the retirement facility will be for retired priests and the faithful. He wanted to know what portion of the community would be reserved for his denomination and what portion would be available for retirees from general public.

Vice Chair Len Goodwin said the applicant may answer that question.

Jerome Poulin said he is responsible for the project and they don't know if there will be taxes yet and that subject needs further discussion. He said the facility will be a faith based community and people outside the parish would be welcomed.

In response to a question from Kevin Conlin, Mr. Poulin said there is no situation that facility residents must be or should be a member of the congregation and there is no preference in religion.

MOTION: **Kevin Conlin made a motion to keep the record open for two weeks to review the applicant's additional traffic information and allow for the traffic engineer to review it. Lily Rees seconded the motion which passed with a vote of 3-0.**

Vice Chair Len Goodwin clarified that the record will be open for two weeks to submit written testimony to the City at any time during that period.

Ms. Connelly said the applicant has seven days to respond after that two week period.

7. Applicant rebuttal
   None

8. Questions from the Planning Commission
   None

9. Vice Chair Len Goodwin closed the Public Hearing at 7:44 p.m.

10. Deliberation and Decision
    After a brief discussion, there was a consensus of the Planning Commission to delay deliberation until the record is closed, to keep the record open an additional two weeks and to continue deliberations at the next Planning Commission meeting.

    Vic Chair Len Goodwin temporarily adjourned the Planning Commission and called for a brief recess at 7:46 p.m.

    Chair James Eagle Eye re-adjourned the Planning Commission at 7:59 p.m.

V. SIGN CODE AMENDMENTS – UPDATE (CLAUDIA DENTON)

a. Sign Code Revisions
   Denton said this is her last Planning Commission meeting, she will not be at the September meeting but she can prepare necessary updates for Garbett and Bork to provide at that time. She said this update includes the Planning Commission's suggestions made at the last meeting which she reviewed.

   After a brief discussion, there was a consensus of the Commission that all of their comments made at the June meeting were covered and staff can move forward with the amendments.

   Bork said the next step would be a code amendment process and some housekeeping amendments may also be included which staff will provide for review.

VI. ADMINISTRATIVE DECISIONS

Garbett said a backyard chicken permit was submitted but not approved because we don't allow multi housing zoning to have chickens.

Garbett said TNT Fireworks submitted a temporary use permit and we received several single family residential building permits and one residential addition building permit. She said staff held a pre-development meeting with someone interested in developing Dick's Diesel Service on Broadway. She said they are purchasing the building and they want to develop professional business offices on that site. She said we received three more chicken permits in July and a few tree permits were submitted after the packets went out. Garbett said in the future a quarterly report will be provided to the Planning Commission rather than a monthly report. She said Veneta Municipal Code requires staff to provide

updates on administrative decisions.

VII. OTHER
None

VIII. ADJOURN
adjourned the Veneta Planning Commission at 8:09 p.m

XXXXXXXXXXXXXX
James Eagle Eye, Chair

ATTEST:

XXXXXXXXXXXXXXXXX
Darci Henneman, City Recorder

VENETA PLANNING COMMISSION
2nd STAFF REPORT
SARTO VILLAGE
COMPREHENSIVE DIAGRAM ZONE CHANGE (CP/ZC-1-16)

Application Received:	April 5, 2016
Supplemental Info Received:	April 15, 2016
Additional Info Received	May 13, 2016
Application Complete:	May 27, 2016
Notice Posted and Mailed:	June 17, 2016
Notice Published:	June 22, 2016
Planning Commission Hearing:	August 2, 2016 (record left open 2 weeks)
Public Comment period expiration:	August 16, 2016
1st Staff Report Date:	July 19, 2016
2nd Staff Report Date:	August 25, 2016
Prepared By:	Lisa Garbett, Associate Planner
Additional Info Received (Revised TIA):	August 5, 2016
ODOT Comment Received:	August 16, 2016
Applicant Response/ Rebuttal Received:	August 19, 2016 & August 24, 2016
Planning Commission Deliberation:	September 6, 2016
Tentative City Council Hearing Date:	September 26, 2016

Referrals:
Department of Land Conservation & Development (DLCD)
Lane Branch, P.E., City Engineer (Branch Engineering)
Kyle Schauer, City Public Works Director
Oregon Department of Transportation, Region 2
Lane County Assessor
Lane County Land Management
Lane County Public Works

BASIC DATA

Applicant:
Jerome Poulin, for Sarto Village Project
Society of Saint Piux X Southwest District, Inc.
11485 N. Farley Road
Platte City, MP 64079

Property Owner:
Society of Saint Piux X Southwest District, Inc.
11485 N. Farley Road
Platte City, MP 64079

Assessors Map/ Tax Lot No.:
17-05-31-00-00400
17-05-31-00-00501
17-05-31-34-00602

Area:	Approximately +/-50.78 acres (three tax lots combined)
Plan Designation:	Map/ Tax Lot No. 17-05-31-00-00400 Rural Residential (RR), Open Space/Greenway Overlay Zone (/OS) and 100-Year Floodplain Map/Tax Lot No. 17-05-31-00-00501 R-Rural Residential & OS – Open Space/ Greenway Map/Tax Lot No. 17-05-31-34-00602 R-Rural Residential & L-Low Density Residential (split Plan Designation) & OS-Open Space/ Greenway
Zoning:	Map/ Tax Lot No. 17-05-31-00-00400 Rural Residential (RR), Greenway Overlay Zone (GW) and 100-Year Floodplain Map/Tax Lot No. 17-05-31-00-00501 Rural Residential (RR) & Greenway Overlay Zone (GW) Map/ Tax Lot No. 17-05-31-34-00602 Rural Residential (RR) and Single-Family Residential (SFR) split zoning & Greenway Overlay Zone (GW)

REQUEST

The applicant is requesting a Zone and Comprehensive Plan designation (map only) amendment of approximately +/-50.78 acres, including three (3) tax lots, from R-Rural Residential and L - Low Density Residential Comprehensive Plan Designation to Medium Density Residential Plan Designation and accompanying zone change from Rural Residential and Single Family residential to General Residential. The existing Open Space/ Greenway Overlay, 100-Year Floodplain Overlay Comp Plan Designations and existing Greenway-Open Space Subzone and 100-Year Floodplain Subzone zone designations will not change.

BACKGROUND

The Planning Commission held a public hearing on August 2, 2016. The Planning Commission took public testimony, closed the public hearing, and moved to leave the record open for two weeks until August 16, 2016 to allow the applicant to submit additional information and allow additional public comment and one additional week until August 23, 2016 to allow the applicant time to submit a rebuttal to any new testimony received. The Planning Commission moved to continue the meeting to September 6, 2016 for further deliberation.

This staff report addresses additional information submitted since the August 2, 2016 Planning Commission meeting and is supplemental to information prior.

APPROVAL CRITERIA

Veneta Comprehensive Plan, Ordinance 523, Chapter III – Plan Elements and Policies including A. Growth Management Element, C. Residential Land and Housing Element and E. Utilities, Chapter V - Implementation and Updates to the Plan, Veneta Land Development Ordinance No. 493, Article 11 – Amendments and Statewide Planning Goals (Goal 1: Citizen Involvement, Goal 2: Land Use Planning, Goal 10: Housing and Goal 12: Transportation Planning Rule).

AGENCY COMMENTS

The applicant submitted a revised Traffic Impact Analysis (TIA) on August 5, 2016 (Exhibit B). The Oregon Department of Transportation (ODOT) was sent the revised TIA and provided comment on August 16, 2016 (Exhibit C). Originally ODOT was sent a referral request on May 31, 2016 and did not provide comment.

ODOT's comments indicate that the revised TIA utilized outdated methodology from the Highway Capacity Manual (HCM) 2000 rather that the current HCM 2010 for the un-signalized intersections. ODOT recommended the TIA be modified to report and utilize operational performance per the HCM 2010 methodology. ODOT maintains jurisdiction of the Florence-Eugene Highway No. 62 (OR 126) and the Territorial Highway No. 200 (OR 200) and ODOT approval will be required for any proposed mitigation measures to these facilities.

The applicant provided a response to ODOT's comments in a Technical Memorandum, received August 19, 2016 (Exhibit D). The City Engineer, Lane Branch, P.E. of Branch Engineering reviewed the materials and provided findings addressing transportation issues (Exhibit F).

ISSUES

Corrections

The applicant's TIA dated April 15, 2016, page 8 states "The total site acreage is 50.78 acres, however the western portion of tax lot 602 (found by extending the western boundary of tax lot 401 due south) is currently zoned SFR so this ~7.17 acres is not part of the zone change", should more accurately state "so this ~7.17 acres is not part of the TPR analysis." Per Access Engineering, this area shows no change since the proposed use (6,000 square foot minimum lot sizes worst case scenario) is allowed by the current zone/plan designation on the western portion of the tax lot. This change does not impact the TIA however staff is bringing this to the Planning Commission attention to avoid any confusion regarding the applicant's intention of redesigating and rezoning Tax Lot 602 to Medium Density Residential (Plan Designation)/General Residential (Zone).

The applicant's submittal by Myhre Group, dated June 16, 2016 and titled*: Establishment of Need for Zone Change & Comprehensive Plan Amendment*, references 28.57 net acres for the site (page 3, paragraph #6). Staff also references the 28.57 net acres in the July 19, 2016 Staff Report. The TIA submitted by the applicant on April 15, 2016 page 8 and revised TIA, dated August 5, 2016 page 8, references 31.2 net acres that was used in their Trip Generation analysis. The proposed final order attached as Exhibit A, has been amended to reference the 31.2 acres referenced in the TIA since it is a more accurate representation of the proposed site and resulting traffic impacts.

Transportation

As stated earlier, ODOT provided comment (Exhibit C) on the revised TIA and recommended the applicant utilize current High Capacity Manual 2010 (HCM2010) methodology for the unsignalized intersection. The applicant revised the TIA using this methodology (within the allowed 7 day comment period) and submitted a Technical Memorandum to the revised TIA

(Exhibit D). The analysis shows at full build out with 220 single family dwellings there are no impacts to the intersection of Hwy 126 and Huston Rd and no mitigation is required.

However, once rezoned to General Residential, the site could potentially be developed with multi-family units at a maximum density of 15 dwelling units per net acre per the Veneta Comprehensive Plan, Chapter IV Comprehensive Plan Map and Land Use Designations. The applicant states the net acres of the entire site available for development is 31.2 acres. At a maximum density of 15 dwelling units per acre the site could potentially be developed with 468 units. The TIA provided no data that to show whether or not multi-family development on all three tax lots might significantly affect transportation facilities.

The applicant's architect submitted a letter (Exhibit E) requesting a 220 PM peak hour trip cap. The City Engineer commented (Exhibit F) development of 227 single family dwellings discussed throughout the TIA process is not consistent with 220 PM peak hour trip cap requested. If the applicant is proposing a trip cap of 220 PM peak hour trips, the trip generation should be documented based on the number of potential dwellings and should utilize trip generation rates consistent with the previous analyses applied to the number of dwelling units.
Staff is proposing the following condition in order to satisfy the TPR:

The maximum development on the site shall be limited so that it would not produce more than 217 PM peak hours as determined by the Institute of Transportation Engineers Trip Generation Manual. The city may allow development intensity beyond this maximum number of peak hour vehicle trips only if the applicant submits to the City and ODOT a traffic impact analysis that demonstrates that the proposed intensification of use would be consistent with the Transportation Planning Rule. The applicant shall see and the City shall consider such approval using the City's Type II land use application procedure.

The City of Veneta Land Development Ordinance requires a Transportation Impact Analysis when a development generates 100 or more PM peak hour trips. It is noted in the Final Order that the City will require a TIA at the time of development proposal. The City's Traffic Engineer provided the following findings which were incorporated into the Final Order.

> *As an informational item, since the zone change application is based on planned development that includes three separate tax lots (Assessor's Map 17-05-31-00 Tax Lots 00400 and 00501 and Assessor's Map 17-05-31-34 Tax Lot 00602), the site should be considered as one development site. If development on the site occurs in phases, prior to issuance of any land use application approvals or prior to issuance of any building permits, the trip generation from the entire site (Assessor's Map 17-05-31-00 Tax Lots 00400 and 00501 and Assessor's Map 17-05-31-34 Tax Lot 00602) should be evaluated by the owner/developer's traffic engineer and approved by the City Engineer, to determine if the site's cumulative trip generation exceeds 100 or more PM peak hour trips and if a traffic study is applicable. If/when development on any part of the site (Assessor's Map 17-05-31-00 Tax Lots 00400 and 00501 and Assessor's Map 17-05-31-34 Tax Lot 00602) generates 100 or more PM peak hour trips and when any development on the site occurs after the 100 PM peak hour trip threshold is exceeded; a traffic study should be prepared by the*

owner/developer's traffic engineer and approved by the City Engineer, to address traffic conditions per Section 5.27 of the City of Veneta's Land Use Ordinance No. 493.

The existing Hunter Road roadway conditions do not include bike lanes or pedestrian facilities that are identified in the City of Veneta's transportation system plan for the major collector street functional classification. The TPR criterion addresses the functional classification and capacity at the planning level for motor vehicle traffic (i.e. what is planned during the TSP plan year) and does not include stipulations for bike lanes and/or pedestrian facilities. If required with future development proposal(s), a future traffic impact analysis prior to development should include an inventory and assessment of the adequacy of the existing level of improvements for motor vehicle, bicycle and pedestrian users and the capability of existing facilities within the study area to accommodate both motorized and non-motorized modes of traffic and any potential for increase with development.

In regards to the existing Hunter Road roadway conditions (i.e. lack of bike lanes or pedestrian facilities which are identified in the City of Veneta's transportation system plan (TSP) for the major collector street functional classification), the City Engineer states that the Transportation Planning Rule (TPR) criterion addresses the functional classification and capacity at the planning level for motor vehicle traffic (i.e. what is planned during the TSP plan year) and does not include stipulations for bike lanes and/or pedestrian facilities. The City Engineer suggests the following for future development

PUBLIC COMMENT

Ten written public comments were received from the following; 1. Doug James (Exhibit G), 2. Bonita Pleier (Exhibit H), 3. Jackie Miller Burnett (Exhibit I) and 4. Patricia Hodurski (Exhibit J), 5. Tom and Vivian Cummings (Exhibit K), 6. Peter Buschmann (Exhibit L), 7. Jo Ann Woodworth (Exhibit M), 8. James Eagle Eye (Exhibit N), 9. Anthony Clemons (Exhibit O) and 10. Judith Terry (Exhibit P).

Public comments are summarized below in italics, followed by staff response to comments, in regular font.

Doug James (25355 Trinity St)

- In support of proposed rezone given growth is to be expected within the city limits and urban growth boundary.
- The concept plan of a senior living community, park and assisted living facility would be a great addition to Veneta.
- The applicant seems to be making an effort to be good neighbors.
- The concept plan includes improvements that the entire community will enjoy and not negatively impact surrounding property values.
  Concerned with the non-profit status for the residential homes and strain it may add to city services (i.e. Fire and Police).

Bonita Pleier (25183 Jake St)
Resides on nearby Jake Street and contends that the Sarto Village proposal will add value.

Jackie Miller Burnett (88154 Lindsay Lane)

- Proposal is too large for existing infrastructure (i.e. inadequacy of Highway 126 and Hunter Road). Hunter Road is currently utilized by pedestrians and bicyclists that have no safe place to go when vehicles are approaching from opposite directions.
- Concerned with tax exempt development and property owners may be paying additional property taxes.
- Respectfully requests the City Council not to rezone or allow the proposal.

Patricia Hodurski (25010 Meadowdale Ln)

- Concerned with safety (i.e. need for sidewalks to be constructed prior to further development along Hunter Road).
- Fifty (50) acres is too large an area to remove from property tax in relation to the total city limits of Veneta unless it is of benefit to all residents of Veneta. The property exemption would require the expenditure of city funds for roads and emergency response. A 55 and older development will use emergency response more than typical developments. Cost of emergency response will be a burden for current residents of the City because of property tax exempt status.
- Concerned that Veneta citizens will be paying for much of the expense of development and maintenance and concerned that the proposal is not intended to be a retirement facility but a facility for the international priestly fraternity and SSPX (Society of St. Piux X) of which St. Thomas Becket is associated and started by Marcel Lefebreve (Global Organizations).

Tom and Vivian Cummings (25357 Trinity St)

- Concerned with inadequacy of existing streets and city infrastructure surrounding the site. Major concern with E. Bolton from Territorial to Trinity, Hunter from Territorial to Huston, and Huston from 126 to Perkins. Improvements (i.e. widening, bicycle lanes and sidewalks) are already needed.
- Concerned that the community of Veneta will be expected to subsidize the service needs of the proposed non-profit. A profitable non-profit could agree to help mitigate the financial burden on the community.
- An adult retirement village would be an asset to Veneta, but at what cost?
- If the proposal is approved, what type of uses are permitted in the new zoning designation?

Peter Buschmann (Dayton, MN)

- Impressed with the location and intended project.
- In support of the proposal as it would bring additional residents, jobs, and visitors to the area and offer additional housing.

Jo Ann Woodworth (1245 Montecello Drive, Eugene)

- In support of the proposal as a retirement community is needed in Veneta and will benefit the community with improvements and employment.

James Eagle Eye (25456 E. Hunter Road)

- Concerned in terms of the 97 PM peak hour trip cap and in relation to known safety concerns regarding the existing infrastructure of roadways adjacent to the site; these hazards will only be increased by allowing a denser zoning.
- A trip cap (enforced by encumbrances recorded on the property deed) may help provide a compromise between rezoning to greater density and public safety and would be in the cities best interest as suggested by the city engineer.
- Requests consideration by the Planning Commission that the supporting roadway infrastructure has not been completed to city standards and does not function as such.
- Concerned with pedestrian safety as well as performance at intersections. The proposed trip cap would not prevent the site from being developed as presented.

Anthony Clemons (25156 Cherry Lane)

- Opposed to the proposal based on human considerations (i.e. factual situations and effect the proposal will have on the community) given the following; unsafe existing infrastructure along Hunter Road with no plans to develop or widen Hunter Road, tax burden for Veneta citizens given non-profit status of applicant, potential flooding of adjacent land owners and potential requirement to connect to City sewer for adjacent land owners, decrease in land value for adjacent land owners.
- Increased traffic should be considered in the decision.
- Greatest concern is the preservation of wetlands, greenspaces and flood zones. If a wetland variance is issued to the applicant to construct (i.e. street extensions of Trinity Street, Baker Lane and Erdman Way) within the wetlands, greenspaces and flood zones, it should be reconsidered and revoked.

Judith Terry (88154 Lindsay Lane)

- Concerned with increased traffic along E. Hunter Road and the need to make improvements to the roadway before increased additional development and traffic occurs as E. Hunter Road is currently dangerous for bicyclists and pedestrians.
- Concerned with city approved tree removal along Hunter Road near Lindsey Lane that occurred in the past. Property owners were led to believe that the property owner would

leave the site clean and equipment removed after tree removal which never occurred, leaving a fire hazard and unsightly mess.

- Would like assurance that the Sarto Village project will not fall through at some point leaving a second mess along E. Hunter Road.

STAFF RESPONSE TO PUBLIC COMMENT:

Public comment issues are summarized below in italics, followed by staff response in regular font.

1) *Existing infrastructure inadequacy (i.e. E. Hunter Road)*
    - E. Hunter Road is designated a major collector in the Veneta Transportation System Plan. A Major Collector serves traffic from local streets or minor collectors to the arterial system. E. Hunter has not been improved to urban standards with curb, gutter, sidewalks, and bike lanes. E. Hunter Road street improvements are included in the City's Capital Improvement Plan for future construction. The Veneta City Council determines when and what funding source will be used to construct the improvements. At the time of development, the applicant will be required to construct local streets and bike and pedestrian ways to serve the development. At the time of development, the applicant will be required to improve E. Hunter Road with curb, gutter, and sidewalks, along the proposed development frontage or sign an irrevocable development agreement for future improvements.
    - Specific bicycle and pedestrian connections will be addressed at the time of development. The Veneta Transportation System Plan Map Plan (Map 15 - Proposed Bicycle/Pedestrian Network) shows proposed multi-use paths through the subject site which will provide safe pedestrian and bicycle access to connecting streets.
    - Sidewalk projects that are not part of a new development proposal are funded through a Local Improvement District. A Local Improvement District is initiated by City Council and sidewalk construction costs are assessed to property owners along the street frontages where sidewalks are constructed. A sidewalk Local Improvement District has not been initiated by the City Council. The 2016/2017 Work Plan includes a task to prioritize sidewalk projects and a Local Improvement District could be identified.
    - At the time of development, the applicant shall submit required land use applications, which shall comply with the Veneta Land Development and Land Division Ordinances. Regulations in these Ordinances establish standards and procedures for the orderly development of land within the City of Veneta; to assist in implementing the Veneta Comprehensive Plan and to promote the public health, safety and general welfare. Development impact issues, such as traffic impacts, residential design standards, landscaping, parking, stormwater,

Greenway and wetland protections, street connectivity, and bicycle, and pedestrian improvements, will be addressed at the time of development review.

- The Veneta Comprehensive Plan policies dictate the criteria to be applied to Plan and Zone change requests. Additional findings of fact addressing applicable criteria for converting Rural Residential to Low Density Residential and Medium Density Residential plan designations are presented in the Planning Commission Final Order:

  > "A. Growth Management Element Policies.
  > Make the following findings of fact in order to permit conversion of rural residential lands to other plan designations:
  > (a) Water: The City water supply and distribution system are adequate to provide service to the property proposed for conversion to urban densities.
  > (b) Sewer: The City sewer treatment and collection system are adequate to provide service to the property for conversion to urban densities.
  > (c) Streets: The neighborhood streets and drainage system are adequate to handle additional traffic and storm drainage."

- At the time of development, street connectivity, safety and design of streets within the development and fronting the development are evaluated.

2) Tax Exempt status

- While the non-profit status of the proposal is a concern, it is not applicable to the land use decision process.

3) What types of uses are allowed in the proposed zoning district?

- Veneta Land Development Ordinance No. 493, Section 4.03(2-4) lists uses permitted outright, uses permitted subject to Site Plan Review and conditional uses in the General Residential zone.
- Uses permitted outright in the General Residential zone include; one detached single-family dwelling per buildable legal lot, one duplex per legal buildable lot, domestic horticulture, registered or certified family daycare and an adult foster home.
- Uses permitted subject to Site Plan Review in the General Residential zone include; Public and semi-public uses, including transit facilities and transportation improvement conforming to the City of Veneta Transportation Plan, multi-family dwellings, one accessory dwelling subject to the standards listed in the ordinance, Residential facilities, accessory structures not exceeding 2,500 square feet in size, non-commercial animal husbandry on properties one acre in size or larger, attached single-family dwellings (townhouse or row house).
  Conditional uses in the General Residential zone include; Major home occupation, Neighborhood commercial centers, Day care facilities, manufactured

dwelling parks, public structures or uses of land for public facilities and accessory structures larger than 2,500 square feet.

4) *Potential flooding of adjacent property*
   - All development is evaluated for impacts to surrounding areas, especially stormwater runoff which shall show no impacts to off-site properties. The City requires stormwater be detained and treated (with vegetation) before it is released into the City's storm drainage system.

5) *Potential for neighboring property owners to be required to connect to City services (i.e. wastewater).*
   - When wastewater services become available along the street frontage of a property, the City requires wastewater connection (Veneta Municipal Code 13.10.290). Properties are required to be connected within one year after the date of official notice from the city to connect. The City may grant time extensions after considering certain criteria such as location of property, condition of private disposal, and length of extension (Veneta Municipal Code 13.10.350). There are no such requirements for water connections. A property owner may choose to connect to available water service.

6) *Wetland/ greenway/floodplain preservation*
   - Development within a wetland is subject to compliance with Veneta's Wetland Protection Ordinance, Veneta Municipal Code Chapter 18.10.
   - Permitted uses within the Greenway-Open Space boundary include, "Structures or development granted a variance to Veneta's Wetland Protection Ordinance found in Veneta Municipal Code, Section 18.10. Impacts to the Greenway shall be the minimum necessary to construct those improvements for which the wetlands variance was granted" per Veneta Land Development Ordinance No. 493, Section 4.12(3)(k) – Permitted Uses.
   - Any new structures or development (including fences) is prohibited in the Greenway – Open Space Subzone, other than those allowed as permitted uses or approved as conditional uses, construction or ground disturbing activities, gardens, lawns, dumping of materials of any kind, and operation of heavy machinery per Veneta Land Development Ordinance No. 493, Section 4.12(5)(a) – Prohibited Uses.

7) *Tree removal and future development*
   - Veneta Municipal Code, Chapter 8.10 dictates the process and approval criteria for tree removal. In general, tree removal is not permitted until a notice to proceed from the city engineer on public improvements is issued or when no public

improvements are proposed, tree removal cannot occur until building permits have been issued. Although, applicants seeking a Type B permit to remove trees independent of site improvements, no tree removal can take place until tree protection measures have been inspected and approved by the City.

STAFF RECOMMENDATION

Based on the information above, staff finds that the proposal can meet all of Veneta's requirements for a change to the Veneta Comprehensive Plan map and Veneta Zoning map. Staff recommends that the Planning Commission recommend conditional approval to the Veneta City Council.

POSSIBLE ACTIONS BY THE PL ANNING COMMISSION

The Planning Commission shall review the plan and the reports of the appropriate officials and agencies. The Planning Commission may:

1. Recommend approval of the findings as stated in the Final Order (Exhibit A) and recommends adoption of the Comprehensive Plan Amendment and zone change to the City Council.

2. Recommend denial of the findings as stated in the Final Order (Exhibit A) and recommends denial of the Comprehensive Plan Amendment and zone change to the City Council. Additional findings will need to be generated to support denial.

3. If more research is needed, the Commission may direct staff to conduct the needed research and bring revised findings to the Planning Commission at a specified date.

4. Continue the deliberations and decision to a date and time certain.

EXHIBITS

A. Proposed Final Order
    a. Map of Proposed Comp Plan Diagram
    b. Map of Proposed Zoning
B. Applicant's Submittal – New Information (Revised TIA dated 8/5/16)
C. Oregon Department of Transportation (ODOT) response (Received 8/16/16)
D. Applicant's Technical Memorandum (Received 8/19/16)
E. Applicant's Memo (Received 8/24/16)
F. City Engineer comments (Received 8/26/16)
G. Public comment, Letter Received 8/3/16 (Doug James)
H. Public comment, Email Received 8/11/16 (Bonita Pleier)
I. Public comment, Letter Received 8/12/16 (Jackie Miller Burnett)
J. Public comment, Letter Received 8/12/16 (Patricia Hodurski)
K. Public comment, Letter Received 8/15/16 (Tom and Vivian Cummings)
L. Public comment, Letter Received 8/15/16 (Peter Buschmann)
M. Public comment, Letter Received 8/16/16 (Jo Ann Woodworth)
N. Public comment, Email Received 8/16/16 (James Eagle Eye)
O. Public comment, Letter Received 8/16/16 (Anthony Clemons)
P. Public comment, Email Received 8/16/16 (Judith Terry)

EXHIBIT A
FINAL ORDER
VENETA PLANNING COMMISSION

SARTO VILLAGE
COMPREHENSIVE PLAN DIAGRAM AND ZONING MAP AMENDMENT
File (CP/ZC-1-16)

A. The Veneta Planning Commission finds the following:

1. The Planning Commission held a public hearing on August 2, 2016 on the proposed amendments after providing the required notice per Section 2.11 of Veneta's Land Development Ordinance No. 493. The Planning Commission closed the public hearing on August 2, 2016 and the left the record open until August 16, 2016 with a one week rebuttal period for the applicant until August 23, 2016. The Planning Commission deliberated at a public meeting on September 6, 2016.

2. The Veneta Planning Commission recommended conditional approval of the proposed amendments as presented in Exhibit A, Proposed Comprehensive Map Designation Amendment and Exhibit B, Proposed Zoning Map Amendment attached to and incorporated herein to the Final Order, CP/ZC-1-16.

3. The proposed amendments are in conformance with applicable Statewide Planning Goals and the Veneta Comprehensive Plan Ordinance No. 523.

B. IT IS HEREBY ORDERED THAT the Veneta Planning Commission recommends conditional approval of the proposed amendments, as shown in Exhibit A and B, to the Veneta City Council based on the following findings of fact:

<u>FINDINGS</u>
Applicable Comprehensive Plan provisions are set forth in *italics*, below. Findings showing compliance with the applicable criteria and standards are in **bold**.

<u>FINDINGS OF CONSISTENCY FOR COMPREHENSIVE PLAN NO. 523</u>

I. INTRODUCTION
C. CITIZEN INVOLVEMENT
RESPONSIBILITIES RELATED TO CITIZEN INVOLVEMENT

City Council

1. *The City Council makes all major decisions related to land use planning and community development for the City of Veneta. Decisions requiring City Council action include but are not limited to the following:*
    - *A. Adoption of a Program for Citizen Involvement.*

B. Amendment to the Veneta Comprehensive Land Use Plan.
C. Adopted of an amendment to ordinances implementing the Comprehensive Plan.

2. *The City Council will provided a written record for public dissemination of the rationale used in all land use and other planning policy decisions.*

FINDINGS:

1. **The City Council, with approval of an ordinance, will make the final decision regarding the requested rezone.**

Planning Commission

1. *The Planning Commission is appointed by the City Council to review land use planning issues and to make recommendations to the City Council on these issues.*
2. *The Planning Commission makes recommendations to the City Council on such issues as:*
   A. The Program for Citizen Involvement
   B. Updating or amending the Comprehensive Plan
   C. Updating or amending the zoning, subdivision, and other implementation ordinances.
3. *The Planning Commission will provide a written record for public dissemination of the rationale in recommending land use and other planning policy decisions.*

FINDINGS:

1. **The Planning Commission is being asked to make a recommendation to the City Council regarding the rezone request. These findings constitute the required rational for this land use decision.**

III. PLAN ELEMENTS AND POLICIES
A. GROWTH MANAGEMENT ELEMENT
GOAL:
Provide sufficient buildable lands and open space areas to all ow Veneta to develop as the retail and service center for the Fern Ridge area and to develop a commercial and light industrial employment base.

POLICIES:

4. *Designate the Urban Service Development Area as the primary development area within Veneta. When water and sewer services become available, facilitate an easy transition of plan designations from rural residential to residential, commercial, industrial, or public/semi-public.*
5. *Allow either the City of Veneta or the property owner to initiate a plan designation change and zoning map amendments when services become available.*

FINDINGS:

1. **Lands with a plan designation of Rural Residential are slated for eventual transition to other designations which allow development within the UGB to**

occur at urban densities. The applicant wishes to develop the site with a mix of single family detached and attached single family dwellings (age restricted 55+) and a senior assisted living facility at higher densities than the current Rural Residential Plan Designation and Zoning permits.

2. **City water, sewer, stormwater, and streets are available to the site as illustrated in the findings below.**

6. *Make the following findings of fact in order to permit conversion of rural residential lands to other plan designations:*
   (a) Water: The City water supply and distribution system are adequate to provide service to the property proposed for conversion to urban densities.
   (b) Sewer: The City sewer treatment and collection system are adequate to provide service to the property for conversion to urban densities.
   (c) Streets: The neighborhood streets and drainage system are adequate to handle additional traffic and storm drainage.

FINDINGS:

1. **The proposal is consistent with this standard in that adequacy of water, sewer, and streets are adequate to provide service to the property proposed for conversion to urban densities based on the following:**

   Water

   i. **The applicant provided a memorandum prepared by MSA, dated May 11, 2016 was provided with the rezone request, which was reviewed by the City Engineer.**
   ii. **Increased water demands associated with the potential additional dwelling units are estimated at 87,285 gallons per day (gpd) for average day demands (ADD), and 234,876 gpd for maximum day demand (MDD). The supply and distribution systems have adequate capacity, as planned in the Water System Master Plan, to meet the increased demands of the proposed re-zoned area per the City Engineer. Distribution system capacity to meet fire flow needs in the proposed project area is dependent on the completion of looped piping through the project area from E. Hunter Road (formerly known as Baker Lane) to Bolton Road and Jake Street, as identified in the Water System Master Plan (WSMP).**
   iii. **Public water lines exist adjacent to the site in Hunter Road and Trinity.**
   iv. **The combined increase in water storage needed to accommodate the proposed increased development density is 237,000 gallons, or 0.24 million gallons. Under current conditions, the City has an existing storage volume surplus of approximately 1.0 MG. There is adequate storage capacity today to serve the proposed increased development density according to the City Engineer.**
   v. **Per the Water System Master Plan (WSMP), the City will ultimately have a storage volume deficit of 1.6 MG at build-out within the UGB, without considering the proposed increased development density. The storage volume deficit would be increased to 1.84 MG with these proposed density**

increases. The Capital Improvement Plan (CIP) includes the recommended construction of a new 1.6 MG reservoir in the southwest corner of the City's urban growth boundary in order to meet the projected deficit. This improvement is recommended to be complete by approximately the year 2020.

vi. Public water is available to the site with adequate capacity to serve development permitted within the proposal according to the City Engineer.

vii. Based on the findings above, the City Engineer states public water is available to the site with adequate capacity to serve development permitted with the proposed amendment.

<u>Sewer</u>

i. Per the City's wastewater engineer, the wastewater treatment plant has capacity to serve 6,220 residents. Current population served is roughly 4,800 residents.

ii. Public gravity sewer pipes exist in Hunter and Trinity near the western limits of the site. Due to the existing topography of the area, these pipes are likely too shallow to gravity serve the site. In addition, the capacity of portions of the existing gravity pipe in Hunter appears insufficient to accommodate the potential development density proposed based on comments received from the City's Wastewater Engineer.

iii. According to the City's wastewater engineer, a lift station will be required to pump the wastewater from the project area to the existing gravity collection system on Hunter Road. The pipe in Hunter, between Pine Street and Lindsay Lane, likely will not have the available capacity to handle the flow from the proposed development unless that section of the gravity system is reconstructed with a larger diameter pipe.

iv. Although public wastewater service has been extended to the project site, the capacity of the existing downstream system may be insufficient to serve development of the site. Any future development on the subject site will be required to address wastewater capacity of the existing downstream system, and upsize the system as necessary to accommodate the proposed development.

<u>Streets</u>

i. The applicant provided a Traffic Impact Analysis (TIA), prepared by Access Engineering, Inc., dated April 15, 2016 in order to satisfy Goal 12, Oregon Administrative Rules (OAR 660-012- 0060). The traffic impact and TPR analyses are prepared by a qualified professional engineer per the City Engineer.

ii. The subject site is adjacent to E. Hunter Road, classified as a Major Collector per the Veneta Transportation System Plan.

iii. Street frontage improvements are reviewed and conditioned with development review.

iv. **Development of property is subject to City of Veneta Land Development Ordinance 493, Article 5, Section 5.27, which requires a traffic impact analysis if a development generates 100 or more AM or PM peak hour trips.**

<u>Stormwater</u>

i. **Any future development proposal for the project site will be required to adhere to Veneta's stormwater treatment and detention standard, which limit peak flow rates for new development to existing (pre-development) rates.**
ii. **Increasing the development density potential will have minimal, if any, impact to the downstream system, according to the City Engineer.**

III. PLAN ELEMENTS AND POLICIES
C. RESIDENTIAL LAND AND HOUSING ELEMENT
GOALS:

1. *Provide an adequate supply of residential land and encourage land use regulations that allow a variety of housing types that will be able to meet the housing needs of a range of age groups, income levels, and family types.*

2. *Encourage efficient land development patterns that minimize service and infrastructure costs.*

3. *Encourage land use patterns that provide livable neighborhoods; allow mixed uses, and allow a variety of housing types.*

4. *Encourage land use patterns that protect and enhance Veneta's natural resources.*

5. *Maintain an attractive residential community in an appealing rural setting.*

POLICIES:

4. *Control further subdivision of land in the rural residential area to allow for easy conversion of rural residential properties to urban densities in the future when full city services become available.*

7. *Locate multi-family housing where traffic circulation problems and safety hazards are minimized.*

<u>FINDINGS:</u>

1. **The proposal would convert approximately forty-three (43) acres of R-Rural Residential designated land and seven (7) acres of L-Low Density Residential land (50 acres) to M-Medium Density Residential land. The same parcels would be rezoned to General Residential.**

2. **The intended use of the property is for an age restricted 55+ community with a variety of housing types; detached and attached single family dwellings, and a Senior Residential Care Facility.**
3. **Approximately 7.17 acres of the subject property is located in the Single Family Residential zone. The Single Family Residential zone does not allow multi-family housing except with conditional use permit approval which would require the applicant to prove the, "Existing lot is incapable of division to City standards" per Veneta Land Development Ordinance No. 493, Section 8.11(11)(b) – Standards for multi-family in Single-Family Residential zone.**
4. **An adequate supply of residential land will be maintained with approval of the Comprehensive Plan designation and Zoning Map amendment request. The City's 20-year Buildable Land Inventory assumes all Rural Residential Land will be built out to urban densities (a minimum of 6.2 units per net acre). The conversion of Rural Residential and Single Family Residential land to General Residential will not negatively impact the supply of residential land.**
5. **The applicant has submitted a Traffic Impact Analysis prepared by Access Engineering, Inc. which addresses traffic impacts. Findings and recommended conditions of approval are addressed (Goal 12 – Transportation).**
6. **The net site area is likely reduced to approximately 31.2 acres due to potential new right-of-way extensions and preservation of existing wetlands/buffers according to the applicant's preliminary analysis.**
7. **In order to develop the property; the property owner/ applicant will be required to comply with Veneta Land Development Ordinance No. 493 and Veneta Land Division Ordinance No. 494.**

III. PLAN ELEMENTS AND POLICIES

E. UTILITIES
GOAL:

1. *Upgrade and develop adequate water, sewer, storm drainage and other appropriate utilities to serve the planning population (Other utilities could potentially include telecommunications, electric, cable, solid waste, etc.)*

POLICIES:

2. *Protect groundwater from the potential of contamination through improperly abandoned wells and protect city water from contamination by private wells by requiring proof of proper abandonment/isolation of private wells at the time of any development action on property with one or more private wells.*

3. *Encourage use of city water and wastewater services by requiring all new development to connect to the city water supply when practical.*

12. *Determine if oversizing of infrastructure is needed in light of future potential development (based on development at urban densities).*

15. *Allow rural properties until such time as the conversion to urban densities is feasible and needed.*

FINDINGS:

1. **City water and sewer are available to the site and extension of City services is preferable over development with wells and septic systems as would be required for a majority (+/-43.61 acres) of the site under the current Rural Residential zone designation.**
2. **Approving the requested rezone encourages new development to connect to city services.**
3. **Future development will be required to extend and connect to public water and sewer services.**
4. **Oversizing of sewer infrastructure will be evaluated at the time of development proposal.**

V. IMPLEMENTATION AND UPDATES TO THE PLAN
B. UPDATING THE PLAN

"…Comprehensive Plan amendments, however, can be initiated by private citizens. The procedure will be exactly the same as the procedure used for a zone change as outlined in the Veneta Land Development Ordinance. The applicant makes the initial request for a plan amendment to the Planning Commission. The City notifies LCDC of the proposal prior to the first hearing date, per ORS 197.610. The Planning Commission holds a public hearing and makes its recommendation to the City Council. The City Council holds a final public hearing. If the amendment is approved, the City would instruct the city attorney to prepare an ordinance to that effect and the ordinance could be adopted at the next regularly scheduled Council meeting."

"For a plan amendment to be legally adopted, there must be documentation of an "established need" for the plan change. The establishment of this need rests ultimately with the City Council. However, the most common practice in Oregon is for the City Council and Planning Commission to require the applicant to submit the documentation for establishing that changes in the Comprehensive Plan cannot be arbitrary or capricious but must be based on a demonstrated need."

FINDINGS:

1. **The property owner submitted an application for the Comprehensive Plan designation and zone change request (Map only), accompanied by a letter addressed to the Planning Commission and City Council demonstrating need for the change, consistent with the Comprehensive Plan, Ordinance 523, V., B. Updating the Plan.**
2. **The City notified the Department of Land Conservation and Development (DLCD) of the proposal on June 17, 2016, more than 35 days prior to the first evidentiary hearing. The Planning Commission will review the proposed**

change and make a recommendation to the Veneta City Council. The City Council will make the final decision.

3. **The establishment of need for the rezone with the applicants intent to develop of a Senior Living Project (55 and older), has been documented by the applicant, given the intended development aligns with the following Comprehensive Plan goals; 1) Rapidly growing population and changing demographics in Veneta, particularly those over age 55, 2) Veneta's population is projected to increase from 4,635 in 2013 to 10,505 people by the year 2035, 3) Adequate land area must be allocated to support the residential needs of this projected growth, 4) Aging of the baby boom generation, accompanied by increases in life expectancy; increasing the number of people age 55 and older and 5) Median age of Veneta residents is increasing and the Oregon Office of Economic Analysis forecasts that Lane County's percent of people 55 years and older will increase from 13 percent in 2000 to 20 percent in 2030.**
4. **The requested Comprehensive Plan Diagram amendment from R-Rural Residential & L-Low Density Residential to M-Medium Density Residential is consistent with the Comprehensive Plan as shown in the included findings and as summarized as follows: 1) <u>Utilities</u>: Increasing the density within the City makes for efficient use of public utilities reducing initial and long-term maintenance costs for the City and Residents, 2) <u>Transportation</u>: Increasing the density within the City makes for efficient use of public transportation systems and reduces initial and long-term maintenance costs for the City and residents, 3) <u>Parks and Open space</u>: The increased density will support development of a variety of public neighborhood parks, open space areas, and recreational facilities for use by the residents of Veneta and 4) <u>Natural Resources</u>: Allows for preservation of significant natural resources within the City while maintaining density levels as the demand for population growth within the City continues.**

IV. COMPREHENSIVE PLAN MAP AND LAND USE DESIGNATIONS
PLAN DESIGNATIONS:

MEDIUM DENSITY GENERAL RESIDENTIAL (M)
Purpose of Plan Designation:

- *Provide areas suitable and desirable for a variety of housing types and densities with provisions for associated public service uses, planned developments and other uses under controlled conditions.*
- *Ensure that sufficient lands are available for development of a variety of housing types by allowing an intermix of housing types within a medium density residential area. Allow densities up to fifteen (15) living units per net acre. Planned Development (PD) may qualify for density bonuses up to twenty (20) living units per net acre.*
- *Require a minimum lot size of 6,000 square feet per single-family detached dwelling unit. The minimum lot size for single-family attached or multi-family units is 7,500 square feet minimum for duplex and 2,000 square feet per unit*

thereafter. Undersized lots, existing prior to 1980, may be developed as single family residential lots.

- *Allow mobile home parks in the General Residential (GR) Zone. Concentrate medium-density housing in and around the downtown area. Typical housing densities would be approximately 6-14 units per net acre.*
- *Use the medium-density housing to transition from higher intensity uses to low-density residential.*
- *Allow for residential care facilities for more than 15 people. Allow up to 30 units per acre.*

LOW DENSITY RESIDENTIAL (L)
Purpose of Plan Designation:

- *Provide areas suitable and desirable for primarily single-family uses with provisions for associated public service uses, planned developments, and limited multiple-family use under controlled conditions on lots incapable of division to city standards.*
- *Ensure that residents are provided with a low density single-family residential area.*
- *Allow up to seven (7) units per net acre. Planned Developments may qualify for a density bonus of up to fifteen (15) living units per net acre in the Single Family Residential (SFR) zone.*
- *Require minimum lot sizes shall of 6,000 square feet and 8,000 square feet on steep slopes. Larger lots may be established by the Planning Commission if it determines that development hazards or constraints exist or if the Planning Commission finds larger lot sizes will be more compatible with surrounding residential areas.*
- *Allow multi-family uses in this designation area if there is no feasible alternative which would allow division of the large lot into smaller single-family lots.*
- *Allow for residential care facilities for more than 15 people. Allow up to 30 units per acre.*

RURAL RESIDENTIAL (R)
Purpose of Plan Designation:

- *Allow the City of Veneta or the property owner to initiate a plan designation change to either Low Density or Medium Density Residential, and applicable zoning map amendments, when development to urban uses and densities and services become available.*

FINDINGS:

1. **The applicant states that the conversion of the subject parcels to M-Medium Density Residential is consistent with surrounding properties (both in terms of plan designation and zoning). Staff notes that there are several instances within the Veneta city limits where Medium Density Residential abuts Low and Rural Density Residential similarly to the subject site. The surrounding properties (to the west) are within the Low Density Residential plan**

designation/ Single Family Residential zone. The surrounding properties to the east and north are within the Rural Residential plan designation.

2. **Approximately 43.61 acres of the subject site are located in the Rural Residential plan designation and in reserve for future plan change designation to either Low Density or Medium Density residential; when urban uses, densities and services become available as described in the purpose of the Rural Residential plan designation (Ordinance 523 – Comprehensive Plan). A portion of the property, approximately 7.17 acres is currently located in the Low Density Residential plan designation/ Single Family Residential zone. The applicant states, there are significant wetlands and greenway that will buffer the transition between the proposed M– Medium Density Residential plan designation and adjacent L – Low Density Residential.**
3. **The Rural Residential zone requires one-acre lot minimums. The majority (+/-43.61 acres) of the subject site is located in the Rural Residential zone, which equates to a potential of approximately forty-three (43) dwelling units, if the designations remained as is. Approximately 7.17 acres of the subject site, is located in the Single Family Residential zone, which currently allows similar size lots as the General Residential zone. The Single Family Residential zone allows a net density not to exceed seven (7) dwelling units per acre versus the General Residential zone which allows a net density not to exceed fifteen (15) dwelling units per net acre.**
4. **The proposal will convert approximately forty-three (43) gross acres of R-Rural Residential designated land, seven (7) acres of L-Low Density Residential land and add a total of approximately fifty (50) acres of M-Medium Density Residential land and adjacent Low Density Residential plan designation.**
5. **The Medium Density Residential (M) plan designation is intended to be concentrated in and around the downtown area according to the Comprehensive Plan. However, there are several instances where Medium Density Residential is not concentrated in the downtown area including south of Perkins Road (Perkins Country Estates Subdivision), Applegate Landing Subdivision in southwest Veneta and east of Territorial Road (Lawler Subdivision).**
6. **The applicant has expressed intent to develop multi-family housing (townhomes – 3 or more units on one lot). The Low Density Residential (L) plan designation does not allow multi-family uses except through conditional use permit approval. The purpose of the Low Density Residential plan designation is to allow multi-family uses if there are no feasible alternative which would allow division of the large lot into smaller single-family lots.**
7. **The proposal is consistent with the change from Rural Residential to Medium Density Residential as the Rural Residential plan designation is intended to allow the property owner to initiate a plan designation change to Medium Density Residential.**

FINDINGS OF CONSISTENCY LAND DEVELOPMENT ORDINANCE NO. 493

"PURPOSE OF LAND DEVELOPMENT ORDINANCE NO. 493: The purpose of this ordinance is to establish standards and procedures for the orderly development of land within the City of Veneta; to assist in implementing the Veneta Comprehensive Plan and to promote the public health, safety and general welfare."

FINDINGS:

1. **The amendments to the Land Development Ordinance No. 493, Article 3, Section 3.03 – Location of Zones, does not affect the stated purpose of the Land Development Ordinance.**

SECTION 11.01 AUTHORIZATION TO INITIATE AMENDMENTS

"An amendment to the text of this ordinance may be initiated by the City Council, the City Planning Commission or by application of a property owner or city resident. An amendment to the zoning map may be initiated by the City Council, the City Planning Commission or by application of a property owner. The request by an application for an amendment shall be accomplished by filing an application with the Building and Planning Official using forms prescribed pursuant to Section 2.06. A filing fee in accordance with the provisions of Section 2.08 and a narrative statement explaining the reasons for the amendment shall accompany an application by a property owner."

FINDINGS:

1. **The property owner is requesting by application the initiation of a Zone Change (map only) which is consistent with this criteria. The applicant has submitted the required application form, filing fee, and narrative statement explaining the reasons for the amendment.**

THE STATEWIDE PLANNING GOALS AND GUIDELINES ADOPTED UNDER OREGON REVISED STATUTES CHAPTER 197

The City's Comprehensive Plan incorporated the Statewide Planning Goals and was acknowledged by the state as being in compliance with state law; therefore, the Statewide Goals are addressed under the Comprehensive Plan Policies Sections. The following Statewide Planning Goals are applicable: Goal 1: Citizen Involvement; Goal 2: Land Use Planning; Goal 10: Housing; Goal 12: Transportation.

GOAL 1: CITIZEN INVOLVEMENT

OAR 660-015-0000(1)

To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.

FINDINGS:

1. **The City, through the Veneta Land Development Ordinance No. 493, has created proper procedures to ensure citizens have the opportunity to have input on any proposed map amendment. Opportunities for public input have been made available through the public comment process and public**

hearings procedures, prior to action on this proposal. Notification of this proposal and public hearing schedule was mailed to all property owners located within five-hundred (500) feet of the subject parcels. Notice was also published in the Fern Ridge Review on June 22, 2016. The City has met its obligation of providing for citizen involvement under Statewide Planning Goal 1, as defined through the City's adopted procedures.

GOAL 2: LAND USE PLANNING
OAR 660-015-0000(2)
To establish a land use planning process and policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions.

FINDINGS:

1. **The proposed Comprehensive Plan/Zone amendment (map only) has been evaluated using criteria and policies found within the City's Comprehensive Plan and Land Development Ordinance No. 493. The proposed amendments are subject to a public hearing before the Planning Commission and City Council. Therefore, a well-established planning process and policy framework exists within the City. The proposal is consistent with Statewide Planning Goal 2 – Land Use Planning.**

GOAL 10: HOUSING
OAR 660-015-0000(10)
To provide for the housing needs of citizens of the state. Buildable lands for residential use shall be inventoried and plans shall encourage the availability of adequate numbers of needed housing units at price ranges and rent levels which are commensurate with the financial capabilities of Oregon households and allow for flexibility of housing location, type and density.

FINDINGS:

1. **The project site was identified as vacant or partially vacant land (buildable) in the Veneta Residential Land Use Classifications Map (adopted with the Comprehensive Plan Amendment, September 14, 2015) and Buildable Lands Study.**
2. **As noted in the September 14, 2015 adopted amendment to the Veneta Comprehensive Plan, the majority of buildable residential land acres is designated Rural Residential and Low Density Residential totaling 347.6 acres and the remaining 128 acres is designated Medium Density Residential.**
3. **Veneta will need to provide 2,120 new dwelling units between the years 2013-2033, plus an additional sixty three (63) group quarter units in order to accommodate the forecasted population according to the adopted Comprehensive Plan.**
4. **Group quarter population is forecasted to double by 2033. An additional 3.3 acres will be needed to accommodate projected new group quarter facilities. The intent to develop senior congregate care facility on approximately five**

(5) acres is aligned with the projected need for group quarters within city limits.

5. **The long term national trend is the aging of the baby boom generation, accompanied by increases in life expectancy. The number of people aged 55 and older will more than double by 2050.**
6. **The intent of the Sarto Village project is to develop single family attached and detached lots for those 55 and older. The applicant has expressed the intent to develop individual lots with one owner.**
7. **Based on the above findings, the proposal is consistent with Goal 10: Housing.**

GOAL 12: TRANSPORTATION PLANNING RULE
OAR Section 660-12-0060
Plan and Land Use Regulation Amendments

(1) If an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation (including a zoning map) would significantly affect an existing or planned transportation facility, then the local government must put in place measures as provided in section (2) of this rule, unless the amendment is allowed under section (3), (9) or (10) of this rule. A plan or land use regulation amendment significantly affects a transportation facility if it would:

(a) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);
(b) Change standards implementing a functional classification system; or
(c) As measured by the end of the planning period identified in the adopted transportation system plan (TSP):

(A) Allow land uses or levels of development that would result in types or levels of travel that are inconsistent with the functional classification of an existing or planned transportation facility;
(B) Degrade the performance of an existing or planned transportation facility below the minimum acceptable performance standard identified in the TSP or comprehensive plan:
(C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to perform below the minimum acceptable performance standard identified in the TSP or comprehensive plan:

<u>FINDINGS:</u>

1. **The applicant has provided a Sarto Village Zone Change Traffic Impact Analysis (TIA) dated April 15, 2016, a Revised Sarto Village TIA, dated August 5, 2016 and a Technical Memorandum, dated August 17, 2016, prepared by Access Engineering, Inc.**
2. **The Technical Memorandum is a response to Oregon Department of Transportation's request for the applicant to utilize current High Capacity**

Manual 2010 (HCM2010) methodology for the unsignalized intersections within the study area.

3. **The revised TIA and Technical Memorandum show the Transportation Planning Rule (TPR) likely worst case scenario (fully developed with single family detached housing on 6,000 square foot lots), could result in up to 227 single-family residences and would generate up to 217 new PM peak hour trips. The TPR analysis concluded the site could support up to 227 single family residences and the resulting trip generation of 217 PM peak hour trips in the future year 2026 PM peak hour traffic conditions without causing a failing condition or worsening a failing performance standard on study area intersections.**
4. **The Technical Memorandum, Table 9 and 12 shows the intersection of Huston Road at Highway 126, which is owned and maintained by the Oregon Department of Transportation, would operate with a v/c ratio near the tolerable limit of the 0.85 in the year 2026 traffic conditions with worst case scenario development.**
5. **In the August 24, 2016 Myhre Group response letter, the applicant is proposing a trip cap of 220 PM peak hour trips. The City Engineer responded that the trip generation should be documented based on the number of potential dwellings and should utilize trip generation rates consistent with the previous analyses applied to the number of dwelling units. The development of 227 single family dwellings discussed throughout the TIA process is not consistent with 217 PM peak hour trips discussed in the August 17, 2016 Technical Memorandum. Further, the August 17, 2016 technical memorandum states that a trip cap is not required.**
6. **As stated, the applicant is proposing to rezone the site to General Residential. The reasonable worst case scenario analyzed in the TIA (Revised TIA dated 8/5/16 and Technical Memorandum received 8/19/16) is for single family dwellings on 6,000 square foot lots which would generate 217 PM peak hour trips. Per Veneta Land Development Ordinance No. 493, Section 4.03(3)(b) multi-family dwellings are a permitted use with Site Plan approval in the General Residential Zoning District. Per Veneta's Comprehensive Plan, Chapter IV Comprehensive Plan Map and Land Use Designations the maximum density for General Residential Zone is 15 dwelling units per net acre. The applicant's TIA states the net acres of the site available for development is 31.2 acres. At a maximum density of 15 dwelling units per net acre the site could potentially be developed with 468 multi-family units. The TIA provided no data that to show whether or not multi-family development on all three tax lots might significantly affect transportation facilities. Therefore, staff is proposing a trip cap of 217 PM peak hour trips to ensure study area intersections are not impacted. The TPR can be satisfied with the following condition:**

   <u>Condition: The maximum development on the site (Assessor's Map 17-05-31-00 Tax Lots 00400 and 00501 and Assessor's Map 17-05-31-34 Tax Lot 00602) shall be limited so that it would not produce more than 217 PM peak</u>

hour trips as determined by the Institute of Transportation Engineers Trip Generation Manual. The City may allow development intensity beyond this maximum number of peak hour vehicle trips only if the applicant submits to the City and ODOT a traffic impact analysis that demonstrates that the proposed intensification of use would be consistent with the Transportation Planning Rule. The applicant shall see and the City shall consider such approval using the City's limited land use application procedure.

7. **As an informational item, since the zone change application is based on planned development that includes three separate tax lots (Assessor's Map 17-05-31-00 Tax Lots 00400 and 00501 and Assessor's Map 17-05-31-34 Tax Lot 00602), the site should be considered as one development site. If development on the site occurs in phases, prior to issuance of any land use application approvals or prior to issuance of any building permits, the trip generation from the entire site (Assessor's Map 17-05-31-00 Tax Lots 00400 and 00501 and Assessor's Map 17-05-31-34 Tax Lot 00602) should be evaluated by the owner/developer's traffic engineer and approved by the City Engineer, to determine if the site's cumulative trip generation exceeds 100 or more PM peak hour trips and if a traffic study is applicable. If/when development on any part of the site (Assessor's Map 17-05-31-00 Tax Lots 00400 and 00501 and Assessor's Map 17-05-31-34 Tax Lot 00602) generates 100 or more PM peak hour trips and when any development on the site occurs after the 100 PM peak hour trip threshold is exceeded; a traffic study should be prepared by the owner/developer's traffic engineer and approved by the City Engineer, to address traffic conditions per Section 5.27 of the City of Veneta's Land Use Ordinance No. 493.**
8. **The existing Hunter Road roadway conditions do not include bike lanes or pedestrian facilities that are identified in the City of Veneta's transportation system plan for the major collector street functional classification. The TPR criterion addresses the functional classification and capacity at the planning level for motor vehicle traffic (i.e. what is planned during the TSP plan year) and does not include stipulations for bike lanes and/or pedestrian facilities. If required with future development proposal(s), a future traffic impact analysis prior to development should include an inventory and assessment of the adequacy of the existing level of improvements for motor vehicle, bicycle and pedestrian users and the capability of existing facilities within the study area to accommodate both motorized and non-motorized modes of traffic and any potential for increase with development.**

CONCLUSIONARY FINDINGS

Based on the information, findings, and condition stated above, the proposed amendments to the Veneta Comprehensive Plan Diagram and Veneta Zoning Map, complies with all applicable Statewide Planning Goals and polices of the Veneta Comprehensive Plan. The Veneta Planning Commission hereby approves the proposed amendments and these findings of fact and recommends approval and adoption by the City Council.

XXXXXXXXXXXXXXXXX _____ _____

Len Goodwin, Planning Commission, Vice Chair Date

Exhibit A to Final Order

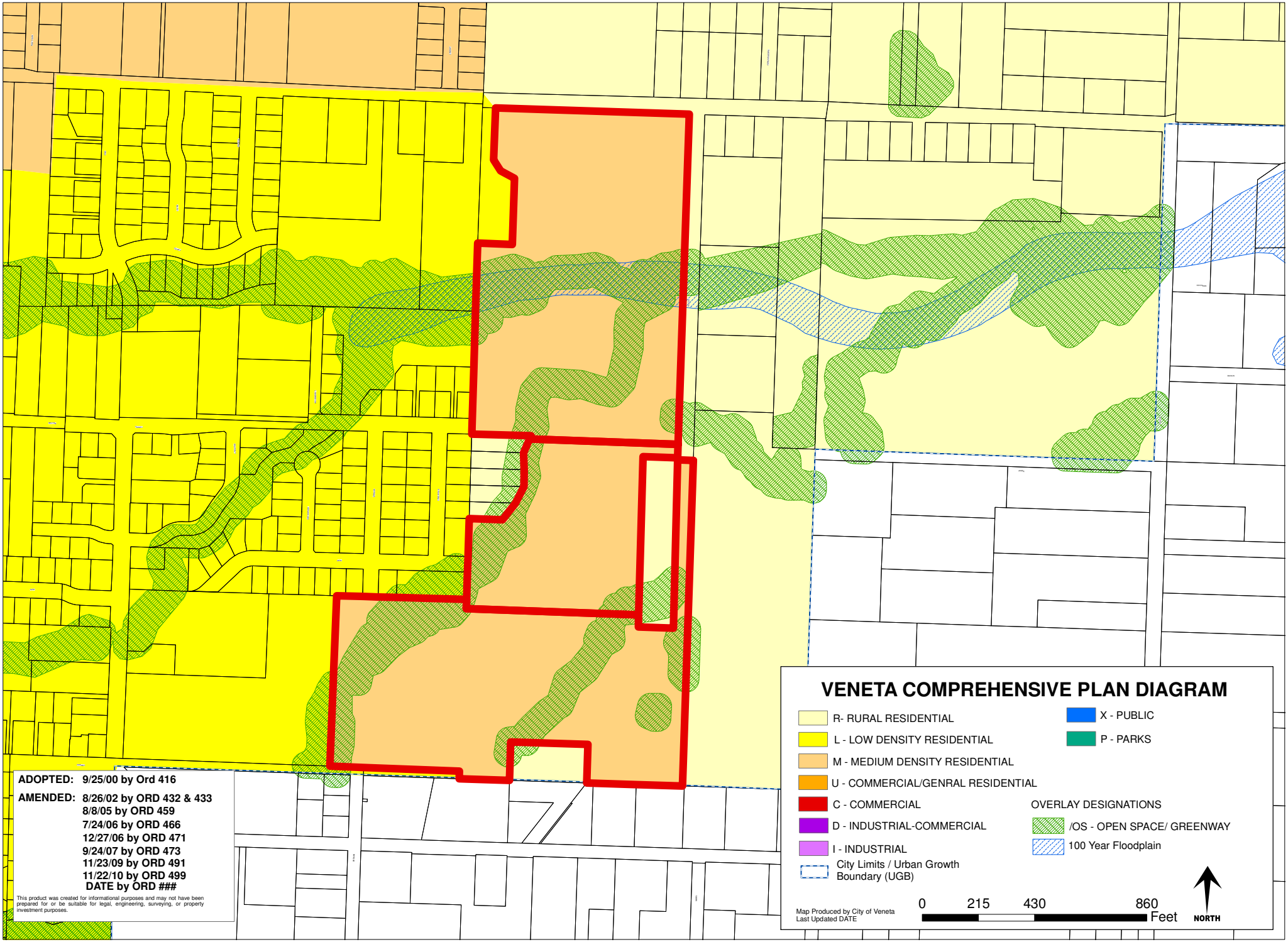

Exhibit B to Final Order

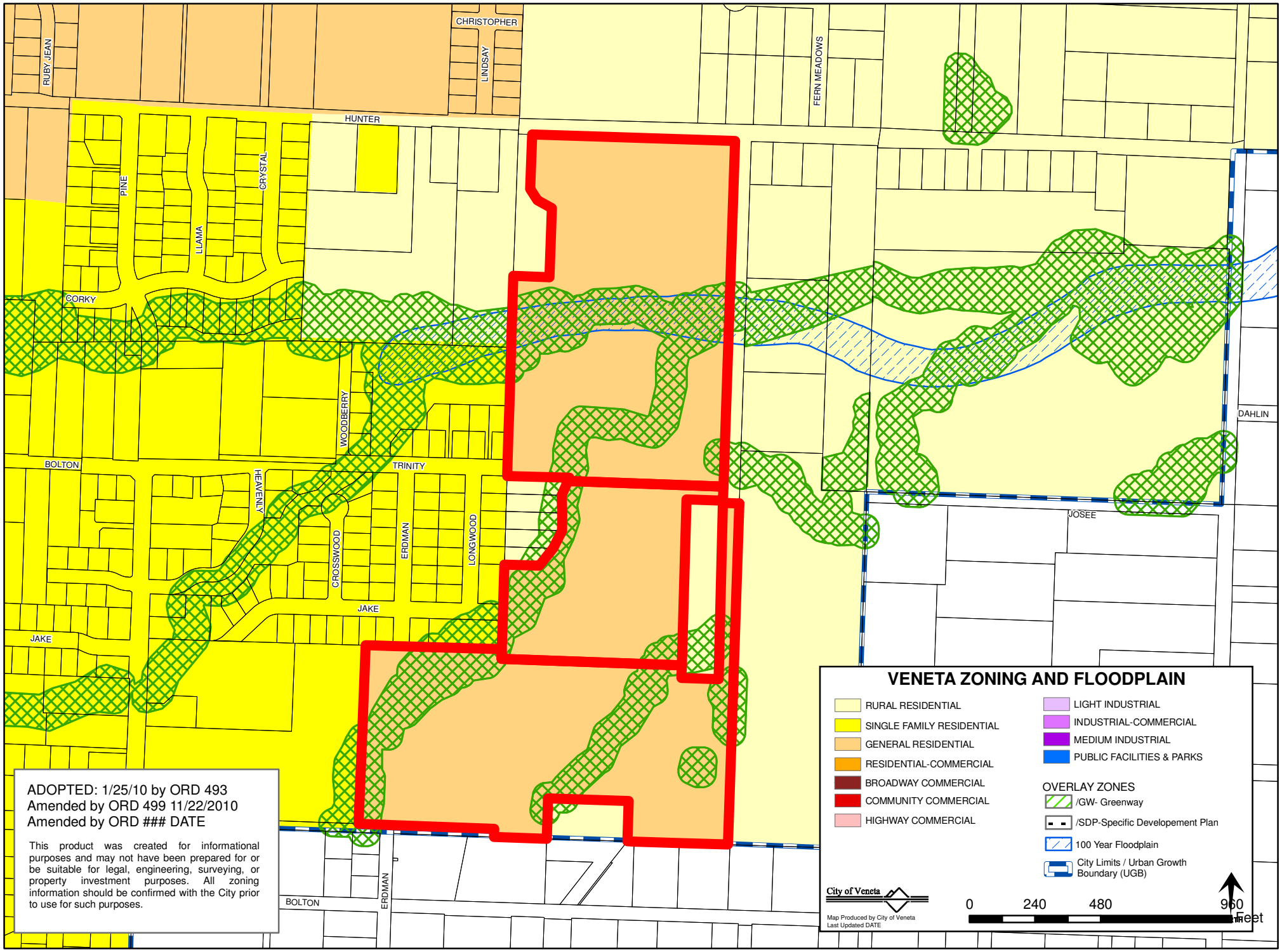

Exhibit B

Access Engineering LLC

134 E. 13th Ave. Suite 2

Eugene, Oregon 97401

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Sarto Village Zone Change
Goal 12 Traffic Impact Analysis

Veneta, Oregon

Transportation Engineering

Traffic Design

Trip Generation

Access Management

Traffic Counts

Street Lighting

Revised August 5, 2016

Sarto Village Zone Change
Goal 12 Traffic Impact Analysis

Veneta, Oregon

RENEWS 6/30/16

Revised August 5, 2016

Table of Contents

I. Executive Summary. 1

II. Background. 2
1. Introduction. 2
2. Location and Vicinity Map. 2
3. Land Uses and Intensity. 2
4. Study Area. 3
5. Existing Traffic Conditions. 4
5a. Seasonal Factor. 4
5b. Intersection Operations - General Procedures. 5
5c. Existing 2014 Intersection Operational Analysis. 5
6. Crash History. 6
7. Trip Generation. 8
8. Trip Distribution and Assignment. 9

III. Transportation Planning Rule (TPR) Operational Analysis. 10
1. Year of Opening, 2016, Intersection Operational Analysis. 10
2. Horizon Year, 2026, Background Traffic Growth. 11
3. Horizon Year, 2026, Intersection Operational Analysis. 11
4. Proposed Mitigation. 12
5. Sarto Village Proposed Development. 12

IV. Conclusions and Recommendations. 14

Tables

Table 1: Existing Study Area Street Characteristics. 3
Table 2: Existing 2016 Operational Analysis. 6
Table 3: Crash History - Oregon 126 @ Territorial Highway. 6
Table 4: Crash History - Oregon 126 @ Huston Road. 7
Table 5: Crash History - Territorial Hwy. @ Hunter Road. 7
Table 6: Crash History - Territorial Hwy. @ Bolton Road. 7
Table 7: Trip Generation Comparison. 8
Table 8: Existing 2016 Operational Analysis. 10
Table 9: Horizon Year, 2026, Operational Analysis. 11
Table 10: Horizon Year, 2026, Trip Cap Operational Analysis. 12
Table 11: Sarto Village Development Plan Trip Generation. 13
Table 12: Horizon Year, 2026, Operational Analysis Comparison. 13

Sarto Village Zone Change
Traffic Impact Analysis

I. Executive Summary

This study evaluates the long-term traffic impacts associated with the Sarto Village proposed plan amendment and zone change on three large parcels of land in Veneta, Oregon. The study addresses the requirements of the Transportation Planning Rule (TPR) for changes to plan designations and zoning as set out in OAR 660-12-0060. The study compares the worst-case development for the proposed zoning (GR - General Residential) to the worst-case development of the existing zoning (RR - rural residential). A transportation facility is significantly affected if trips from the proposal

(a) Change the functional classification of an existing or planned transportation facility;

(b) Change standards implementing a functional classification system;

(c) As measured by the end of the planning period identified in the adopted transportation system plan :

- (A) Allow land uses or levels of development that would result in types or levels of travel that are inconsistent with the functional classification of an existing or planned transportation facility;
- (B) Reduce the performance of an existing or planned transportation facility below the minimum acceptable performance standard identified in the TSP or comprehensive plan;
- (C) Worsen the performance of an existing or planned transportation facility that is otherwise projected to perform below the minimum acceptable performance standard identified in the TSP or comprehensive plan.

Of the 50.78 total acres in the Sarto Village site, there are approximately 7.17 acres that are currently zoned SFR in the southwest corner of the site leaving ~43.61 acres to be re-zoned. There are also designated wetlands that further reduce the build-able area of the zone change. Based on a minimum lot size of 6000 square feet, the worst-case GR development will result in 227 residences and 217 new PM peak hour trips. Those trips are compared to the three trips generated by the single RR dwellings allowed on the three tax lots making up the site.

An analysis of the study area intersections in 2016 with the proposed zoning in place shows that all intersections will remain well above the performance standards. By 2026, all study area intersections are forecast to remain well above the performance standards accept the Oregon 126 at Huston Road intersection where the northbound v/c is 0.84 while the performance standard is 0.85. Since the worst-case development will bring the Oregon 126 at Huston Road intersection within the standard error of the mobility standard (0.02), a trip cap mitigation is proposed that will reduce the northbound v/c to 0.82.

Further analysis finds that reducing the PM peak hour trips from 217 to 200 will result in a v/c of 0.82. Therefore the mitigation for the proposed zone change is a trip cap of 200 peak hour vehicles.

The Sarto Village development plan proposes age-restricted housing with assisted living and congregate care facilities. The actual development proposal consists of assisted living, 100 beds; congregate care, 100 units, and 130 to 150 senior adult housing. This plan will generate 97 PM peak hour trips. When this plan is analyzed all intersections are now well within the performance standards and satisfies the requirements of the Transportation Planning Rule.

II. Background

1. Introduction

The purpose of this report is to provide a Traffic Impact Analysis for the proposed zone change on three parcels in Veneta, Oregon in order to comply with the Statewide Planning Goal 12, the Transportation Planning Rule. This report will compare the traffic impacts of the reasonable worst-case development allowed under the proposed City General Residential zone to the traffic impacts of the reasonable worst-case development allowed under the existing City Rural Residential zone to determine if the change will significantly impact the area's transportation system. A mitigation plan will be prepared for any intersection that is significantly impacted.

According to the definitions in the Oregon Administrative Rule 660-12-0060 Transportation Planning Rule (TPR) analyses have a 20 year "Planning Period" from the date of adoption of the latest Transportation System Plan (TSP) update. The Veneta TSP expired in 2015 and has not been updated. However in 2006 the Veneta Southwest Area Specific Plan Amendment was adopted which can be considered an update of the TSP since the scope included the major streets in Veneta. This would make the new horizon year, 2026, replacing the stated 2015 analysis year identified in the TSP.

2. Location and Vicinity Map

The site consists of three tax lots, 400 and 501 on assessor's map 17-05-31-1 and tax lot 602 on map 17-05-31-34. The site contains a total of 50.78 acres. The properties lie south of Hunter Road and west of Baker Road abutting both streets and extend south to approximately 300 feet north of E. Bolton Road. Figure 1 in Appendix A shows the location of the site in eastern Veneta.

3. Land Uses and Intensity

The site currently contains one dwelling located on tax lot 400 with a driveway access on Hunter Road 330 feet west of Baker Road and one dwelling on tax lot 501 with a driveway access on Baker Road 1275 feet south of Hunter Road. Tax lot 602 is currently vacant. Both the Veneta Zoning and Comprehensive Plan Maps show the western portion of tax lot 602 (~7.17 acres) is currently zoned SFR. This portion of the site will not be included in the TPR analysis since that zoning has been included in the existing Veneta Transportation System Plan (TSP). Figure 2 in Appendix A shows the site boundaries and connections to the surrounding street system based on Map 9 in the Veneta TSP. The site also contains six designated wetland areas totaling 3.04 acres. These wetland areas are shown in Figure 2 and are taken from a 2009 Wetland Boundary map by EGR & Associates, Inc.

The TPR analysis will compare the traffic impacts of a reasonable worst-case development under the proposed zoning to the impacts of a reasonable worst-case development under the existing zoning. For the existing zoning, Rural Residential (RR), the Veneta Development Ordinance 493 allows outright a farm use and/or one single- family dwelling per parcel. The proposed General Residential (GR) zone allows one single- family dwelling per lot or one duplex per corner lot provided the driveway access is taken from an alley or two local streets. The net density in the GR zone is 8 dwelling units per acre.

4. Study Area

a. Limits of Traffic Study. The Initial study area includes the following intersections surrounding the site:

Oregon 126 @ Territorial Hwy.
Oregon 126 @ Huston Road
Territorial Hwy. @ Hunter Road
Territorial Hwy. @ E. Bolton Road
Hunter Road @ Huston Road
E. Bolton Road @ Trinity St./Pine St.
E. Bolton Road @ Cheney Drive

b. Existing Zoning and Land Uses. All properties north and east of the site within the Veneta city limits are zoned RR. North of Hunter Road and west of the site are properties zoned GR - General Residential. Properties immediately west of tax lot 400 from Hunter Road to 800 feet south are zoned RR. All properties southwest of there are zoned SFR.

c. Existing Transportation Facilities. Table 1 shows the characteristics of the existing streets in the initial study area.

Table 1: Existing Study Area Street Characteristics

Street	Segment	Jurisdiction & Functional Classification	Road Width (ft)	Posted Speed	Travel Lanes*	Bike Lanes	Curbs/ Shoulders	Parking	Sidewalks
Oregon 126	East of M.P. 47.03 West of M.P. 47.03	ODOT Major Arterial	26'	55 45	2	None	/8'	None	None
Territorial Hwy	N/o Waldo Lane Waldo to Hunter S/o Hunter	ODOT Minor Arterial	26' 50' 50'	35 35** 45	2	Both Sides	Curbs	None	Both Sides
Hunter Road	W/o Territorial Hwy Territorial to Huston	City Major Collector	30' 22'	25	2	None	Curbs /0	None	None
Huston Road	N/o Ore 126 to Hunter S/o Hunter	City Major Collector County U-Mn Collector	22'	35 45	2	None	/0	None	None
Bolton Hill Road	W/o Territorial Hwy	City Major Collector	34'	35	2	Both Sides	Curbs	None	Both Sides
E. Bolton Road	Territorial to Pine Pine to Cheney Cheney to Huston	City Minor Collector City Minor Collector County Rural Local	20'	30 30** 35	2	None	/0	S/s 350' E/o T Hwy	S/s 350' E/o T Hwy
Trinity Street		City Minor Collector	38'	25	2	Both Sides	Curbs	South Side	Both Sides
Pine Street		City Minor Collector	38'	25	2	Both Sides	Curbs	West Side	Both Sides
Baker Road		City Local	12'-20'	N/A	1/2	None	Gravel	None	None
Erdman Way	N/o E Bolton Rd S/o E Bolton Rd	County Local	12' 20'	25***	2	None	Gravel /0'	None	None

* - Number of through lanes only. **- School 20 MPH Zone *** - Basic Rule

Oregon 126 is the principal arterial running through Veneta. Oregon 126 is known as the Florence-Eugene Highway (Highway #62) in the Oregon Department of Transportation (ODOT) highway system and is classified as a Statewide Highway by the 1999 Oregon Highway Plan (OHP), amended.

Territorial Highway is a state highway (Highway #200) running as a major arterial north-south through Veneta. The OHP classifies Territorial Highway as District Highway.

d. Existing Intersection Controls. At the signalized intersection of Oregon 126 with Territorial Highway, all approaches have left-turn and right-turn pockets with protected left-turn phases. The intersection is an isolated, fully actuated traffic signal. The northbound right-turn lane is controlled by an overlap with the westbound left-turn phase.

All streets intersecting Territorial Highway in the study area are controlled by two-way Stop signs for the minor street.

The Oregon 126 at Huston Road intersection is controlled by Stop signs for Huston Road. Oregon 126 has left-turn pockets and right-turn flared approaches in both eastbound and westbound directions. The Coos Bay Rail Link crosses Huston Road only 50 feet south of the northbound Stop line.

Hunter Road is controlled by a Stop sign at the Huston Road T-intersection.

The intersection of E. Bolton Road (west and south legs) with Trinity Street (east leg) and Pine Street (north leg) is controlled by an All-way Stop.

The intersection of E Bolton Road with Cheney Drive is controlled by a Stop sign for Cheney Dr.

5. Existing Traffic Conditions

Vehicle classification turning movement counts were taken at the seven study area intersections during the PM peak hours on March 29, 30, and 31, 2016. The two Oregon 126 intersections were counted on March 29th from 3:30 to 6:30 PM. The PM peak hour was 4:00-5:00 at the Oregon 126 at Territorial Highway intersection and 3:45-4:45 at the Oregon 126 at Huston Road intersection. Since the Oregon 126 at Territorial Highway intersection has the highest traffic level, that peak hour was used to determine the two-hour PM count period for the remaining five intersections. On March 30th and 31st the remaining peak hour counts were conducted. The PM peak hour at all other intersection was 4:00 to 5:00 PM. The actual peak hour volumes were used in the analysis at each intersection. Summary sheets for the traffic counts can be found in Appendix B.

5a. Seasonal Factor

For analysis of state highway intersections, ODOT guidelines call for the use of design hour volumes (DHV). Design hour volumes are the 30th highest hour volume for a given year. Chapter 4 of ODOT's "Analysis Procedure Manual" provides for three methods for determining season factors that are used to convert peak hour traffic to DHV's. Seasonal factors were calculated for three types of travel in the area; the coastal destination trend on Oregon 126 and Territorial Highway north of Oregon 126, and the commuter trend on the remaining intersections.

For Oregon 126, there is an Automatic Traffic Recorder (ATR 20-005 Noti) located 3.06 miles west of Territorial Highway. Using the On Site ATR Method, the seasonal factor for all through traffic on Oregon 126 was found to be 1.20 based on five years of traffic count data.

For Territorial Highway north of Oregon 126, there is an ATR (20-023 Fern Ridge) located 5.97 miles north of Oregon 126. Using the On Site ATR Method, the seasonal factor for all traffic on Territorial Hwy. North of Oregon 126 was found to be 1.24 based on five years of traffic count data.

For Territorial Highway south of Oregon 126 the commuter and summer seasonal trends were combined to describe the type of traffic during the PM peak hour. The 2014 Seasonal Trend Table was consulted to establish a seasonal factor. The seasonal factor was found to be 1.18 based on the late March traffic count period. All other city streets were adjusted using the commuter seasonal trend alone.

The seasonally adjusted traffic volumes at the study area intersections calculated using the seasonal factors above are found in Figure 3 in Appendix A. The calculations can be found in Appendix B.

5b. Intersection Operations - General Procedures

For state highway intersections, ODOT uses a mobility standard based on the ratio of the volume of traffic using an intersection or an approach compared to the capacity of the intersection or approach, v/c. As the volume of traffic nears capacity the ratio approaches 1.0. Table 6 in the Updated 1999 Oregon Highway Plan lists the maximum allowable v/c for various highway classifications, locations, and speeds.

- For Oregon 126, a statewide highway not in a metropolitan area with a posted speed equal to or greater than 45 MPH, the maximum allowed v/c is 0.80
- For Territorial Highway, a district highway not in a metropolitan area with a posted speed equal to 35 MPH, the maximum allowed v/c is 0.95 at Hunter Road and for a posted speed of 45 MPH, the maximum allowed v/c is 0.90 at E Bolton Road.
- The remaining intersections are inside the city limits. The expired TSP gives no guidance on mobility standards for city streets other than to avoid congestion. Since most of these streets were originally County roads, will use Lane County's mobility standards found in Table 4 of Section 15.697 of the Lane Code. For county roads inside an Urban Growth Boundary but outside the Eugene-Springfield Metro area, the maximum allowed v/c for speeds less than 45 MPH is 0.85

5c. Existing 2014 Intersection Operational Analysis

A capacity analysis was performed on the intersections in the study area for the weekday existing 2016 design hour volumes (DHV) shown in Figure 3 in Appendix A. The Synchro program is used to evaluate the operation of all intersections in the study area. For unsignalized intersections, only the most critical (highest) v/c along with the corresponding movement at the intersection are reported. For the signalized intersections the overall v/c is reported. The saturation flow rate was set to the ODOT standard 1750 vehicles per hour for intersection approaches. The existing Peak Hour Factors (PHF's) and heavy vehicle percentages from the traffic counts were used. The Synchro reports are in Appendix D. Table 2 on the following page shows that the v/c levels at the study area intersections are well above the appropriate mobility standards.

Table 2: Existing 2016 Operational Analysis

Intersection Movement (Controlled)	Mobility Standard	PM Peak Hour		
		V/C	Delay (sec.)	LOS
Oregon 126 @ Territorial Road	0.80	0.66	29.5	C
Oregon 126 @ Huston Road				
Westbound Ore. 126	0.80	0.44	0.0	A
Southbound Movements	0.85	0.22	40.2	E
Territorial Road @ Hunter Road				
Eastbound Approach	0.85	0.13	14.6	B
Southbound Thru + Right	0.95	0.26	0.0	A
Territorial Road @ Bolton Hill/E. Bolton Road				
Eastbound Left turn	0.85	0.09	12.8	B
Southbound Thru + Right	0.90	0.22	0.0	A
E. Bolton Road @ Pine Street/Trinity Street				
Southbound Movements	0.85	0.04	7.2	A
E. Bolton Road @ Cheney Drive				
Eastbound Movements	0.85	0.02	8.6	A
Huston Road @ Hunter Road				
Eastbound Movements	0.90	0.06	9.8	A
Hunter Road @ Baker Lane				
Northbound Movements	0.90	0.00	8.7	A
E. Bolton Road @ Erdman Way				
Northbound Movements	0.90	0.01	8.8	A
Huston Road @ Josee Lane				
Eastbound Movements	0.90	0.0	9.0	A

6. Crash History

Crash records for the Oregon 126 and Territorial Highway intersections in the study area for the three year period 2012 through 2014 were obtained from the ODOT Crash Analysis and Reporting Unit. Tables 3 through 6 list the crashes crash rates at these intersections. The detail crash reports are in Appendix C.

Table 3: Crash History - Oregon 126 @ Territorial Highway

Year	Collision Types							ADT	Crash Rate (mev)	Severity	
	Turn	Rear End	Angle	Sideswipe	Fixed Obj	Backing	Total			PDO	Injury
2012	0	0	1	0	0	1	2	22,400	0.24	1	1
2013	2	1	0	0	0	0	3	22,900	0.36	1	2
2014	2	0	0	1	1	0	4	24,100	0.45	1	2
Total	4	1	1	1	1	1	9	69,400	0.36	3	5

Table 4: Crash History - Oregon 126 @ Huston Road

Year	Collision Types						ADT	Crash Rate (mev)	Severity	
	Turn	Rear End	Angle	Sideswipe	Animal	Total			PDO	Injury
2012	0	2	0	0	1	3	14,100	0.58	3	0
2013	0	0	0	0	0	0	14,200	0.00	0	0
2014	0	0	1	0	0	1	14,800	0.19	0	1
Total	0	2	1	0	1	4	43,100	0.25	3	1

Table 5: Crash History - Territorial Hwy. @ Hunter Road

Year	Collision Types						ADT	Crash Rate (mev)	Severity	
	Turn	Rear End	Angle	Sideswipe	Animal	Total			PDO	Injury
2012	0	0	0	0	0	0	8,200	0.00	0	0
2013	0	0	0	0	0	0	8,550	0.00	0	0
2014	2	1	0	0	0	3	9,125	0.90	1	2
Total	2	1	0	0	0	3	25,875	0.36	1	2

Table 6: Crash History - Territorial Hwy. @ Bolton Road

Year	Collision Types						ADT	Crash Rate (mev)	Severity	
	Turn	Rear End	Angle	Sideswipe	Animal	Total			PDO	Injury
2012	0	0	0	0	0	0	6,750	0.00	0	0
2013	1	0	1	0	0	2	7,000	0.78	1	1
2014	0	0	0	0	0	0	7,700	0.00	0	0
Total	1	0	1	0	0	2	21,450	0.26	1	1

There were no crashes reported at the remaining study area intersections during the three-year period. The crash rate is in units of number of crashes per one million entering vehicles (mev). The crash analysis does not reveal any specific problem areas or types of collision. The three crashes at Territorial Highway at Hunter Road in 2014 involved a southbound left turn, a northbound left turn and a southbound rear-end involving a right turn. These crashes and the two at Territorial Highway at Bolton Road appear to be anomalous but should bear monitoring in the future.

7. Trip Generation

The first step in the analysis of a zone change is to determine the PM peak hour trip generation of a reasonable worst-case development in the existing Rural Residential zone compared to a reasonable worst-case development in the proposed General Residential zone to determine if there is a net increase or decrease in trips.

The Veneta RR zone allows farming use or one single family dwellings per tax lot. There are three existing tax lots two of which have an existing dwelling. We are assuming three total dwelling units for the RR zoning.

The Veneta GR zone allows one single family dwellings per buildable legal lot. The GR zone is selected because the SFR zone does not allow outright the proposed assisted living or congregate care facilities. Both zones have the same minimum lot areas; 6,000 square feet for single-family homes or 7,500 square feet for duplexes. The total site acreage is 50.78 acres, however the western portion of tax lot 602 (found by extending the western boundary of tax lot 401 due south) is currently zoned SFR so this ~7.17 acres is not a part of the zone change. In addition, there are designated wetlands on the site as shown in Figure 2. Of the total 3.04 acres designated as wetlands (see Figure 6A Wetland Delineation Report in Appendix B), approximately 1.04 acres lies on the portion of tax lot 602 that is already zoned SFR. Therefore 2.0 acres of wetlands exist in the zone change area. The total buildable acres in the zone change area 50.78 less 9.17 = 41.61 acres.

For the worst-case scenario, we assume there are no further impediments to full development of the zone change area. Most new residential streets in Veneta have been constructed on either 50 or 60-foot rights-of-way. Taking the developed subdivision immediately west of the site between Trinity and Jake Streets as a sample, the street right-of-way is ~25% of the developed area. Subtracting 25% of the 41.61 buildable acres for streets leaves 31.2 acres or ~1,360,000 square feet available for housing units. At the minimum 6,000 square feet per dwelling unit that amounts to 227 dwelling units.

Table 7 compares the trips generated by the uses selected above. The Ninth Edition of the ITE Trip Generation Manual was consulted for the daily and PM peak hour trips generated by Land Use Code 210 - Single-Family Detached Housing. Trips for both the worst-case RR zoning are computed and compared to the worst-case GR zoning in Table 7. The results show that the zone change from RR to GR will generate an additional 217 peak hour trips.

Table 7: Trip Generation Comparison

Land Use (ITE Code)	Size	Unit	Daily		PM Peak Hour			
			Rate	Total	Rate	Total	In	Out
Existing - Rural Residential (210)	3	Dwelling Units	13.9*	42	1.49*	3	2	1
Proposed - General Residential (210)	227	Dwelling Units	9.79*	2222	0.97*	220	139	81
Net Trips: Proposed - Existing				**2180**		**217**	**137**	**80**

* - Trip rate is based on the fitted curve equation.

8. Trip Distribution and Assignment

The expired TSP's projected average daily traffic (ADT) for 2015 is unreliable. The 2015 projected volumes overestimated actual traffic counts in 2014 on Oregon 126 by 17% at Territorial Hwy. and 45% east of Huston Road. Territorial Highway and Huston Road ADT's were similarly overestimated south of Oregon 126. TIA's for the four out of nine phases of the Southwest Area Specific Plan that have been completed all having different percentages of trips leaving the city limits/urban growth boundary. For these reasons we have developed the following trip distribution.

The distribution of trips generated by the site during the PM peak hour will predominantly follow work/shopping-to-home patterns. The Sarto Village site is only 12 miles from downtown Eugene. The Eugene-Springfield metropolitan area would easily be the largest employer and provide the greatest shopping opportunities. The secondary employment and shopping areas would be downtown Veneta and the commercial areas along Oregon 126 especially the commercial area surrounding the Oregon 126/Territorial Highway intersection. These areas will account for 70% of trip origins and destinations; Oregon 126 east of Huston Road - 45%, downtown Veneta - 10%, Oregon 126/Territorial Highway area - 15%. The remaining 30% of trips area distributed 10% to Perkins Road connecting to Oregon 126 via Central Road; 10% to Territorial Road north of Oregon 126; 5% to Bolton Hill Road to the east; 3% to Territorial Highway south of Perkins Road and 2% to Huston Road north of Oregon 126.

Currently access to the site is only available from Hunter Road which border the site on the north and Baker Lane which borders the northern half of the east boundary. Two streets currently approach the west boundary of the site, Trinity Street and Jake Street, but have a one-foot strip barrier at the border. Map 9 in the Veneta TSP shows several proposed streets connecting to the site:

- Trinity Street is proposed to run west to east through the site and connect with Josee Lane which appears to be a gravel, local access road or private access easement just outside the Veneta UGB in Lane County. The area north of Josee Lane is in the city and undeveloped.
- Corky Lane is proposed to run west to east through the site and end to Baker Lane.
- Jake Street is an existing street that is shown to reach the west site boundary.
- Baker Lane is shown to be extended south from Trinity Street to E. Bolton Road.

One major wetland greenway passes through the site from the southwest corner to the to the east boundary creating an impediment to through streets connections. We have assumed the only the Trinity Street/Josee Lane east-west connection to be made through the center of the site. In addition, Baker Lane cannot connect to E. Bolton Road because the area between the site south boundary and E. Bolton Road has been developed with single-family homes and no right-of-way exists for Baker lane. There is, however, a right-of-way that connects to E. Bolton Road near the southwest corner of the site which is an extension of Erdman Way. Figure 4 in Appendix A shows the assignment of trips between the four site accesses and the study area intersections.

III. Transportation Planning Rule (TPR) Operational Analysis

Since all study area intersections currently operate above the ODOT, City and County mobility standards, a significant impact occurs when an intersection's mobility standard is exceeded by the new trips from the proposed zone change.

1. Year of Opening, 2016, Intersection Operational Analysis

The development under the proposed zoning is assumed to be completed in 2016. The study area traffic levels for the proposed zoning scenario are shown on Figure 5 in Appendix A. The worst-case development traffic levels in Figure 4 are added to the existing traffic volumes shown in Figure 3. The Synchro program is used to evaluate the operation of the study area intersections. The PHF's, truck and pedestrian percentages from the traffic counts are used in the analysis. Table 8 shows the results of the level-of-service (LOS) analysis. The Synchro reports can be found in Appendix D.

Table 8: Existing 2016 Operational Analysis

Intersection Movement (Controlled)	Mobility Standard	Existing Zoning			Proposed Zoning		
		V/C	Delay (sec.)	LOS	V/C	Delay (sec.)	LOS
Oregon 126 @ Territorial Road	0.80	0.66	29.5	C	0.67	30.1	C
Oregon 126 @ Huston Road							
Westbound Ore. 126	0.80	0.44	0.0	A	0.44	0.0	A
Southbound Movements	0.85	0.22	40.2	E	0.34	61.1	F
Northbound Movements	0.85	0.36	31.7	D	0.57	42.9	E
Territorial Road @ Hunter Road							
Eastbound Approach	0.85	0.13	14.6	B	0.15	16.2	C
Southbound Thru + Right	0.95	0.26	0.0	A	0.28	0.0	A
Territorial Road @ Bolton Hill/E. Bolton Road							
Eastbound Left turn	0.85	0.09	12.8	B	0.10	13.6	B
Southbound Thru + Right	0.90	0.22	0.0	A	0.22	0.0	A
E. Bolton Road @ Pine Street/Trinity Street							
Eastbound Movements	0.85	0.03	7.1	A	0.07	7.3	A
E. Bolton Road @ Cheney Drive							
Eastbound Movements	0.85	0.02	8.6	A	0.03	8.7	A
Huston Road @ Hunter Road							
Eastbound Movements	0.90	0.06	9.8	A	0.09	10.5	B
Hunter Road @ Baker Lane							
Northbound Movements	0.90	0.00	8.7	A	0.04	9.1	A
E. Bolton Road @ Erdman Way							
Northbound Movements	0.90	0.01	8.8	A	0.01	9.0	A
Huston Road @ Josee Lane							
Eastbound Movements	0.90	0.0	9.0	A	0.03	9.5	A

All intersection critical movements are above the appropriate mobility standard, so no mitigation is required. The north- and southbound movements on Huston Road at Oregon 126 will experience long

delays which are increased by the worst-case development. A check of signal warrants for the intersection is made following the procedures in ODOT's Analysis Procedures Manual (APM). The results indicate that a signal is not warranted at this time. The calculation is in Appendix B.

2. Horizon Year, 2026, Background Traffic Growth

Traffic growth for Oregon 126 and Territorial Highway for the horizon year, 2026, was estimated using ODOT's 2034 Future Highway Volume Table. The calculations are found in Appendix B. The annual growth rate for Oregon 126 was found to be 1.0% per year or a growth factor of 1.10 over ten years. The annual growth rate for Territorial Highway shows a significant difference in the area near Oregon 126 (0.34%) compared to the area south of Broadway (0.99%). A growth factor of 1.034 was applied to Territorial Highway approaches to Oregon 126 and a growth factor of 1.10 was applied to Territorial Highway south of Broadway and the remaining City and County streets in the study area. Figure 6 in Appendix A shows the No-build and Build traffic levels in the study area.

3. Horizon Year, 2026, Intersection Operational Analysis

The Synchro program was rerun for the 2026 data using the same PHF's as in 2016. Table 9 shows the results of the level-of-service (LOS) analysis. The Synchro reports can be found in Appendix E.

Table 9: Horizon Year, 2026, Operational Analysis

Intersection Movement (Controlled)	Mobility Standard	Existing Zoning			Proposed Zoning		
		V/C	Delay (sec.)	LOS	V/C	Delay (sec.)	LOS
Oregon 126 @ Territorial Road	0.80	0.70	31.7	C	0.72	32.6	C
Oregon 126 @ Huston Road							
Westbound Ore. 126	0.80	0.48	0.0	A	0.48	0.0	A
Southbound Movements	0.85	0.37	63.2	F	0.56	110.1	F
Northbound Movements	0.85	0.55	53.6	F	**0.84**	93.6	F
Territorial Road @ Hunter Road							
Eastbound Approach	0.85	0.17	16.3	C	0.20	18.3	C
Southbound Thru + Right	0.95	0.29	0.0	A	0.30	0.0	A
Territorial Road @ Bolton Hill/E. Bolton Road							
Eastbound Left turn	0.85	0.11	13.6	B	0.12	14.5	B
Southbound Thru + Right	0.90	0.24	0.0	A	0.24	0.0	A
E. Bolton Road @ Pine Street/Trinity Street							
Eastbound Movements	0.85	0.05	7.1	A	0.07	7.3	A
E. Bolton Road @ Cheney Drive							
Eastbound Movements	0.85	0.03	8.6	A	0.03	8.7	A
Huston Road @ Hunter Road							
Eastbound Movements	0.90	0.07	10.0	A	0.10	10.7	B
Hunter Road @ Baker Lane							
Northbound Movements	0.90	0.00	8.7	A	0.04	9.2	A
E. Bolton Road @ Erdman Way							
Northbound Movements	0.90	0.01	8.8	A	0.01	9.1	A
Huston Road @ Josee Lane							
Eastbound Movements	0.90	0.0	9.1	A	0.03	9.5	A

The intersection operational analysis in Table 9 above shows that the northbound movements on Hunter Road approaching Oregon 126 will reach a v/c of 0.84 just under the maximum v/c allowed, 0.85. While this does not technically result in reducing the performance of an existing facility below the minimum acceptable performance standard (0.85), it is within the standard error of the v/c data, 0.02. Since the v/c is determined for future conditions that are based on a number of assumptions including overall community growth and travel patterns, the intersection could fail and a mitigation plan is proposed. A check of signal warrants again indicates that the intersection does not meet ODOT's preliminary signal warrant.

4. Proposed Mitigation

Since the worst-case development will bring the Oregon 126 at Huston Road intersection within the standard error of the mobility standard and a traffic signal is not warranted, a trip cap mitigation is proposed that will reduce the northbound v/c to 0.82. To determine the volume of trips that will reduce the v/c to an acceptable level, the Synchro program was rerun lowering the new trips proportionally until the v/c reached .082. That v/c level was reached when the total trips generated by the site reached 200. Figure 8 in Appendix A shows he resulting traffic levels in the study area when the site's new trips are reduced to 200 in the peak hour. Table 10 shows the results of the intersection operational analysis of the Highway 126 at Huston Road intersection with the reduced volume of new trips. The Sychro report is in Appendix D. The remaining study area intersections are well under the mobility standard at 217 new trips and will improve slightly at 200 new trips.

Table 10: Horizon Year, 2026, Trip Cap Operational Analysis

Intersection Movement (Controlled)	Mobility Standard	Existing Zoning			Proposed Zoning			Prop. Zoning w/ Trip Cap		
		V/C	Delay (sec.)	LOS	V/C	Delay (sec.)	LOS	V/C	Delay (sec.)	LOS
Oregon 126 @ Huston Road										
Westbound Ore. 126	0.80	0.48	0.0	A	0.48	0.0	A	0.48	0.0	A
Southbound Movements	0.85	0.37	63.2	F	0.56	110.1	F	0.55	106.5	F
Northbound Movements	0.85	0.55	53.6	F	**0.84**	93.6	F	0.82	90.2	F

With a trip reduction of approximately 92%, the intersection will now operate within the mobility standard. Therefore, a trip cap of 200 trips will satisfy the Goal 12 requirements and is recommended to be applied to the proposed zone change on tax lots 400 and 501 on assessor's map 17-05-31-1 and the re-zoned portion of tax lot 602 on map 17-05-31-34.

5. Sarto Village Proposed Development

The developer does not intend to develop to the maximum extent allowed by the Goal 12 transportation Planning Rule. The following is the actual development plan for the site:

Phase 1: Age-restricted (55+) senior housing, 140 units to be completed by 2018 on tax lots 501, 602, and the southern portion of tax lot 400.

Phase 2: Congregate Senior Housing - 100 units of Independent Living and 100 units of Assisted Living to be completed by 2020 on the northern portion of tax lot 400.

The Ninth Edition of the ITE Trip Generation Manual was consulted for the daily and PM peak hour trips generated by Land Use Codes 251 - Senior Adult Housing Detached, 253 - Congregate Care Facility, and 254 - Assisted Living. The trips generated for the proposed age-restricted and congregate housing development in are tabulated in Table 11 on the following page.

Table 11: Sarto Village Development Plan Trip Generation

Land Use (ITE Code)	Size	Unit	Daily		PM Peak Hour			
			Rate	Total	Rate	Total	In	Out
Proposed Senior Adult Housing Detached (251)	140	Dwelling Units	4.56*	638	0.41*	58	35	23
Proposed Congregate Care Facility (253)	100	Dwelling Units	2.02	202	0.17	17	9	8
Proposed Assisted Living (254)	100	Beds	2.66	266	0.22	22	10	12
Proposed -Development				1106		97	54	43

* - Trip rate is based on the fitted curve equation.

Table 11 shows that the Sarto Village Development Plan will generate less than half of the trips that could result from the zone change if it were developed to the maximum extent allowed by the Goal 12 analysis. The distribution and assignment of the 97 new trips are made in the same manner as previously done for the worst-case development. Figure 9 in Appendix A shows the assignment of new trips generated by the actual development plan. Figure 10 in Appendix A shows the resulting traffic levels in the study area. Table 12 shows the results of the level-of-service (LOS) analysis for the study area compared with that of the proposed Zoning. The Synchro reports can be found in Appendix F.

Table 12: Horizon Year, 2026, Operational Analysis Comparison

Intersection Movement (Controlled)	Mobility Standard	Proposed Zoning			Sarto Village Development		
		V/C	Delay (sec.)	LOS	V/C	Delay (sec.)	LOS
Oregon 126 @ Territorial Road	0.80	0.72	32.6	C	0.71	32.0	C
Oregon 126 @ Huston Road							
Westbound Ore. 126	0.80	0.48	0.0	A	0.48	0.0	A
Southbound Movements	0.85	0.56	110.1	F	0.44	76.8	F
Northbound Movements	0.85	**0.84**	93.6	F	0.66	62.6	F
Territorial Road @ Hunter Road							
Eastbound Approach	0.85	0.20	18.3	C	0.17	17.0	C
Southbound Thru + Right	0.95	0.30	0.0	A	0.29	0.0	A
Territorial Road @ Bolton Hill/E. Bolton Road							
Eastbound Left turn	0.85	0.12	14.5	B	0.12	13.9	B
Southbound Thru + Right	0.90	0.24	0.0	A	0.24	0.0	A
E. Bolton Road @ Pine Street/Trinity Street							
Eastbound Movements	0.85	0.07	7.3	A	0.06	7.1	A
E. Bolton Road @ Cheney Drive							
Eastbound Movements	0.85	0.03	8.7	A	0.03	8.7	A
Huston Road @ Hunter Road							
Eastbound Movements	0.90	0.10	10.7	B	0.08	10.3	B
Hunter Road @ Baker Lane							
Northbound Movements	0.90	0.04	9.2	A	0.04	9.2	A
E. Bolton Road @ Erdman Way							
Northbound Movements	0.90	0.01	9.1	A	0.01	9.1	A
Huston Road @ Josee Lane							
Eastbound Movements	0.90	0.03	9.5	A	0.02	9.3	A

The results of the intersection operational analysis for the Sarto Village development plan shows that the v/c for the northbound Huston Road movements at Oregon 126 is well within the allowable range. All other intersections show a reduced traffic impact as well.

IV. Conclusions and Recommendations

The above analysis of the Transportation Planning Rule for the proposed plan amendment and zone change from Rural Residential to General Residential has found that the full development of the site to 227 single-family homes could result in the Oregon 126 at Huston Road intersection reaching the maximum allowable v/c ratio. While the worst-case development does not technically exceed the performance standard it is too close to ignore. The proposed mitigation is a trip cap of 200 new trips generated by 205 single-family residences.

Based on this analysis, we find that the proposed Zone Change from Rural Residential to General Residential, developed as age-restricted housing with assisted living and congregate care facilities, will result in no significant impact to the operation of the transportation system following the directives of OAR 660-012-0060(1):

(a) Change the functional classification of an existing or planned transportation facility; - **NO**
(b) Change standards implementing a functional classification system; - **NO**
(c) As measured by the end of the planning period identified in the adopted transportation system plan (TSP):
    (A) Allow land uses or levels of development that would result in types or levels of travel that are inconsistent with the functional classification of an existing or planned transportation facility; - **NO**
    (B) Reduce the performance of an existing or planned transportation facility below the minimum acceptable performance standard identified in the TSP or comprehensive plan: - **NO**
    (C) Worsen the performance of an existing or planned transportation facility that is otherwise projected to perform below the minimum acceptable performance standard identified in the TSP or comprehensive plan: - **NO** with Trip Cap at 200 trips.

Therefore we recommend approval of the plan amendment and zone change conditioned on the proposed Trip Cap of 200 new trips.

Appendix A

Figures

Figure 1

Sarto Village Zone Change Traffic Impact Study

Vicinity Map

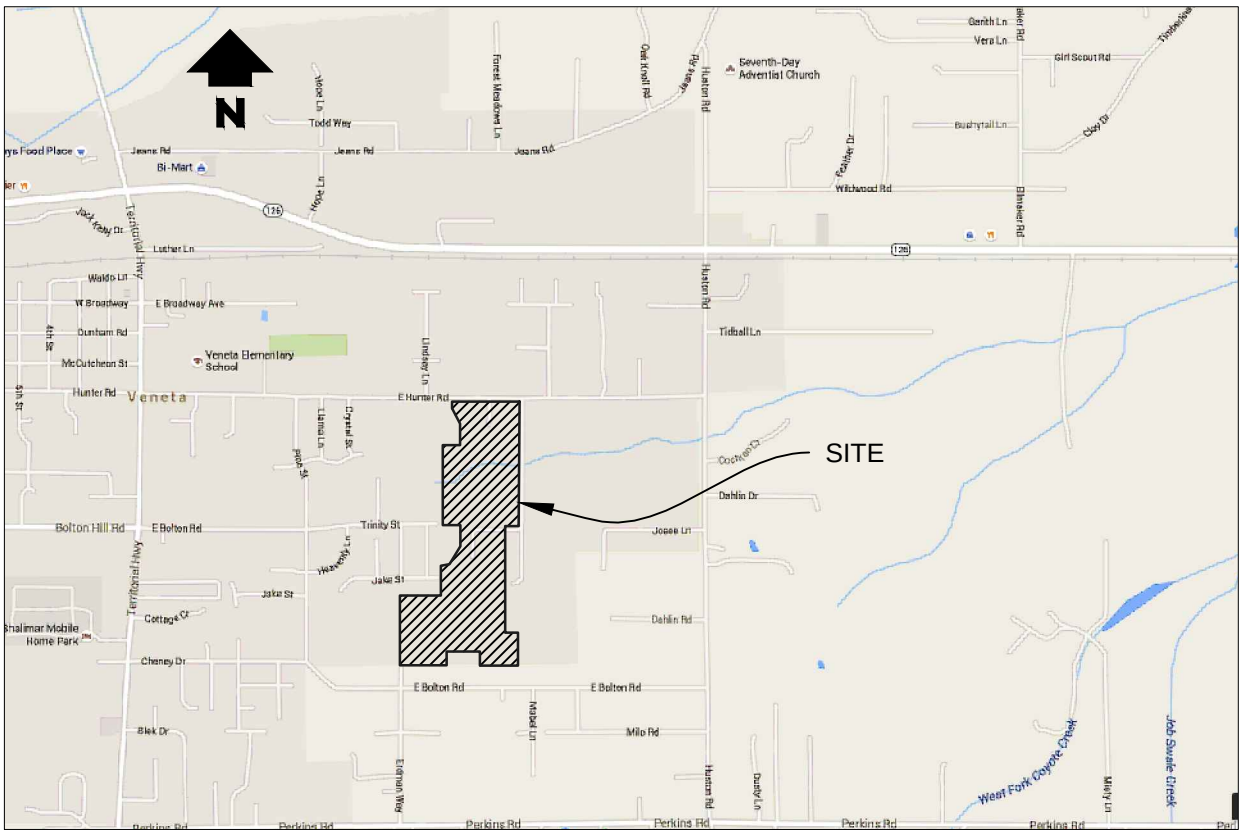

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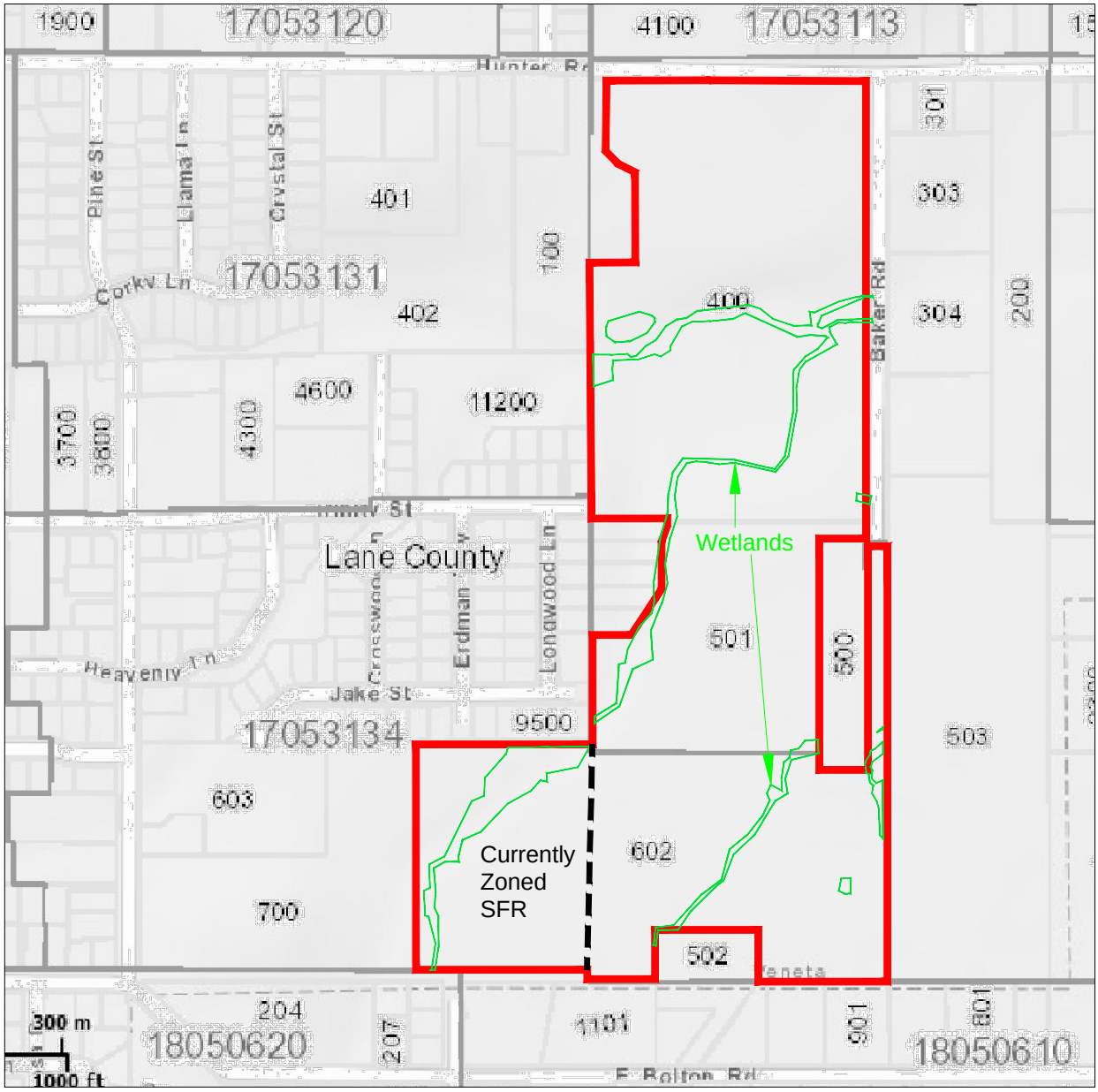
Figure 2

Sarto Village Zone Change Traffic Impact Study

Site Plan

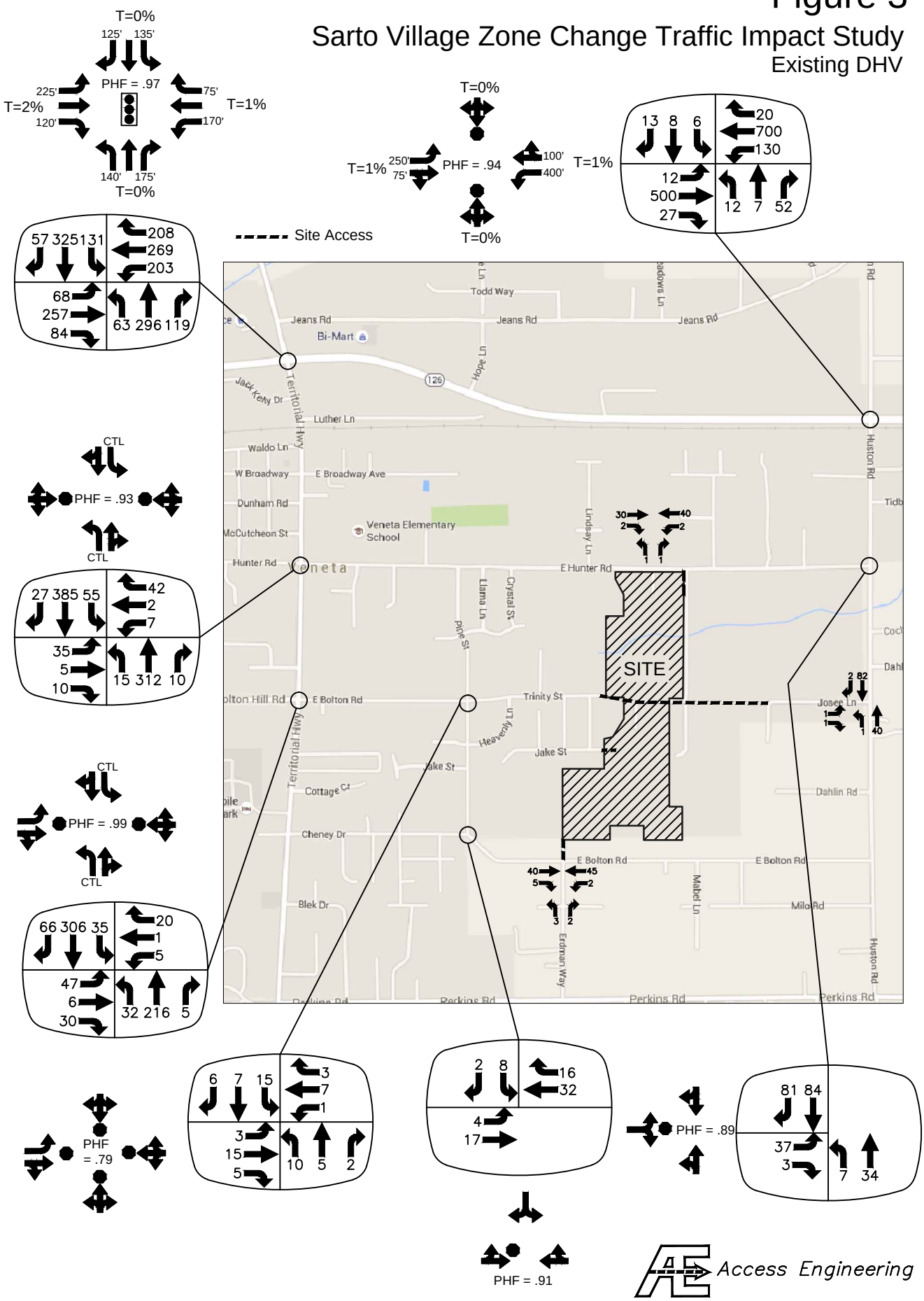


Access Engineering

Figure 3

Sarto Village Zone Change Traffic Impact Study

Existing DHV

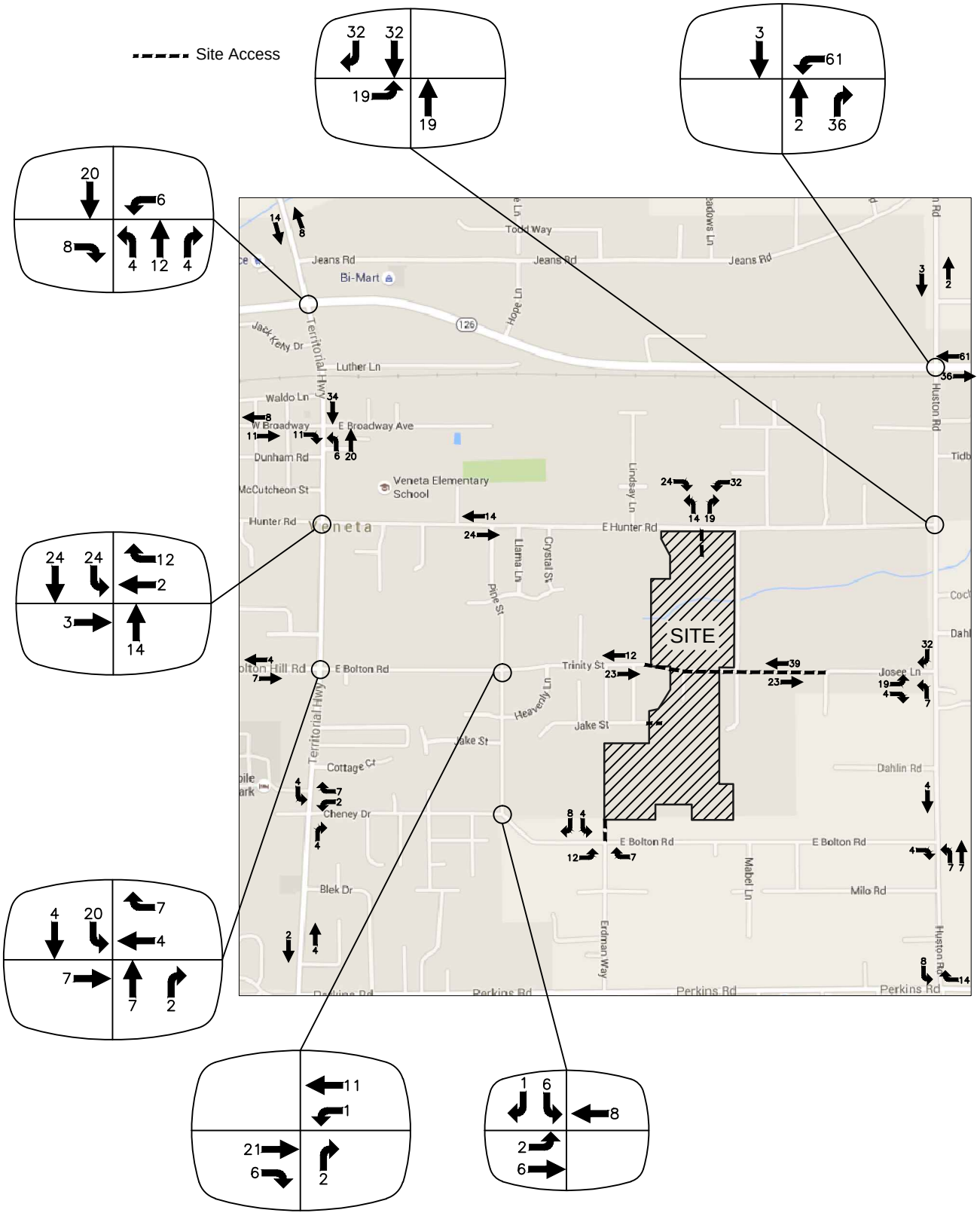


Access Engineering

Figure 4

Sarto Village Zone Change Traffic Impact Study

Worst Case Trip Assingment

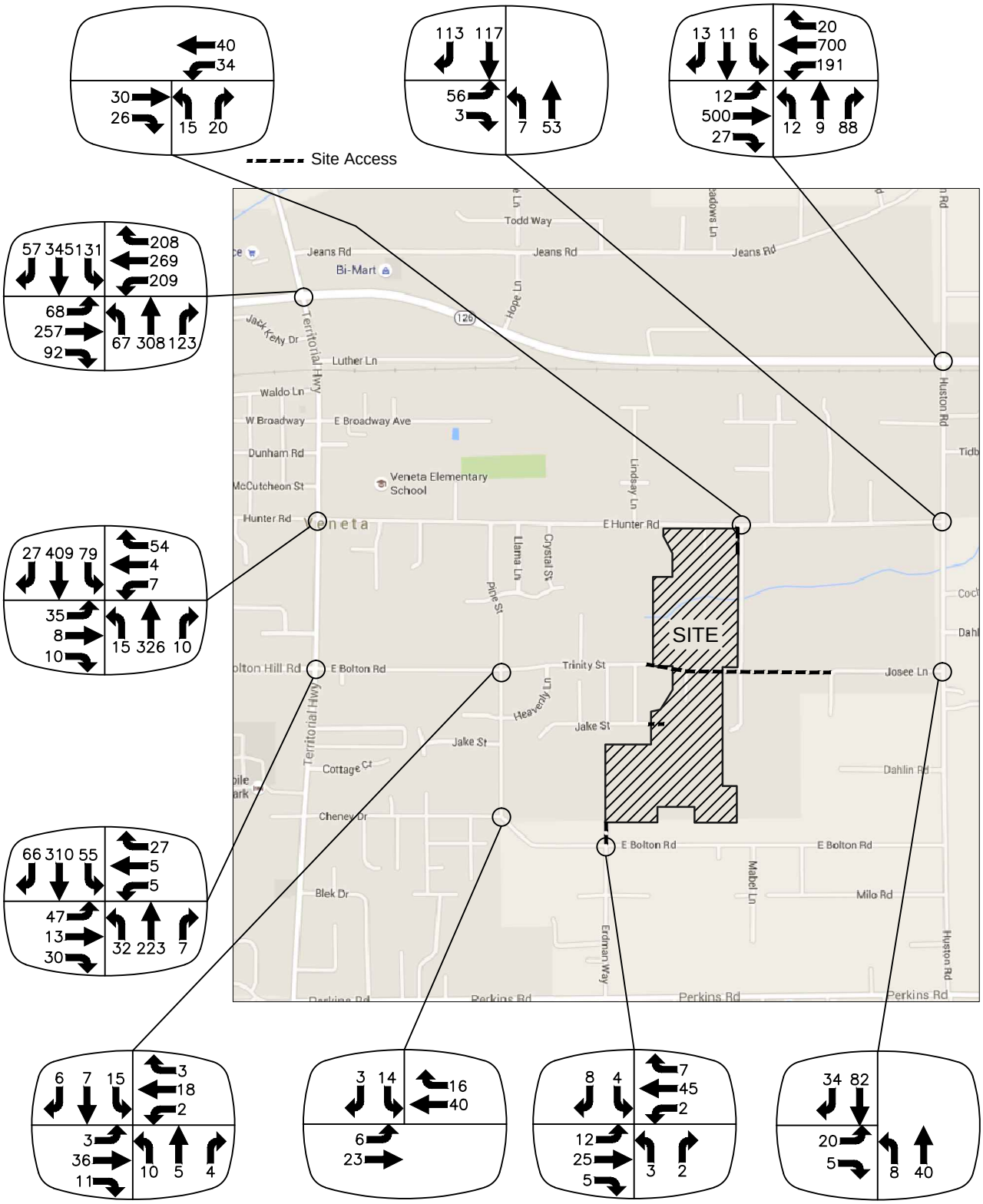


Access Engineering

Figure 5

Sarto Village Zone Change Traffic Impact Study

2016 Build



Access Engineering

Figure 6

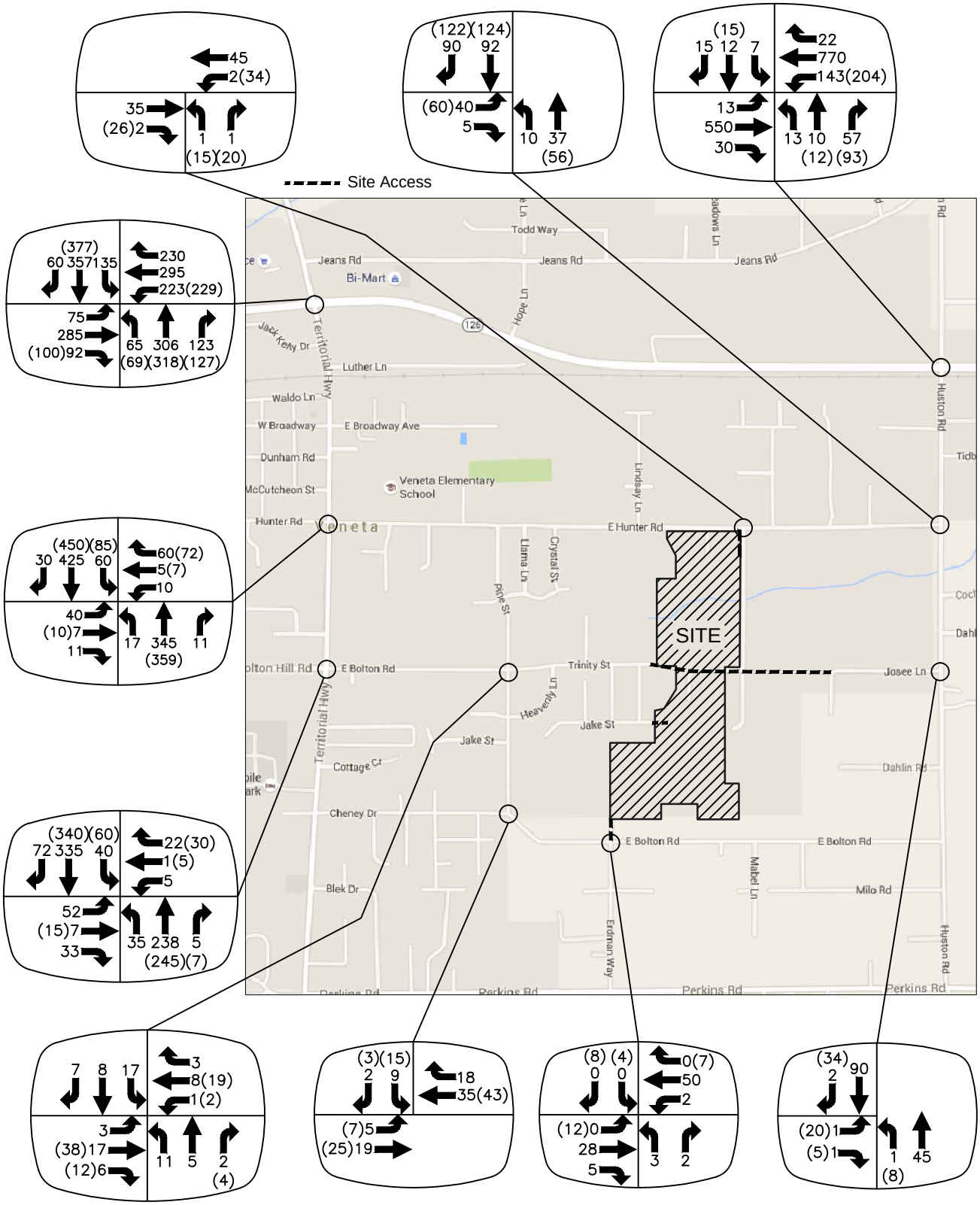
Sarto Village Zone Change Traffic Impact Study

2026 DHV's

LEGEND

XX - No Build

(XX) - Build (where different)

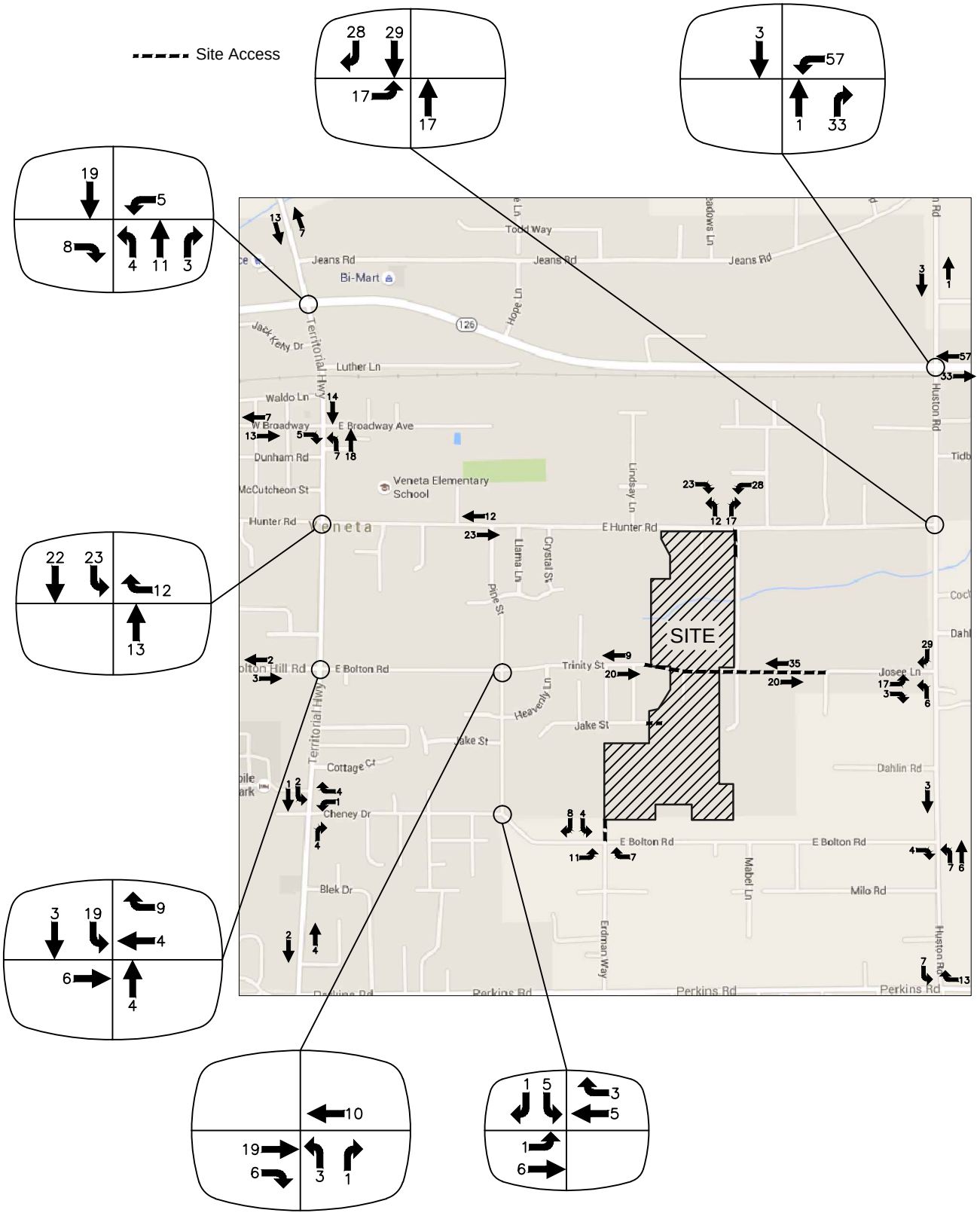


Access Engineering

Figure 7

Sarto Village Zone Change Traffic Impact Study

Trip Cap Trip Assingment



Access Engineering

Figure 8

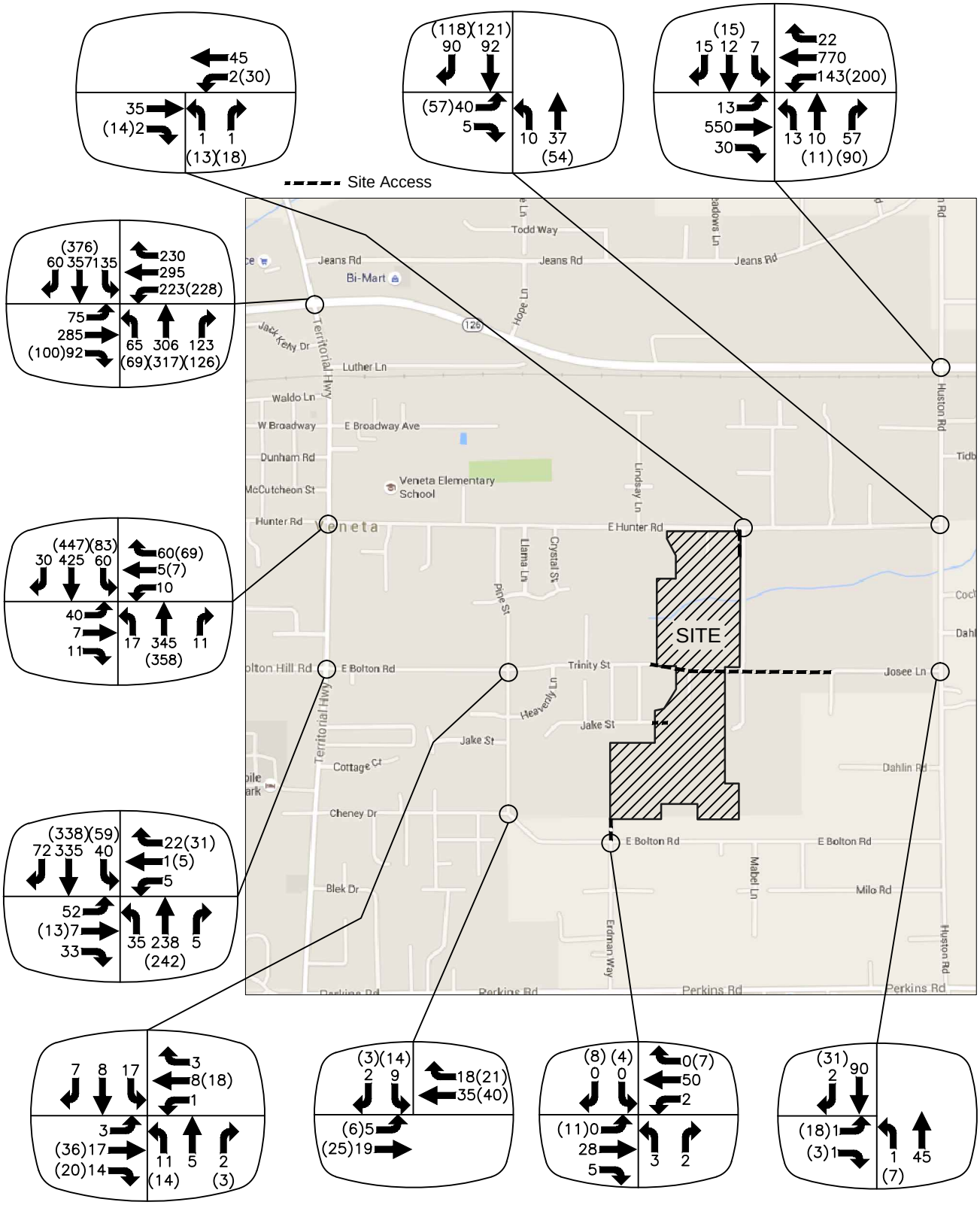
Sarto Village Zone Change Traffic Impact Study

2026 DHV's with Trip Cap

LEGEND

XX - No Build

(XX) - Build Mitigation (where different)

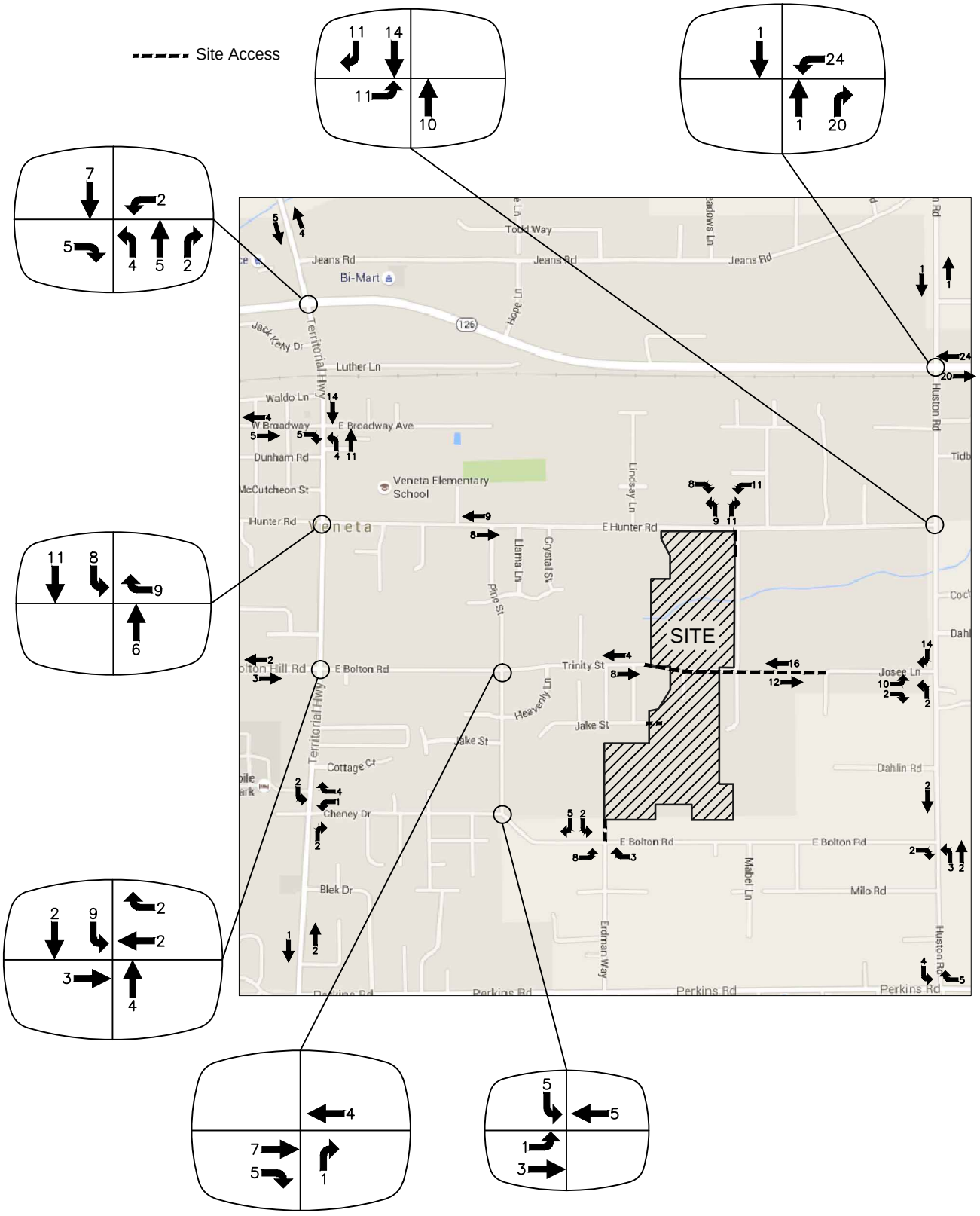


Access Engineering

Figure 9

Sarto Village Zone Change Traffic Impact Study

Proposed Development Trip Assingment



Access Engineering

Figure 10

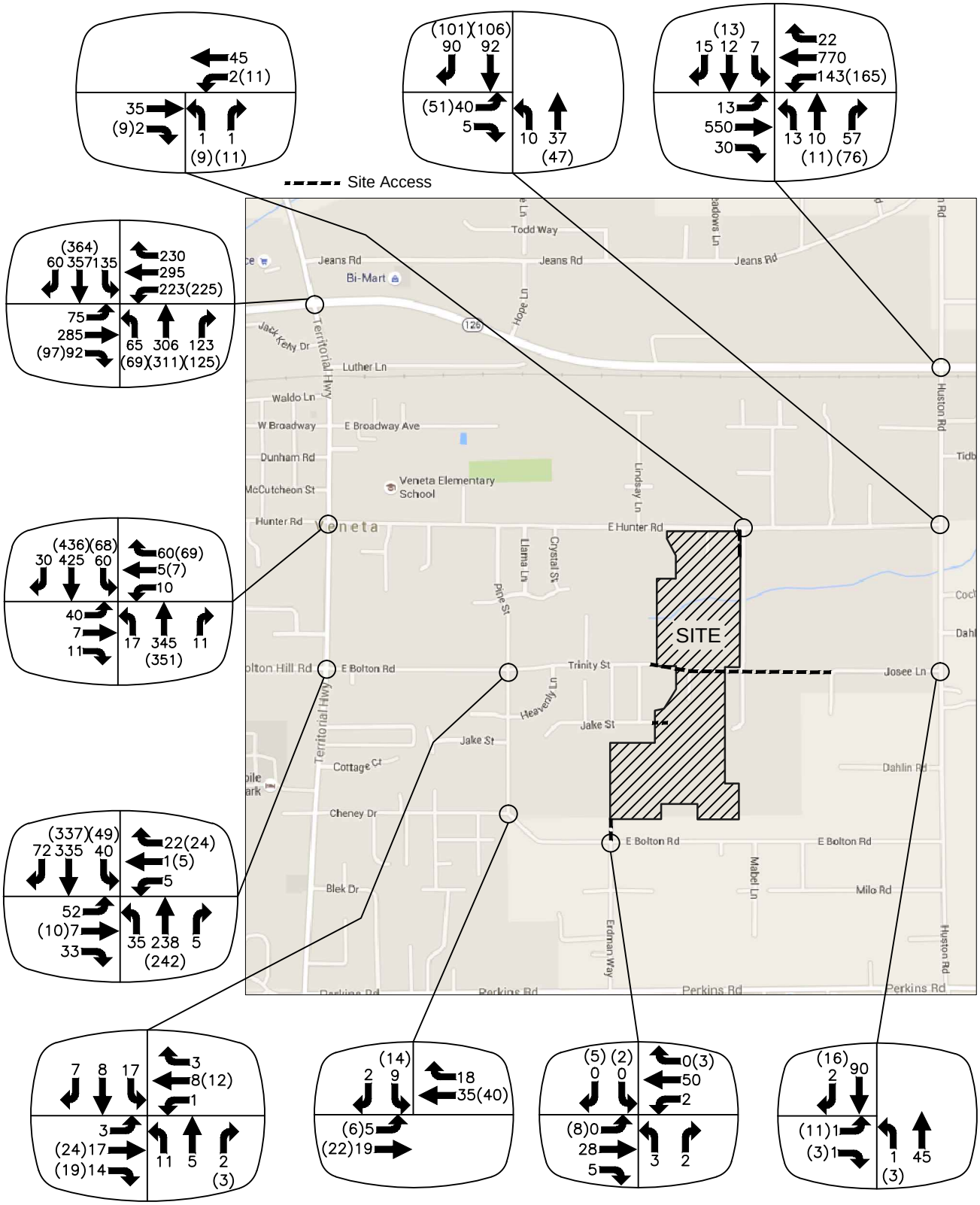
Sarto Village Zone Change Traffic Impact Study

2026 DHV's with Sarto Village

LEGEND

XX - No Build

(XX) - Build Sarto Village (where different)



Access Engineering

Appendix B

Traffic Data & Calculations

ACCESS ENGINEERING
Peak Hour Intersection Turning Movement Count & Classification Summary

N/S Street: **Territorial Hwy.** Counted By: **GTD**
E/W Street: **Oregon 126** Date: **3/29/16**

Time Period From-To PM	Northbound Territorial Hwy.					Southbound Territorial Hwy.					Eastbound Oregon 126					Westbound Oregon 126					ALL
	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	
3:30-3:45	6	54	17	**77**	0	19	71	7	**97**	0	10	53	22	**85**	2	55	47	42	**144**	1	403
3:45-4:00	15	56	21	**92**	0	27	53	16	**96**	1	14	42	24	**80**	2	31	62	38	**131**	0	399
Hour Total:	21	110	38	**169**	0	46	124	23	**193**	1	24	95	46	**165**	4	86	109	80	**275**	1	802
4:00-4:15	10	56	34	**100**	0	22	70	9	**101**	0	16	53	11	**80**	3	52	46	33	**131**	0	412
4:15-4:30	13	69	20	**102**	0	26	64	15	**105**	0	17	54	12	**83**	2	39	67	42	**148**	2	438
4:30-4:45	13	55	18	**86**	0	36	57	8	**101**	1	11	56	24	**91**	0	36	56	53	**145**	1	423
4:45-5:00	15	59	24	**98**	0	22	71	14	**107**	0	13	51	23	**87**	2	42	55	45	**142**	0	434
Hour Total:	51	239	96	**386**	0	106	262	46	**414**	1	57	214	70	**341**	7	169	224	173	**566**	3	1707
5:00-5:15	13	57	18	**88**	0	13	52	7	**72**	1	16	49	28	**93**	0	39	60	36	**135**	0	388
5:15-5:30	13	50	14	**77**	0	16	65	9	**90**	0	13	40	12	**65**	0	41	69	43	**153**	1	385
5:30-5:45	8	57	16	**81**	0	21	70	8	**99**	0	11	50	24	**85**	0	45	65	47	**157**	0	422
5:45-6:00	5	66	28	**99**	0	24	83	13	**120**	0	4	43	17	**64**	1	45	56	36	**137**	0	420
Hour Total:	39	230	76	**345**	0	74	270	37	**381**	1	44	182	81	**307**	1	170	250	162	**582**	1	1615
6:00-6:15	11	57	19	**87**	0	12	61	15	**88**	0	5	53	22	**80**	0	35	48	26	**109**	2	364
6:15-6:30	7	50	20	**77**	0	11	51	13	**75**	0	11	30	16	**57**	1	34	54	33	**121**	1	330
Hour Total:	18	107	39	**164**	0	23	112	28	**163**	0	16	83	38	**137**	1	69	102	59	**230**	3	694
Grand Total:	129	686	249	**1064**	0	249	768	134	**1151**	3	141	574	235	**950**	13	494	685	474	**1653**	8	4124
PM Peak Hr. 4:00-5:00	**51**	**239**	**96**	**386**	**0**	**106**	**262**	**46**	**414**	**1**	**57**	**214**	**70**	**341**	**7**	**169**	**224**	**173**	**566**	**3**	**1707**
PHF				**0.946**					**0.967**					**0.937**					**0.956**		**0.974**
% Trucks				**0%**					**0%**					**2%**					**1%**		
Seasonal Factor (x 1.24)											**Seasonal Factor (x 1.20)**										
Adj. PHV	**63**	**296**	**119**	**478**		**131**	**325**	**57**	**513**		**68**	**257**	**84**	**409**		**203**	**269**	**208**	**680**		**2080**

Pedestrians:
Peak Hour

1	**4:00-4:15**	
1	**4:30-4:45**	
2	**4:45-5:00**	
2	5:00-5:15	
1	5:30-5:45	

1	3:30-3:45	
3	3:45-4:00	
3	**4:00-4:15**	
4	**4:15-4:30**	
10	**4:30-4:45**	
5	**4:45-5:00**	

2	5:00-5:15	
3	5:15-5:30	
4	5:30-5:45	
3	5:45-6:00	
6	6:00-6:15	
8	6:15-6:30	

2	**4:00-4:15**	
2	**4:45-5:00**	
1	**5:30-5:45**	

ACCESS ENGINEERING

Peak Hour Intersection Turning Movement Count & Classification Summary

N/S Street: **Huston Road** | Counted By: **GTD**

E/W Street: **Oregon 126** | Date: **3/29/16**

Time Period From-To PM	Northbound Huston Road					Southbound Huston Road					Eastbound Oregon 126					Westbound Oregon 126					ALL
	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	
3:30-3:45	0	0	7	**7**	0	3	2	5	**10**	0	1	92	6	**99**	2	17	136	7	**160**	1	276
3:45-4:00	3	3	9	**15**	0	1	0	5	**6**	0	3	105	1	**109**	1	27	163	4	**194**	1	324
Hour Total:	3	3	16	**22**	0	4	2	10	**16**	0	4	197	7	**208**	3	44	299	11	**354**	2	600
4:00-4:15	1	3	10	**14**	0	2	2	1	**5**	0	2	108	9	**119**	3	17	126	2	**145**	0	283
4:15-4:30	3	1	14	**18**	0	2	4	3	**9**	0	2	96	3	**101**	2	31	162	4	**197**	2	325
4:30-4:45	3	0	12	**15**	0	1	1	3	**5**	0	3	106	7	**116**	0	20	133	5	**158**	1	294
4:45-5:00	2	1	9	**12**	0	4	1	2	**7**	0	3	93	4	**100**	2	35	154	3	**192**	0	311
Hour Total:	9	5	45	**59**	0	9	8	9	**26**	0	10	403	23	**436**	7	103	575	14	**692**	3	1213
5:00-5:15	4	2	11	**17**	0	4	2	2	**8**	0	0	83	5	**88**	0	32	136	5	**173**	0	286
5:15-5:30	4	1	8	**13**	0	1	2	4	**7**	0	0	73	6	**79**	0	43	162	6	**211**	1	310
5:30-5:45	4	3	9	**16**	0	2	3	3	**8**	0	0	88	2	**90**	0	31	166	7	**204**	0	318
5:45-6:00	2	2	8	**12**	0	1	2	3	**6**	0	3	90	5	**98**	1	22	132	7	**161**	0	277
Hour Total:	14	8	36	**58**	0	8	9	12	**29**	0	3	334	18	**355**	1	128	596	25	**749**	1	1191
6:00-6:15	2	2	7	**11**	0	2	2	3	**7**	0	2	83	11	**96**	0	35	128	9	**172**	2	286
6:15-6:30	2	1	10	**13**	0	3	1	4	**8**	0	4	68	4	**76**	1	37	125	2	**164**	1	261
Hour Total:	4	3	17	**24**	0	5	3	7	**15**	0	6	151	15	**172**	1	72	253	11	**336**	3	547
Grand Total:	30	19	114	**163**	0	26	22	38	**86**	0	23	1085	63	**1171**	12	347	1723	61	**2131**	9	3004
PM Peak Hr.																					
3:45-4:45	**10**	**7**	**45**	**62**	**0**	**6**	**7**	**12**	**25**	**0**	**10**	**415**	**20**	**445**	**6**	**95**	**584**	**15**	**694**	**4**	**1226**
PHF				**0.861**					**0.694**					**0.935**					**0.881**		**0.943**
% Trucks				**0%**					**0%**					**1%**					**1%**		
Seasonal Factor (x 1.06)											**Seasonal Factor (x 1.20)**										
Adj. PHV	**11**	**7**	**48**	**66**		**6**	**7**	**13**	**26**		**12**	**498**	**24**	**534**		**114**	**701**	**18**	**833**		**1459**

Pedestrians: **1** **5:45-6:00**

Peak Hour

2	**4:30-4:45**
2	**4:45-5:00**

ACCESS ENGINEERING

Peak Hour Intersection Turning Movement Count & Classification Summary

N/S Street: **Territorial Hwy.**
E/W Street: **Hunter Road**

Counted By: **GTD**
Date: **3/30/16**

Time Period From-To PM	Northbound Territorial Hwy.					Southbound Territorial Hwy.					Eastbound Hunter Road					Westbound Hunter Road					ALL
	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	
3:30-3:45	4	54	5	**63**		6	66	3	**75**		1	3	4	**8**		0	0	9	**9**		155
3:45-4:00	6	61	2	**69**		10	79	7	**96**		6	1	0	**7**		1	1	8	**10**		182
Period Total:	10	115	7	**132**	0	16	145	10	**171**	0	7	4	4	**15**	0	1	1	17	**19**	0	337
4:00-4:15	2	70	1	**73**		15	88	6	**109**		4	1	2	**7**		2	1	13	**16**		205
4:15-4:30	3	66	1	**70**		10	65	7	**82**		6	1	2	**9**		4	1	4	**9**		170
4:30-4:45	4	65	1	**70**		10	90	7	**107**		9	0	1	**10**		0	0	13	**13**		200
4:45-5:00	3	63	4	**70**		11	83	3	**97**		10	2	3	**15**		0	0	6	**6**		188
Hour Total:	12	264	7	**283**	0	46	326	23	**395**	0	29	4	8	**41**	0	6	2	36	**44**	0	763
5:00-5:15	4	63	1	**68**		12	89	6	**107**		2	0	1	**3**		0	1	9	**10**		188
5:15-5:30	5	59	0	**64**		11	85	6	**102**		2	0	2	**4**		3	1	10	**14**		184
Period Total:	9	122	1	**132**	0	23	174	12	**209**	0	4	0	3	**7**	0	3	2	19	**24**	0	372
Grand Total:	31	501	15	**547**	0	85	645	45	**775**	0	40	8	15	**63**	0	10	5	72	**87**	0	1472
PM Peak Hr. 4:00-5:00	**12**	**264**	**7**	**283**	**0**	**46**	**326**	**23**	**395**	**0**	**29**	**4**	**8**	**41**	**0**	**6**	**2**	**36**	**44**	**0**	**763**
PHF				**0.969**					**0.906**					**0.683**					**0.688**		**0.930**
% Trucks				**0%**					**0%**					**0%**					**0%**		
Seasonal Factor (x 1.18)																					
Adj. PHV	**14**	**312**	**8**	**334**		**54**	**385**	**27**	**466**		**34**	**5**	**9**	**48**		**7**	**2**	**42**	**51**		**899**

Pedestrians: **1 4:15-4:30**

Peak Hour

3	3:45-4:00	4	3:30-3:45	5	3:30-3:45
2	**4:00-4:15**	5	3:45-4:00	2	3:45-4:00
6	**4:15-4:30**	**2**	**4:15-4:30**	**6**	**4:15-4:30**
3	5:00-5:15	**5**	**4:30-4:45**	**2**	**4:30-4:45**
		5	**4:45-5:00**	**5**	**4:45-5:00**
		3	5:00-5:15	1	5:00-5:15
		5	5:15-5:30	4	5:15-5:30

ACCESS ENGINEERING

Peak Hour Intersection Turning Movement Count & Classification Summary

N/S Street: **Territorial Hwy.**
E/W Street: **Bolton Hill Road/E. Bolton Road**

Counted By: **GTD**
Date: **3/30/16**

Time Period From-To PM	Northbound Territorial Hwy.					Southbound Territorial Hwy.					Eastbound Bolton Hill Road					Westbound E. Bolton Road					ALL
	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	
3:30-3:45	2	44	2	**48**	0	6	48	10	**64**	0	10	2	5	**17**	0	1	1	2	**4**	0	133
3:45-4:00	4	40	1	**45**	0	5	56	15	**76**	0	11	0	4	**15**	0	0	4	7	**11**	0	147
Period Total:	6	84	3	**93**	0	11	104	25	**140**	0	21	2	9	**32**	0	1	5	9	**15**	0	280
4:00-4:15	10	51	0	**61**	0	4	73	12	**89**	0	9	0	2	**11**	0	0	1	9	**10**	0	171
4:15-4:30	7	51	1	**59**	0	3	57	14	**74**	0	10	0	2	**12**	0	0	3	1	**4**	0	149
4:30-4:45	8	48	0	**56**	0	10	55	19	**84**	0	10	3	3	**16**	0	1	0	4	**5**	0	161
4:45-5:00	6	49	2	**57**	0	9	66	7	**82**	0	9	1	8	**18**	0	1	0	3	**4**	0	161
Hour Total:	31	199	3	**233**	0	26	251	52	**329**	0	38	4	15	**57**	0	2	4	17	**23**	0	642
5:00-5:15	7	42	1	**50**	0	8	72	5	**85**	0	10	0	8	**18**	0	1	0	7	**8**	0	161
5:15-5:30	6	44	1	**51**	0	2	66	25	**93**	0	11	1	6	**18**	0	1	0	1	**2**	0	164
Period Total:	13	86	2	**101**	0	10	138	30	**178**	0	21	1	14	**36**	0	2	0	8	**10**	0	325
Grand Total:	50	369	8	**427**	0	47	493	107	**647**	0	80	7	38	**125**	0	5	9	34	**48**	0	1247
PM Peak Hr. 4:30-5:30	**27**	**183**	**4**	**214**	**0**	**29**	**259**	**56**	**344**	**0**	**40**	**5**	**25**	**70**	**0**	**4**	**0**	**15**	**19**	**0**	**647**
PHF				**0.939**					**0.925**					**0.972**					**0.594**		**0.986**
% Trucks				**0%**					**0%**					**0%**					**0%**		
Seasonal Factor (x 1.18)																					
Adj. PHV	**32**	**216**	**5**	**253**		**34**	**306**	**66**	**406**		**47**	**6**	**30**	**83**		**5**	**0**	**18**	**23**		**765**

Pedestrians:

	2	3:45-4:00
Peak Hour	**2**	**4:00-4:15**
	1	5:15-5:30

2	3:30-3:45
1	3:45-4:00
2	**4:15-4:30**
2	**4:30-4:45**
1	**4:45-5:00**
1	5:00-5:15
2	5:15-5:30

2	3:45-4:00
1	**4:00-4:15**
1	**4:30-4:45**
2	5:00-5:15

1	**4:00-4:15**

ACCESS ENGINEERING

Peak Hour Intersection Turning Movement Count & Classification Summary

N/S Street: **E. Bolton Road/Pine Street**
E/W Street: **E. Bolton Road/Trinity Street**

Counted By: **GTD**
Date: **3/30/16**

Time Period From-To PM	Northbound E. Bolton Road					Southbound Pine Street					Eastbound E. Bolton Road					Westbound Trinity Street					ALL
	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	
3:30-3:45	2	1	0	**3**	0	0	1	0	**1**	0	2	3	4	**9**	0	0	2	0	**2**	0	15
3:45-4:00	4	1	0	**5**	0	1	0	2	**3**	0	0	2	1	**3**	0	0	3	1	**4**	0	15
Period Total:	6	2	0	**8**	0	1	1	2	**4**	0	2	5	5	**12**	0	0	5	1	**6**	0	30
4:00-4:15	5	2	0	**7**	0	2	4	1	**7**	0	0	2	0	**2**	0	1	2	1	**4**	0	20
4:15-4:30	1	0	0	**1**	0	5	0	1	**6**	0	1	2	0	**3**	0	0	3	0	**3**	0	13
4:30-4:45	0	2	1	**3**	0	4	2	2	**8**	0	1	5	3	**9**	0	0	2	1	**3**	0	23
4:45-5:00	3	0	1	**4**	0	2	1	2	**5**	0	1	4	2	**7**	0	0	0	1	**1**	0	17
Hour Total:	9	4	2	**15**	0	13	7	6	**26**	0	3	13	5	**21**	0	1	7	3	**11**	0	73
5:00-5:15	3	1	0	**4**	0	1	1	2	**4**	0	2	3	2	**7**	0	0	0	0	**0**	0	15
5:15-5:30	0	0	1	**1**	0	3	1	2	**6**	0	1	2	1	**4**	0	0	2	2	**4**	0	15
Period Total:	3	1	1	**5**	0	4	2	4	**10**	0	3	5	3	**11**	0	0	2	2	**4**	0	30
Grand Total:	18	7	3	**28**	0	18	10	12	**40**	0	8	23	13	**44**	0	1	14	6	**21**	0	133
PM Peak Hr. 4:00-5:00	**9**	**4**	**2**	**15**	**0**	**13**	**7**	**6**	**26**	**0**	**3**	**13**	**5**	**21**	**0**	**1**	**7**	**3**	**11**	**0**	**73**
PHF				**0.536**					**0.813**					**0.583**					**0.688**		**0.793**
% Trucks				**0%**					**0%**					**0%**					**0%**		
Seasonal Factor (x 1.06)																					
Adj. PHV	**10**	**4**	**2**	**16**		**14**	**7**	**6**	**27**		**3**	**14**	**5**	**22**		**1**	**7**	**3**	**11**		**76**

Pedestrians:	1	3:30-3:45	2	5:15-5:30	4	3:30-3:45
Peak Hour	**4**	**4:15-4:30**			1	3:45-4:00
					1	**4:00-4:15**
					1	**4:45-5:00**

ACCESS ENGINEERING

Peak Hour Intersection Turning Movement Count & Classification Summary

N/S Street: **E Bolton Road**
E/W Street: **Cheney Drive/E.Bolton Road**

Counted By: **GTD**
Date: **3/31/16**

Time Period From-To PM	Northbound					Southbound E Bolton Road					Eastbound Cheney Drive					Westbound E. Bolton Road					ALL
	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	
3:30-3:45				**0**			4	0	**4**		2		3	**5**		4	1		**5**		14
3:45-4:00				**0**			1	2	**3**		1		5	**6**		0	1		**1**		10
Period Total:	0	0	0	**0**	0	0	5	2	**7**	0	3	0	8	**11**	0	4	2	0	**6**	0	24
4:00-4:15				**0**			1	0	**1**		0		2	**2**		1	4		**5**		8
4:15-4:30				**0**			3	1	**4**		1		3	**4**		1	4		**5**		13
4:30-4:45				**0**			1	1	**2**		0		3	**3**		9	3		**12**		17
4:45-5:00				**0**			3	1	**4**		2		3	**5**		5	4		**9**		18
Hour Total:	0	0	0	**0**	0	0	8	3	**11**	0	3	0	11	**14**	0	16	15	0	**31**	0	56
5:00-5:15				**0**			3	0	**3**		2		3	**5**		7	5		**12**		20
5:15-5:30				**0**			1	0	**1**		0		7	**7**		9	4		**13**		21
Period Total:	0	0	0	**0**	0	0	4	0	**4**	0	2	0	10	**12**	0	16	9	0	**25**	0	41
Grand Total:	0	0	0	**0**	0	0	17	5	**22**	0	8	0	29	**37**	0	36	26	0	**62**	0	121
PM Peak Hr. 4:30-5:30	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**2**	**10**	**0**	**4**	**0**	**16**	**20**	**0**	**30**	**16**	**0**	**46**	**0**	**76**
PHF				**N/A**					**0.625**					**0.714**					**0.885**		**0.905**
% Trucks									**0%**					**0%**					**0%**		
Seasonal Factor (x 1.06)																					
Adj. PHV	**0**	**0**	**0**	**0**		**0**	**8**	**2**	**10**		**4**	**0**	**17**	**21**		**32**	**17**	**0**	**49**		**80**

Pedestrians: None 3 4:15-4:30 None None

Peak Hour

ACCESS ENGINEERING

Peak Hour Intersection Turning Movement Count & Classification Summary

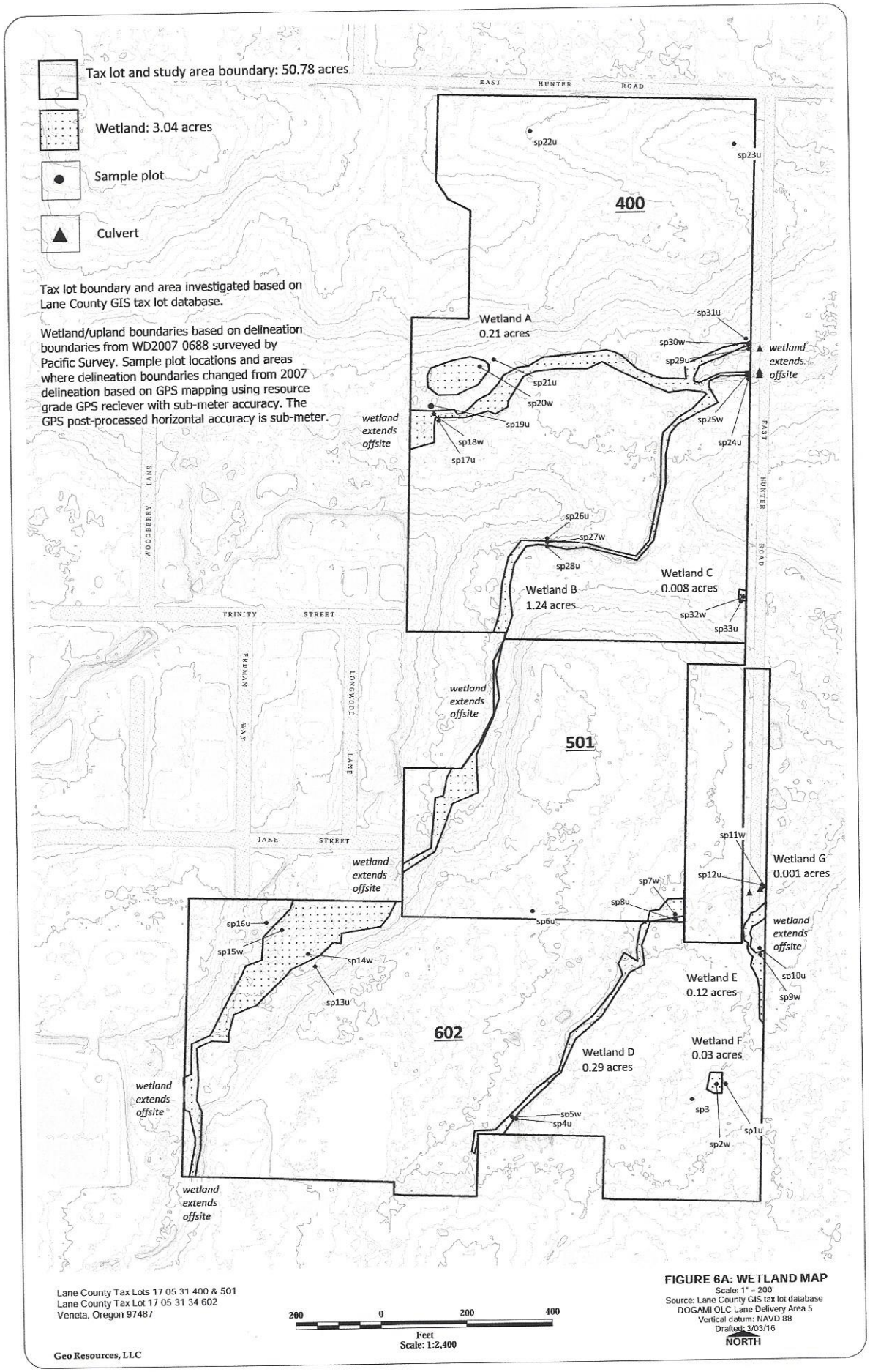
N/S Street: **Huston Road** | Counted By: **GTD**

E/W Street: **Hunter Road** | Date: **3/31/16**

Time Period From-To PM	Northbound Huston Road					Southbound Huston Road					Eastbound Hunter Road					Westbound Hunter Road					ALL
	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	Left	Thru	Right	Total	Trucks	
3:30-3:45	0	8		**8**			18	3	**21**		4		1	**5**					**0**		34
3:45-4:00	4	7		**11**			8	13	**21**		2		2	**4**					**0**		36
Period Total:	4	15	0	**19**	0	0	26	16	**42**	0	6	0	3	**9**	0	0	0	0	**0**	0	70
4:00-4:15	2	9		**11**			16	11	**27**		7		2	**9**					**0**		47
4:15-4:30	0	9		**9**			9	15	**24**		5		2	**7**					**0**		40
4:30-4:45	1	8		**9**			22	20	**42**		8		1	**9**					**0**		60
4:45-5:00	2	6		**8**			21	17	**38**		5		0	**5**					**0**		51
Hour Total:	5	32	0	**37**	0	0	68	63	**131**	0	25	0	5	**30**	0	0	0	0	**0**	0	198
5:00-5:15	3	8		**11**			22	17	**39**		12		1	**13**					**0**		63
5:15-5:30	1	10		**11**			19	27	**46**		10		1	**11**					**0**		68
Period Total:	4	18	0	**22**	0	0	41	44	**85**	0	22	0	2	**24**	0	0	0	0	**0**	0	131
Grand Total:	13	65	0	**78**	0	0	135	123	**258**	0	53	0	10	**63**	0	0	0	0	**0**	0	399
PM Peak Hr.																					
4:30-5:30	**7**	**32**	**0**	**39**	**0**	**0**	**84**	**81**	**165**	**0**	**35**	**0**	**3**	**38**	**0**	**0**	**0**	**0**	**0**	**0**	**242**
PHF				**0.886**					**0.897**					**0.731**					**N/A**		**0.890**
% Trucks				**0%**					**0%**					**0%**							
Seasonal Factor (x 1.06)																					
Adj. PHV	**7**	**34**	**0**	**41**		**0**	**89**	**86**	**175**		**37**	**0**	**3**	**40**		**0**	**0**	**0**	**0**		**256**

Pedestrians: None | None | None | None

Peak Hour



Lane County Tax Lots 17 05 31 400 & 501
Lane County Tax Lot 17 05 31 34 602
Veneta, Oregon 97487

FIGURE 6A: WETLAND MAP
Scale: 1" = 200'
Source: Lane County GIS tax lot database
DOGAMI OLC Lane Delivery Area 5
Vertical datum: NAVD 88
Drafted: 3/03/16

Geo Resources, LLC

Sarto Village Zone Change

Seasonal Factor Calculation

ATR # 20-005 (Noti) OR 126 MP 43.86; 3.06 miles west of Territorial Highway

Oregon 126	2014	2013	2012	2011	2010	Average	Factor
Peak Month (July or August)	118	118	119	116	117	117.67	1.20
Count Month (March/April)	91	92	103	102	100	98.00	

ATR # 20-023 (Fern Ridge) Territorial Hwy. MP 13.54; 5.97 miles north of Oregon 126

Territorial Highway North of Ore. 126	2014	2013	2012	2011	2010	Average	Factor
Peak Month (July)	118	117	117	117	118	117.33	1.24
Count Month (March/April)	98	99	87	93	92	94.33	

Source: ATR Trend Summaries 2010-2014, ODOT Transportation Development

Seasonal Trend Table 2014

	Trend	Mar 15	Apr 1	Mar 30	Peak	Factor	Average
Territorial Hwy south of Oregon 126	**Commute**	0.9838	0.9651	0.9673	0.9136	**1.059**	1.18
	Summer	1.0838	1.0548	1.0582	0.8101	**1.306**	
City Streets & Huston Road	**Commute**	0.9838	0.9651	0.9663	0.9136	**1.06**	

Source: 2014 Seasonal Trend Table, ODOT Transportation Development

Growth Rate Calculations

Oregon 126

Location	M.P.	2012	2034	RSQ	22 Year Factor	Annual Rate
ATR # 20-005 (Noti)	**43.86**	**5700**	**6800**	**0.2928**	**1.193**	**0.88%**
0.05 mile East of 8th St.	46.56	6500	6700	0.4503	1.031	0.14%
0.10 miles east of Territorial Hwy	47.02	12400	13700	0.5190	1.105	0.48%
0.13 miles east of Huston Road	**47.97**	**13100**	**16000**	**0.7350**	**1.221**	**1.01%**
Average						**1.00%**
Annual Growth Rate:	**1.00%**					
Annual Growth Factor	1.010					
Years	10					
Growth Factor	**1.100**					

Territorial Road

Location	M.P.	2012	2034	RSQ	22 Year Factor	Annual Rate	
0.02 miles south of Suttle Road	**18.68**	**7600**	**8000**	**0.0315**	**1.053**	**0.26%**	
0.02 miles south of Oregon 126	**19.51**	**10000**	**10200**	**0.1009**	**1.020**	**0.10%**	
0.02 miles south of Broadway	**19.72**	**9000**	**10200**	**0.5852**	**1.133**	**0.67%**	**0.34%**
0.02 miles south of Hunter Road	**19.89**	**7100**	**8100**	**0.4813**	**1.141**	**0.70%**	
0.02 miles north of Bolton Hill Road	**20.10**	**6500**	**8100**	**0.6850**	**1.246**	**1.23%**	
0.02 miles south of Bolton Hill Road	**20.14**	**5300**	**6400**	**0.8079**	**1.208**	**1.04%**	**0.99%**

	North of Broadway	South of Broadway
Average		
Annual Growth Rate:	0.34%	0.99%
Annual Growth Factor	1.003	1.010
Years	10	10
Growth Factor	**1.034**	**1.100**

Source: 2034 Future Volumes Table, ODOT Transportation Planning & Analysis Unit

Oregon Department of Transportation
Transportation Development Branch
Transportation Planning Analysis Unit

Preliminary Traffic Signal Warrant Analysis

Major Street:	Oregon 126	**Minor Street:**	Huston Road
Project:	Sarto Village Zone Change	**City/County:**	Veneta/Lane
Year:	2016	**Alternative:**	Build Max. Residential

Preliminary Signal Warrant Volumes

Number of Approach lanes		ADT on Major Street approaching from both directions		ADT on Minor Street, highest approching volume	
Major Street	Minor Street	% of Standard Warrants 100	70	% of Standard Warrants 100	70
Case A: Minimum Vehicular Traffic					
1	1	8,850	6,200	2,650	1,850
2 or more	1	10,600	7,400	2,650	1,850
2 or more	2 or more	10,600	7,400	3,550	2,500
1	2 or more	8,850	6,200	3,550	2,500
Case B: Interruption of Continuous Traffic					
1	1	13,300	9,300	1,350	950
2 or more	1	15,900	11,100	1,350	950
2 or more	2 or more	15,900	11,100	1,750	1,250
1	2 or more	13,300	9,300	1,750	1,250

5.65% of the above ADT volumes is equal to the MUTCD vehicles per hour (vph)

	100 % of standard warrants
X	70 % of standard warrants

Preliminary Signal Warrant Calculation

	Street	Number of Lanes	Warrant Volumes	Approach Volumes	Warrant Met
Case	Major	1	6,200	14,500	
A	Minor	1	1,850	210	**NO**
Case	Major	1	9,300	14,500	
B	Minor	1	950	210	**NO**

Analyst and Date:	cmw 4/7/16	Reviewer and Date:	mcw 4/17/16

NB RT discount for shared left-thru-right lane:

85% of shared lane capacity= 0.85*207=176

RT discount= 88-176=0

LT+Th+RT= 12+9+0=21/0.1= **210**

Oregon Department of Transportation

Transportation Development Branch

Transportation Planning Analysis Unit

Preliminary Traffic Signal Warrant Analysis

Major Street:	Oregon 126	**Minor Street:**	Huston Road
Project:	Sarto Village Zone Change	**City/County:**	Veneta/Lane
Year:	2026	**Alternative:**	Build Max. Residential

Preliminary Signal Warrant Volumes

Number of Approach lanes		ADT on Major Street approaching from both directions		ADT on Minor Street, highest approching volume	
Major Street	Minor Street	% of Standard Warrants 100	70	% of Standard Warrants 100	70
Case A: Minimum Vehicular Traffic					
1	1	8,850	6,200	2,650	1,850
2 or more	1	10,600	7,400	2,650	1,850
2 or more	2 or more	10,600	7,400	3,550	2,500
1	2 or more	8,850	6,200	3,550	2,500
Case B: Interruption of Continuous Traffic					
1	1	13,300	9,300	1,350	950
2 or more	1	15,900	11,100	1,350	950
2 or more	2 or more	15,900	11,100	1,750	1,250
1	2 or more	13,300	9,300	1,750	1,250

5.65% of the above ADT volumes is equal to the MUTCD vehicles per hour (vph)

	100 % of standard warrants
X	70 % of standard warrants

Preliminary Signal Warrant Calculation

	Street	Number of Lanes	Warrant Volumes	Approach Volumes	Warrant Met
Case	Major	1	6,200	15,700	
A	Minor	1	1,850	250	**NO**
Case	Major	1	9,300	15,700	
B	Minor	1	950	250	**NO**

Analyst and Date:	cmw 4/7/16	Reviewer and Date:	mcw 4/17/16

NB RT discount for shared left-thru-right lane:

85% of shared lane capacity= 0.85*151=128

RT discount= 93-128=0

LT+Th+RT= 13+12+0=25/0.1= **250**

Appendix C

Crash Data

200: TERRITORIAL

Highway 200 MAINLINE, MP 19.44 to 19.54 01/01/2012 to 12/31/2014, Both Add and Non-Add mileage

Total crash records: 2

SER# INVEST	SPEED	ALCOHOL	DUGS	SCHL	WORK	DATE DAY TIME	COUNTY CITY URBAN AREA	RD# FC COMPNT MLG TYP MILEPNT	CONN# FIRST STREET SECOND STREET	RD CHAR DIRECT LOCTN	INT-TYPE (MEDIAN) LEGS (#LANES)	INT-REL TRAF-CONTL	OFFRD RNDBT DRVWY	WTHR SURF LIGHT	CRASH COLL SVRTY	V#	SPCL USE TRLR QTY OWNER TYPE	MOVE FROM TO	P#	TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
03763	N	N	N	N	N	11/21/2012	LANE	1 06		STRGHT		Y	N	RAIN	O-1STOP	01	LOG 1	BACK											10
NO RPT						WE	VENETA	MN 0	TERRITORIAL HY	N	(NONE)	TRF SIGNAL	N	WET	BACK		PRVTE	S -N									000		00
						12P		19.48	FLORENCE-EUGENE HY	03			N	DAY	PDO		SEMI TOW		01	DRVR	NONE	40	M	OR-Y		016,011	000		10
											(02)													OR>25					
																02	NONE 0	STOP											
																	PRVTE	N -S									011		00
																	PSNGR CAR		01	DRVR	NONE	31	F	OR-Y		000	000		00
																								OR<25					
																02	NONE 0	STOP											
																	PRVTE	N -S									011		00
																	PSNGR CAR		02	PSNG	NO<5	04	F			000	000		00
04190	N	N	N	N	N	12/20/2014	LANE	1 06		INTER	CROSS	N	N	RAIN	S-1STOP	01	NONE 0	STRGHT											07
NONE						SA	VENETA	MN 0	FLORENCE-EUGENE HY	S		TRF SIGNAL	N	WET	REAR		PRVTE	S -N									000		00
						6P		19.49	TERRITORIAL HY	06	0		N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	00	F	UNK		026	000		07
																								UNK					
																02	NONE 0	STOP											
																	PRVTE	S -N									011		00
																	PSNGR CAR		01	DRVR	NONE	80	M	OR-Y		000	000		00
																								OR<25					

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is committed to providing the highest quality crash data to customers. However, because submittal of crash report forms is the responsibility of the individual driver, the Crash Analysis and Reporting Unit can not guarantee that all qualifying crashes are represented nor can assurances be made that all details pertaining to a single crash are accurate. Note: Legislative changes to DMV's vehicle crash reporting requirement, effective 01/01/2004, may result in fewer property damage only crashes being eligible for inclusion in the Statewide Crash Data File.

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT
CONTINUOUS SYSTEM CRASH LISTING

062: FLORENCE-EUGENE

Highway 062 MAINLINE AND CONNECTIONS, MP 46.82 to 47.02 01/01/2012 to 12/31/2014, Both Add and Non-Add mileage

Total crash records: 7

SER# / INVEST	SPEED	ALCOHOL	DRUG	SCHOOL	WORK	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / COMPNT / MLG / MILEPNT	FC / TYP	CONN# / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF-CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ SVRTY	AGE	SEX	LICNS / RES	PED LOC	ERROR	ACT	EVENT	CAUSE
04107	N	N	N	N	N	12/14/2014	LANE	1	02		STRGHT		N	Y	CLD	FIX OBJ	01	NONE 0	STRGHT										058	10
NONE						SU	VENETA	MN 0		FLORENCE-EUGENE HY	W	(NONE)	UNKNOWN	N	WET	FIX		PRVTE	E -W									001	058	11
						4P		46.85		TERRITORIAL HY	06			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	19	M	OR-Y		080,081	017		10
												(02)													OR<25					
01952	N	N	N	N	N	06/27/2013	LANE	1	02		STRGHT		Y	N	CLR	S-1STOP	01	NONE 0	STRGHT											07
COUNTY						TH	VENETA	MN 0		FLORENCE-EUGENE HY	W	(NONE)	FLASHBCN-A	N	DRY	REAR		PRVTE	W -E									000		00
						8A		46.88		TERRITORIAL HY	03			N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	34	F	OR-Y		043,026	000		07
												(02)													OR<25					
																	02	NONE 0	STOP											
																		PRVTE	W -E									011		00
																		PSNGR CAR		01	DRVR	NONE	88	M	OR-Y		000	000		00
																									OR>25					
03027	N	N	N	N	N	09/27/2013	LANE	1	02		INTER	CROSS	N	N	RAIN	ANGL-STP	01	NONE 0	TURN-R											08
NO RPT						FR	VENETA	MN 0		MCCUTCHEON AVE	E		TRF SIGNAL	N	WET	TURN		PRVTE	S -E									000		00
						6P		46.92		TERRITORIAL HY	05	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	19	F	OR-Y		001,007,026	000		08
																									OR<25					
																	02	NONE 0	STOP											
																		PRVTE	E -W									012		00
																		PSNGR CAR		01	DRVR	NONE	35	M	OR-Y		000	000		00
																									OR<25					
03537	N	N	N	N	N	10/28/2014	LANE	1	02		INTER	CROSS	N	N	CLD	BIKE	01	NONE 0	TURN-R											04
COUNTY						TU	VENETA	MN 0		FLORENCE-EUGENE HY	E		TRF SIGNAL	N	WET	TURN		PRVTE	S -E									016		00
						7A		46.92		TERRITORIAL HY	05	0		N	DAWN	INJ		PSNGR CAR		01	DRVR	NONE	81	M	OR-Y		027	000		04
																									OR<25					
																			-											
																			STRGHT	01	BIKE	INJC	53	M		I XWLK	000	035		00
																			UN UN											
01574	N	N	N	N	N	05/25/2012	LANE	1	02		INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											14
COUNTY						FR	VENETA	MN 0		FLORENCE-EUGENE HY	CN		TRF SIGNAL	N	DRY	ANGL		PRVTE	S -N									000		00
						12P		46.92		TERRITORIAL HY	02	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJB	80	M	OR-Y		024	000		14
																									OR<25					
																	02	AMBLN	STRGHT											
																		PUBLC	E -W									000		00
																		TRUCK		01	DRVR	NONE	66	M	OR-Y		000	000		00
																									OR<25					
02580	N	N	N	N	N	08/21/2014	LANE	1	02		STRGHT		N	N	CLR	O-STRGHT	01	NONE 0	STRGHT											16
COUNTY						TH	VENETA	MN 0		FLORENCE-EUGENE HY	E	(NONE)	UNKNOWN	N	DRY	SS-M		PRVTE	E -W									000		00
						10P		47.00		TERRITORIAL HY	03			N	DARK	INJ		PSNGR CAR		01	DRVR	INJB	18	F	OR-Y		080	025		16
												(02)													OR>25					
																	02	NONE 0	STRGHT											
																		PRVTE	W -E									000		00
																		PSNGR CAR		01	DRVR	INJB	52	F	OR-Y		000	000		00
																									OR<25					
01939	N	N	N	N	N	06/26/2013	LANE	1	02		STRGHT		N	N	CLD	BIKE													110	18,19
COUNTY						WE	VENETA	MN 0		FLORENCE-EUGENE HY	E	(NONE)	UNKNOWN	N	DRY	TURN			-											
						2P		47.00		TERRITORIAL HY	04			N	DAY	INJ			TURN-L	01	BIKE	INJC	19	M		ROAD	045	037		18,19
												(02)							UN UN											
																	01	NONE 0	STRGHT											

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062: FLORENCE-EUGENE

Highway 062 MAINLINE AND CONNECTIONS, MP 46.82 to 47.02 01/01/2012 to 12/31/2014, Both Add and Non-Add mileage

Total crash records: 7

SER# INVEST	SPED	ALCH	DRUG	SLK	WTHR DAY TIME	DATE DAY TIME	COUNTY CITY URBAN AREA	RD# FC COMPNT MLG TYP MILEPNT	CONN# FIRST STREET SECOND STREET	RD CHAR DIRECT LOCTN	INT-TYPE (MEDIAN) LEGS (#LANES)	INT-REL TRAF-CONTL	OFFRD RNDBT DRVWY	WTHR SURF LIGHT	CRASH COLL SVRTY	V#	SPCL USE TRLR QTY OWNER TYPE PRVTE PSNGR CAR	MOVE FROM TO E -W	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES OR-Y OR<25	PED LOC	ERROR	ACT EVENT 000 000	CAUSE 00 00
																	PRVTE	E -W									000	00
																	PSNGR CAR		01	DRVR	NONE	59	M	OR-Y OR<25		000	000	00

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OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT
CONTINUOUS SYSTEM CRASH LISTING

062: FLORENCE-EUGENE

Highway 062 ALL ROAD TYPES, MP 47.87 to 48.07 01/01/2012 to 12/31/2014, Both Add and Non-Add mileage

Total crash records: 2

SER# INVEST	SPEED	ALCOHOL	DRUG	SCHOOL	WORK RK	DATE DAY TIME	COUNTY CITY URBAN AREA	RD# FC COMPNT MLG TYP MILEPNT	CONN# FIRST STREET SECOND STREET	RD CHAR DIRECT LOCTN	INT-TYPE (MEDIAN) LEGS (#LANES)	INT-REL TRAF-CONTL	OFFRD RNDBT DRVWY	WTHR SURF LIGHT	CRASH COLL SVRTY	V#	SPCL USE TRLR QTY OWNER TYPE	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
01619	N	N	N			06/01/2012	LANE	1 02		STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT											07
NONE						FR		MN 0		UN	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E -W									000		00
						3P		48.00		04			Y	DAY	PDO		PSNGR CAR		01	DRVR	NONE	54	F	OR-Y		026	000		07
											(02)													OR<25					
																02	NONE 0	STOP											
																	PRVTE	E -W									011		26
																	PSNGR CAR		01	DRVR	NONE	00	M	UNK		000	000		00
																								UNK					
03167	N	N	N			10/07/2012	LANE	1 02		STRGHT		N	N	UNK	ANIMAL	01	NONE 0	STRGHT										035	12
NONE						SU		MN 0		UN	(NONE)	UNKNOWN	N	UNK	OTH		PRVTE	E -W									000	035	00
						7A		48.00		04			N	DAWN	PDO		PSNGR CAR		01	DRVR	NONE	72	M	OR-Y		000	000		12
											(02)													OR>25					

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CITY OF VENETA, LANE COUNTY

HUSTON RD at FLORENCE-EUGENE HY, City of Veneta, Lane County, 01/01/2012 to 12/31/2014

Total crash records: 2

SER# / INVEST	SPE	ALCD	DRSGL	WCHK	DATE / DAY / TIME	CLASS / DIST / FROM	CITY STREET / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF-CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	AGE	SEX	LICNS / RES	PED LOC	ERROR	ACT	EVENT	CAUSE
02710	N	N	N	N	N 07/13/2012	07	HUSTON RD	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											07
COUNTY					FR	0	FLORENCE-EUGENE HY	S		STOP SIGN	N	DRY	REAR		PRVTE	S -N									000		00
					6P			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	21	M	SUSP		026	000		07
																						OR<25					
														01	NONE 0	STRGHT											
															PRVTE	S -N									000		00
															PSNGR CAR		02	PSNG	NO<5	01	M			000	000		00
														02	NONE 0	STOP											
															PRVTE	S -N									011		00
															PSNGR CAR		01	DRVR	NONE	24	M	OR-Y		000	000		00
																						OR<25					
00050	N	N	N	N	N 01/07/2014	02	HUSTON RD	INTER	CROSS	N	N	RAIN	ANGL-OTH	01	NONE 0	STRGHT											02
STATE					TU		FLORENCE-EUGENE HY	CN		STOP SIGN	N	WET	ANGL		PRVTE	N -S									015		00
					4P			01	0		N	DUSK	INJ		PSNGR CAR		01	DRVR	INJC	52	F	OR-Y		028	000		02
																						OR<25					
														02	NONE 0	STRGHT											
															PRVTE	E -W									000		00
															PSNGR CAR		01	DRVR	NONE	17	M	OR-Y		000	000		00
																						OR<25					
														02	NONE 0	STRGHT											
															PRVTE	E -W									000		00
															PSNGR CAR		02	PSNG	INJB	18	M			000	000		00

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200: TERRITORIAL

Highway 200 ALL ROAD TYPES, MP 19.82 to 19.92 01/01/2012 to 12/31/2014, Both Add and Non-Add mileage

Total crash records: 3

SER# / INVEST	SPEED / ALCOHOL / DRUG / SCHOOL / WORK	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / COMPNT / MLG / MILEPNT	FC / TYP	CONN# / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF-CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ SVRTY	AGE	SEX	LICNS / RES	PED LOC	ERROR	ACT	EVENT	CAUSE
03348	N Y N N N	10/19/2014	LANE	1	06		INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	STRGHT										010,001	02
STATE		SU	VENETA	MN	0	HUNTER AVE	CN		STOP SIGN	N	DRY	TURN		PRVTE	N -S									000	010	00
		8P		19.87		TERRITORIAL HY	01	0		N	DLIT	INJ		MTRCYCLE		01	DRVR	INJA	43	M	OR-Y		000	000	001	00
																					OR<25					
													02	NONE 0	TURN-L											
														PRVTE	S -W									000		00
														PSNGR CAR		01	DRVR	INJC	42	F	OR-Y		004,028	000		02
																					OR<25					
01373	N N N N N	05/10/2014	LANE	1	06		INTER	CROSS	N	N	CLD	ANGL-STP	01	NONE 0	TURN-L										010	08
NONE		SA	VENETA	MN	0	HUNTER RD	CN		STOP SIGN	N	DRY	TURN		PRVTE	N -E									000		00
		4P		19.87		TERRITORIAL HY	03	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	57	F	OR-Y		002	000		08
																					OR<25					
													02	NONE 0	STOP											
														PRVTE	E -W									012	010	00
														MTRCYCLE		01	DRVR	INJC	20	M	OR-Y		000	000		00
																					OR<25					
01598	N N N N N	05/31/2014	LANE	1	06		ALLEY		N	N	CLR	S-STRGHT	01	NONE 0	STRGHT											07
NO RPT		SA	VENETA	MN	0	TERRITORIAL HY	S	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	S -N									000		00
		8A		19.91		HUNTER RD	04			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	52	M	OR-Y		042	000		07
								(02)													OR<25					
													02	NONE 1	TURN-R											
														PRVTE	S -E									019		00
														PSNGR CAR		01	DRVR	NONE	32	M	OR-Y		000	000		00
																					OR<25					

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200: TERRITORIAL

Highway 200 ALL ROAD TYPES, MP 20.07 to 20.17 01/01/2012 to 12/31/2014, Both Add and Non-Add mileage

Total crash records: 2

SER# / INVEST	SEVERITY	ALCOHOL	DUI	RURAL	SCHOOL	WKZ	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / COMPNT / MLG / MILEPNT	FC / TYP	CONN# / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF-CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ SVRTY	AGE	SEX	LICNS / RES	PED LOC	ERROR	ACT	EVENT	CAUSE
00590	N	N	N	N	N		02/27/2013	LANE	1	06		INTER	CROSS	N	N	CLD	ANGL-OTH	01	NONE 0	STRGHT											02
COUNTY							WE	VENETA	MN 0		BOLTON RD	CN		STOP SIGN	N	WET	ANGL		PRVTE	N -S									000		00
							7P		20.12		TERRITORIAL HY	02	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	31	F	OR-Y		000	000		00
																											OR<25				
																		01	NONE 0	STRGHT											
																			PRVTE	N -S									000		00
																			PSNGR CAR		02	PSNG	INJC	11	F			000	000		00
																		02	NONE 0	STRGHT											
																			PRVTE	E -W									015		00
																			PSNGR CAR		01	DRVR	INJC	37	F	OR-Y		028	000		02
																											OR<25				
																		02	NONE 0	STRGHT											
																			PRVTE	E -W									015		00
																			PSNGR CAR		02	PSNG	INJC	11	M			000	000		00
03443	N	N	N	N	N		10/28/2013	LANE	1	06		INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											02
NONE							MO	VENETA	MN 0		BOLTON RD	CN		STOP SIGN	N	DRY	TURN		PRVTE	N -S									000		00
							1P		20.12		TERRITORIAL HY	03	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	45	F	OR-Y		000	000		00
																											OR<25				
																		02	NONE 0	TURN-L											
																			PRVTE	W -N									015		00
																			PSNGR CAR		01	DRVR	NONE	17	F	OR-Y		028	000		02
																											OR<25				

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Appendix D

2016 Synchro Reports

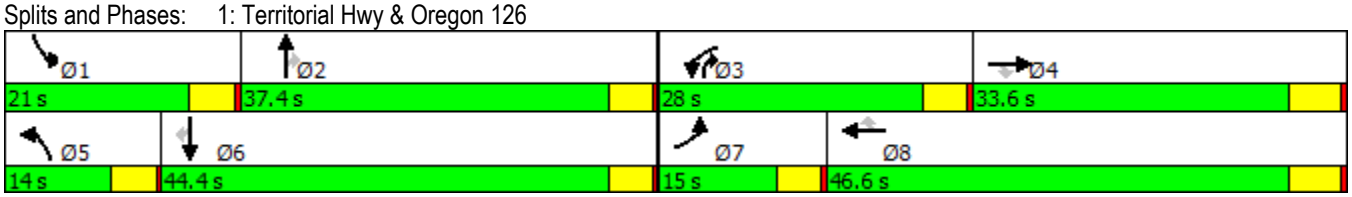
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	257	84	203	269	208	63	296	119	131	325	57
Future Volume (vph)	68	257	84	203	269	208	63	296	119	131	325	57
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	225		120	170		75	140		175	135		125
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	135			200			140			25		
Satd. Flow (prot)	1630	1716	1458	1646	1733	1473	1662	1750	1488	1662	1750	1488
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1716	1415	1646	1733	1473	1662	1750	1444	1662	1750	1276
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			177			144			123			145
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		634			5854			1994			407	
Travel Time (s)		9.6			88.7			38.8			7.9	
Confl. Peds. (#/hr)			4						4			52
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	265	87	209	277	214	65	305	123	135	335	59
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		16			16			14			14	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	20		15	15		9	20		15	20		15
Number of Detectors	2	2	1	2	2	1	2	2	1	2	2	1
Detector Template												
Leading Detector (ft)	78	323	83	78	323	53	78	223	143	78	223	78
Trailing Detector (ft)	2	157	77	2	157	47	2	107	137	2	107	72
Detector 1 Position(ft)	2	157	77	2	157	47	2	107	137	2	107	72
Detector 1 Size(ft)	20	6	6	20	6	6	20	6	6	20	6	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	72	317		72	317		72	217		72	217	
Detector 2 Size(ft)	6	6		6	6		6	6		6	6	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	3	1	6	6
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	10.0	10.0	4.0	6.0	6.0	4.0	6.0	4.0	4.0	6.0	6.0
Minimum Split (s)	13.0	30.4	30.4	13.0	30.4	30.4	13.0	29.5	13.0	13.0	29.5	29.5
Total Split (s)	15.0	33.6	33.6	28.0	46.6	46.6	14.0	37.4	28.0	21.0	44.4	44.4
Total Split (%)	12.5%	28.0%	28.0%	23.3%	38.8%	38.8%	11.7%	31.2%	23.3%	17.5%	37.0%	37.0%
Maximum Green (s)	10.5	28.2	28.2	23.5	41.2	41.2	9.5	32.9	23.5	16.5	39.9	39.9
Yellow Time (s)	4.0	4.7	4.7	4.0	4.7	4.7	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.5	0.7	0.7	0.5	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	-0.5	-1.4	-1.4	-0.5	-1.4	-1.4	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.5	4.0	4.0	2.5	4.0	4.0	2.5	2.5	2.5	2.5	2.5	2.5
Minimum Gap (s)	2.0	2.7	2.7	2.0	2.7	2.7	2.0	2.0	2.0	2.0	2.0	2.0
Time Before Reduce (s)	8.0	10.0	10.0	8.0	10.0	10.0	8.0	8.0	8.0	8.0	8.0	8.0
Time To Reduce (s)	4.0	13.0	13.0	4.0	13.0	13.0	4.0	4.0	4.0	4.0	4.0	4.0
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	7.0
Flash Dont Walk (s)		18.0	18.0		18.0	18.0		18.0			18.0	18.0
Pedestrian Calls (#/hr)		4	4		0	0		4			52	52
Act Effct Green (s)	9.1	19.7	19.7	15.4	29.2	29.2	8.6	20.0	35.3	12.6	27.1	27.1
Actuated g/C Ratio	0.11	0.23	0.23	0.18	0.34	0.34	0.10	0.24	0.41	0.15	0.32	0.32
v/c Ratio	0.40	0.67	0.19	0.71	0.47	0.36	0.39	0.74	0.18	0.55	0.60	0.12
Control Delay	50.2	41.9	0.9	50.0	28.3	11.2	50.7	44.4	3.6	48.2	33.0	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.2	41.9	0.9	50.0	28.3	11.2	50.7	44.4	3.6	48.2	33.0	0.5
LOS	D	D	A	D	C	B	D	D	A	D	C	A
Approach Delay		34.9			29.6			35.0			33.2	
Approach LOS		C			C			D			C	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 85.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.74
Intersection Signal Delay: 32.8 — Intersection LOS: C
Intersection Capacity Utilization 66.3% — ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: Territorial Hwy & Oregon 126



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	5	10	7	2	42	15	312	10	55	385	27
Future Volume (vph)	35	5	10	7	2	42	15	312	10	55	385	27
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Lane Width (ft)	12	12	12	12	12	12	12	12	12	14	12	12
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			75			75		
Satd. Flow (prot)	0	1611	0	0	1516	0	1630	1707	0	1739	1699	0
Flt Permitted		0.966			0.993		0.950			0.950		
Satd. Flow (perm)	0	1611	0	0	1516	0	1630	1707	0	1739	1699	0
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		593			3765			1344			1994	
Travel Time (s)		16.2			102.7			26.2			38.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	54	0	0	55	0	16	346	0	59	443	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			14			14	
Link Offset(ft)		-10			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.02	1.11	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 46.8%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	6	30	5	1	20	32	216	5	35	306	66
Future Volume (vph)	47	6	30	5	1	20	32	216	5	35	306	66
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	300		0	0		0	100		0	100		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	250			25			75			75		
Satd. Flow (prot)	1630	1501	0	0	1522	0	1630	1711	0	1630	1669	0
Flt Permitted	0.950				0.990		0.950			0.950		
Satd. Flow (perm)	1630	1501	0	0	1522	0	1630	1711	0	1630	1669	0
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		756			1656			860			1344	
Travel Time (s)		14.7			37.6			16.8			26.2	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)												
Lane Group Flow (vph)	47	36	0	0	26	0	32	223	0	35	376	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			0			14			14	
Link Offset(ft)		-6			6			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15		9	15		9	20		15	20		15
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 44.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	15	5	1	7	3	10	5	2	15	7	6
Future Volume (vph)	3	15	5	1	7	3	10	5	2	15	7	6
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	0	1656	0	0	1642	0	0	1636	0	0	1621	0
Flt Permitted		0.993			0.996			0.971			0.974	
Satd. Flow (perm)	0	1656	0	0	1642	0	0	1636	0	0	1621	0
Link Speed (mph)		30			25			30			25	
Link Distance (ft)		1656			1314			1319			463	
Travel Time (s)		37.6			35.8			30.0			12.6	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	0	0	14	0	0	22	0	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			6			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	4	17	32	16	8	2
Future Volume (vph)	4	17	32	16	8	2
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	1510	0	0	1661	1673	0
Flt Permitted	0.991			0.968		
Satd. Flow (perm)	1510	0	0	1661	1673	0
Link Speed (mph)	25			35	30	
Link Distance (ft)	276			1033	1319	
Travel Time (s)	7.5			20.1	30.0	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)						
Lane Group Flow (vph)	23	0	0	53	11	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 19.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	500	27	130	700	20	12	7	52	6	8	13
Future Volume (vph)	12	500	27	130	700	20	12	7	52	6	8	13
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	250		75	400		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	300			300			25			25		
Satd. Flow (prot)	1646	1733	1473	1646	1733	1473	0	1563	0	0	1620	0
Flt Permitted	0.950			0.950				0.991			0.990	
Satd. Flow (perm)	1646	1733	1473	1646	1733	1473	0	1563	0	0	1620	0
Link Speed (mph)		55			55			35			35	
Link Distance (ft)		5854			492			1428			324	
Travel Time (s)		72.6			6.1			27.8			6.3	
Confl. Peds. (#/hr)						4			4			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	532	29	138	745	21	0	75	0	0	29	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		14			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		0			0			10			10	
Two way Left Turn Lane												
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	20		15	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 60.2%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	37	3	7	34	84	81
Future Volume (vph)	37	3	7	34	84	81
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	1624	0	0	1700	1602	0
Flt Permitted	0.955			0.991		
Satd. Flow (perm)	1624	0	0	1700	1602	0
Link Speed (mph)	30			35	35	
Link Distance (ft)	1803			1328	1428	
Travel Time (s)	41.0			25.9	27.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	0	0	46	185	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 20.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	30	2	2	40	1	1
Future Volume (vph)	30	2	2	40	1	1
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Lane Width (ft)	12	12	12	12	10	10
Satd. Flow (prot)	1702	0	0	1712	1457	0
Flt Permitted				0.998	0.976	
Satd. Flow (perm)	1702	0	0	1712	1457	0
Link Speed (mph)	25			25	20	
Link Distance (ft)	3765			1803	629	
Travel Time (s)	102.7			49.2	21.4	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)						
Lane Group Flow (vph)	36	0	0	47	2	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.11	1.11	1.21	1.21
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 14.1%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	25	5	2	45	0	3	0	2	0	0	0
Future Volume (vph)	0	25	5	2	45	0	3	0	2	0	0	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	0	1680	0	0	1712	0	0	1576	0	0	1716	0
Flt Permitted					0.998			0.971				
Satd. Flow (perm)	0	1680	0	0	1712	0	0	1576	0	0	1716	0
Link Speed (mph)		35			35			30			25	
Link Distance (ft)		1033			2778			225			318	
Travel Time (s)		20.1			54.1			5.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	32	0	0	51	0	0	5	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		5			5			16			5	
Two way Left Turn Lane												
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 14.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	1	1	40	82	2
Future Volume (vph)	1	1	1	40	82	2
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Lane Width (ft)	10	12	12	12	12	12
Satd. Flow (prot)	1457	0	0	1714	1711	0
Flt Permitted	0.976			0.999		
Satd. Flow (perm)	1457	0	0	1714	1711	0
Link Speed (mph)	20			45	45	
Link Distance (ft)	1300			1453	1328	
Travel Time (s)	44.3			22.0	20.1	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2	0	0	46	94	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	10			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	5			5	5	
Two way Left Turn Lane						
Headway Factor	1.21	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 14.8%	ICU Level of Service A
Analysis Period (min) 15	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	257	84	203	269	208	63	296	119	131	325	57
Future Volume (vph)	68	257	84	203	269	208	63	296	119	131	325	57
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.89
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1630	1716	1419	1646	1733	1473	1662	1750	1464	1662	1750	1327
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1630	1716	1419	1646	1733	1473	1662	1750	1464	1662	1750	1327
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	70	265	87	209	277	214	65	305	123	135	335	59
RTOR Reduction (vph)	0	0	66	0	0	96	0	0	71	0	0	40
Lane Group Flow (vph)	70	265	21	209	277	119	65	305	52	135	335	19
Confl. Peds. (#/hr)			4						4			52
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	6.8	19.7	19.7	14.8	27.7	27.7	6.4	20.9	35.7	12.1	26.6	26.6
Effective Green, g (s)	7.3	21.1	21.1	15.3	29.1	29.1	6.9	21.4	36.7	12.6	27.1	27.1
Actuated g/C Ratio	0.08	0.24	0.24	0.18	0.34	0.34	0.08	0.25	0.42	0.15	0.31	0.31
Clearance Time (s)	4.5	5.4	5.4	4.5	5.4	5.4	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	2.5	4.0	4.0	2.5	4.0	4.0	2.5	2.5	2.5	2.5	2.5	2.5
Lane Grp Cap (vph)	137	419	346	291	583	496	132	433	689	242	548	416
v/s Ratio Prot	0.04	c0.15		c0.13	0.16		0.04	c0.17	0.01	c0.08	0.19	
v/s Ratio Perm			0.01			0.08			0.02			0.01
v/c Ratio	0.51	0.63	0.06	0.72	0.48	0.24	0.49	0.70	0.08	0.56	0.61	0.04
Uniform Delay, d1	37.8	29.2	25.1	33.5	22.6	20.7	38.1	29.6	14.8	34.3	25.2	20.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.4	3.5	0.1	7.7	0.8	0.3	2.1	4.8	0.0	2.2	1.7	0.0
Delay (s)	40.2	32.7	25.2	41.2	23.5	21.0	40.2	34.4	14.8	36.5	26.9	20.7
Level of Service	D	C	C	D	C	C	D	C	B	D	C	C
Approach Delay (s)		32.4			28.0			30.3			28.7	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	29.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	86.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	66.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	5	10	7	2	42	15	312	10	55	385	27
Future Volume (Veh/h)	35	5	10	7	2	42	15	312	10	55	385	27
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	38	5	11	8	2	45	16	335	11	59	414	29
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	960	924	428	918	934	340	443			346		
vC1, stage 1 conf vol	546	546		372	372							
vC2, stage 2 conf vol	413	378		546	561							
vCu, unblocked vol	960	924	428	918	934	340	443			346		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5		6.1	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	90	99	98	98	100	94	99			95		
cM capacity (veh/h)	395	418	626	416	418	702	1117			1213		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	54	55	16	346	59	443
Volume Left	38	8	16	0	59	0
Volume Right	11	45	0	11	0	29
cSH	429	624	1117	1700	1213	1700
Volume to Capacity	0.13	0.09	0.01	0.20	0.05	0.26
Queue Length 95th (ft)	11	7	1	0	4	0
Control Delay (s)	14.6	11.3	8.3	0.0	8.1	0.0
Lane LOS	B	B	A		A	
Approach Delay (s)	14.6	11.3	0.4		1.0	
Approach LOS	B	B				

Intersection Summary			
Average Delay	2.1		
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	6	30	5	1	20	32	216	5	35	306	66
Future Volume (Veh/h)	47	6	30	5	1	20	32	216	5	35	306	66
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (vph)	47	6	30	5	1	20	32	218	5	35	309	67
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	715	700	342	696	730	220	376			223		
vC1, stage 1 conf vol	412	412		284	284							
vC2, stage 2 conf vol	302	287		412	446							
vCu, unblocked vol	715	700	342	696	730	220	376			223		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5		6.1	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	91	99	96	99	100	98	97			97		
cM capacity (veh/h)	506	501	700	489	479	819	1182			1346		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	47	36	26	32	223	35	376
Volume Left	47	0	5	32	0	35	0
Volume Right	0	30	20	0	5	0	67
cSH	506	657	708	1182	1700	1346	1700
Volume to Capacity	0.09	0.05	0.04	0.03	0.13	0.03	0.22
Queue Length 95th (ft)	8	4	3	2	0	2	0
Control Delay (s)	12.8	10.8	10.3	8.1	0.0	7.7	0.0
Lane LOS	B	B	B	A		A	
Approach Delay (s)	12.0		10.3	1.0		0.7	
Approach LOS	B		B				

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	44.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	3	15	5	1	7	3	10	5	2	15	7	6
Future Volume (vph)	3	15	5	1	7	3	10	5	2	15	7	6
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	4	19	6	1	9	4	13	6	3	19	9	8

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	29	14	22	36
Volume Left (vph)	4	1	13	19
Volume Right (vph)	6	4	3	8
Hadj (s)	-0.06	-0.12	0.07	0.01
Departure Headway (s)	4.0	3.9	4.1	4.0
Degree Utilization, x	0.03	0.02	0.03	0.04
Capacity (veh/h)	886	897	857	881
Control Delay (s)	7.1	7.0	7.2	7.2
Approach Delay (s)	7.1	7.0	7.2	7.2
Approach LOS	A	A	A	A

Intersection Summary			
Delay	7.1		
Level of Service	A		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	4	17	32	16	8	2
Future Volume (Veh/h)	4	17	32	16	8	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	4	19	35	18	9	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	98	10	11			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	98	10	11			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	98			
cM capacity (veh/h)	881	1071	1608			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	23	53	11
Volume Left	4	35	0
Volume Right	19	0	2
cSH	1033	1608	1700
Volume to Capacity	0.02	0.02	0.01
Queue Length 95th (ft)	2	2	0
Control Delay (s)	8.6	4.9	0.0
Lane LOS	A	A	
Approach Delay (s)	8.6	4.9	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	5.2		
Intersection Capacity Utilization	19.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	500	27	130	700	20	12	7	52	6	8	13
Future Volume (Veh/h)	12	500	27	130	700	20	12	7	52	6	8	13
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	13	532	29	138	745	21	13	7	55	6	9	14
Pedestrians					4						4	
Lane Width (ft)					12.0						12.0	
Walking Speed (ft/s)					3.5						3.5	
Percent Blockage					0						0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	749			532			1584	1583	536	1590	1583	749
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	749			532			1584	1583	536	1590	1583	749
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			87			82	93	90	91	90	97
cM capacity (veh/h)	861			1041			70	93	546	65	93	414

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	13	532	29	138	745	21	75	29
Volume Left	13	0	0	138	0	0	13	6
Volume Right	0	0	29	0	0	21	55	14
cSH	861	1700	1700	1041	1700	1700	208	131
Volume to Capacity	0.02	0.31	0.02	0.13	0.44	0.01	0.36	0.22
Queue Length 95th (ft)	1	0	0	11	0	0	39	20
Control Delay (s)	9.2	0.0	0.0	9.0	0.0	0.0	31.7	40.2
Lane LOS	A			A			D	E
Approach Delay (s)	0.2			1.4			31.7	40.2
Approach LOS							D	E

Intersection Summary			
Average Delay	3.1		
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	37	3	7	34	84	81
Future Volume (Veh/h)	37	3	7	34	84	81
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	42	3	8	38	94	91
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	194	140	94			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	194	140	94			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	95	100	99			
cM capacity (veh/h)	791	909	1500			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	45	46	185
Volume Left	42	8	0
Volume Right	3	0	91
cSH	798	1500	1700
Volume to Capacity	0.06	0.01	0.11
Queue Length 95th (ft)	4	0	0
Control Delay (s)	9.8	1.3	0.0
Lane LOS	A	A	
Approach Delay (s)	9.8	1.3	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	20.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	30	2	2	40	1	1
Future Volume (Veh/h)	30	2	2	40	1	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	34	2	2	45	1	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			36		84	35
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			36		84	35
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1575		916	1038

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	36	47	2
Volume Left	0	2	1
Volume Right	2	0	1
cSH	1700	1575	973
Volume to Capacity	0.02	0.00	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.3	8.7
Lane LOS		A	A
Approach Delay (s)	0.0	0.3	8.7
Approach LOS			A

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	14.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	25	5	2	45	0	3	0	2	0	0	0
Future Volume (Veh/h)	0	25	5	2	45	0	3	0	2	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	27	5	2	49	0	3	0	2	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	49			32			82	82	30	84	85	49
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	49			32			82	82	30	84	85	49
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1558			1580			904	807	1045	899	804	1020

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	32	51	5	0
Volume Left	0	2	3	0
Volume Right	5	0	2	0
cSH	1558	1580	956	1700
Volume to Capacity	0.00	0.00	0.01	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.3	8.8	0.0
Lane LOS		A	A	A
Approach Delay (s)	0.0	0.3	8.8	0.0
Approach LOS			A	A

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	14.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	1	1	40	82	2
Future Volume (Veh/h)	1	1	1	40	82	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	1	1	1	45	92	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	140	93	94			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	140	93	94			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	852	964	1500			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	2	46	94
Volume Left	1	1	0
Volume Right	1	0	2
cSH	905	1500	1700
Volume to Capacity	0.00	0.00	0.06
Queue Length 95th (ft)	0	0	0
Control Delay (s)	9.0	0.2	0.0
Lane LOS	A	A	
Approach Delay (s)	9.0	0.2	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	14.8%	ICU Level of Service	A
Analysis Period (min)	15		

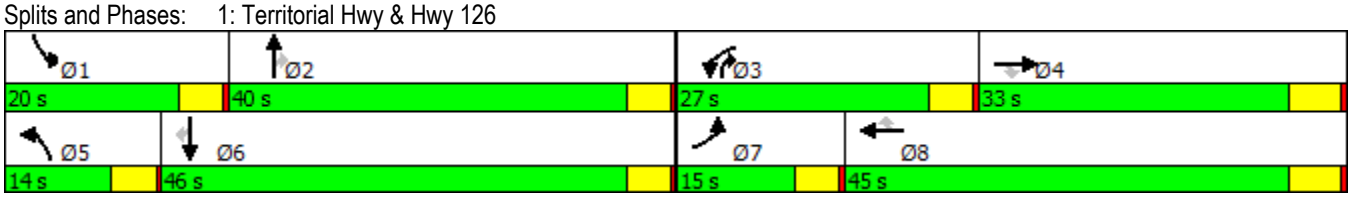
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	257	92	209	269	208	67	308	123	131	345	57
Future Volume (vph)	68	257	92	209	269	208	67	308	123	131	345	57
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	225		120	170		75	140		175	135		125
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	135			200			140			25		
Satd. Flow (prot)	1630	1716	1458	1646	1733	1473	1662	1750	1488	1662	1750	1488
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1716	1415	1646	1733	1473	1662	1750	1444	1662	1750	1276
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			177			141			127			145
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		634			5854			1994			407	
Travel Time (s)		9.6			88.7			38.8			7.9	
Confl. Peds. (#/hr)			4						4			52
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	265	95	215	277	214	69	318	127	135	356	59
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		16			16			14			14	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	20		15	15		9	20		15	20		15
Number of Detectors	2	2	1	2	2	1	2	2	1	2	2	1
Detector Template												
Leading Detector (ft)	78	323	83	78	323	53	78	223	143	78	223	78
Trailing Detector (ft)	2	157	77	2	157	47	2	107	137	2	107	72
Detector 1 Position(ft)	2	157	77	2	157	47	2	107	137	2	107	72
Detector 1 Size(ft)	20	6	6	20	6	6	20	6	6	20	6	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	72	317		72	317		72	217		72	217	
Detector 2 Size(ft)	6	6		6	6		6	6		6	6	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	3	1	6	6
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	10.0	10.0	4.0	6.0	6.0	4.0	6.0	4.0	4.0	6.0	6.0
Minimum Split (s)	13.0	30.4	30.4	13.0	30.4	30.4	13.0	29.5	13.0	13.0	29.5	29.5
Total Split (s)	15.0	33.0	33.0	27.0	45.0	45.0	14.0	40.0	27.0	20.0	46.0	46.0
Total Split (%)	12.5%	27.5%	27.5%	22.5%	37.5%	37.5%	11.7%	33.3%	22.5%	16.7%	38.3%	38.3%
Maximum Green (s)	10.5	27.6	27.6	22.5	39.6	39.6	9.5	35.5	22.5	15.5	41.5	41.5
Yellow Time (s)	4.0	4.7	4.7	4.0	4.7	4.7	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.5	0.7	0.7	0.5	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	-0.5	-1.4	-1.4	-0.5	-1.4	-1.4	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.5	4.0	4.0	2.5	4.0	4.0	2.5	2.5	2.5	2.5	2.5	2.5
Minimum Gap (s)	2.0	2.7	2.7	2.0	2.7	2.7	2.0	2.0	2.0	2.0	2.0	2.0
Time Before Reduce (s)	8.0	10.0	10.0	8.0	10.0	10.0	8.0	8.0	8.0	8.0	8.0	8.0
Time To Reduce (s)	4.0	13.0	13.0	4.0	13.0	13.0	4.0	4.0	4.0	4.0	4.0	4.0
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	7.0
Flash Dont Walk (s)		18.0	18.0		18.0	18.0		18.0			18.0	18.0
Pedestrian Calls (#/hr)		4	4		0	0		4			52	52
Act Effct Green (s)	9.1	19.7	19.7	15.6	29.3	29.3	8.8	20.6	36.1	12.5	27.5	27.5
Actuated g/C Ratio	0.11	0.23	0.23	0.18	0.34	0.34	0.10	0.24	0.42	0.15	0.32	0.32
v/c Ratio	0.40	0.67	0.21	0.72	0.47	0.36	0.41	0.76	0.18	0.56	0.63	0.12
Control Delay	50.2	42.4	1.0	51.0	28.6	11.6	51.0	44.6	3.4	49.0	33.9	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.2	42.4	1.0	51.0	28.6	11.6	51.0	44.6	3.4	49.0	33.9	0.5
LOS	D	D	A	D	C	B	D	D	A	D	C	A
Approach Delay		34.5			30.2			35.3			34.0	
Approach LOS		C			C			D			C	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 85.6
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 33.2 — Intersection LOS: C
Intersection Capacity Utilization 67.2% — ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: Territorial Hwy & Hwy 126



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	8	10	7	4	54	15	326	10	79	409	27
Future Volume (vph)	35	8	10	7	4	54	15	326	10	79	409	27
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Lane Width (ft)	12	12	12	12	12	12	12	12	12	14	12	12
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			75			75		
Satd. Flow (prot)	0	1618	0	0	1514	0	1630	1707	0	1739	1700	0
Flt Permitted		0.968			0.994		0.950			0.950		
Satd. Flow (perm)	0	1618	0	0	1514	0	1630	1707	0	1739	1700	0
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		593			3765			1344			1994	
Travel Time (s)		16.2			102.7			26.2			38.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	58	0	0	70	0	16	362	0	85	469	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			14			14	
Link Offset(ft)		-10			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.02	1.11	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 48.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	13	30	5	5	27	32	223	7	55	310	66
Future Volume (vph)	47	13	30	5	5	27	32	223	7	55	310	66
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	300		0	0		0	100		0	100		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	250			25			75			75		
Satd. Flow (prot)	1630	1536	0	0	1535	0	1630	1707	0	1630	1671	0
Flt Permitted	0.950				0.993		0.950			0.950		
Satd. Flow (perm)	1630	1536	0	0	1535	0	1630	1707	0	1630	1671	0
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		756			1656			860			1344	
Travel Time (s)		14.7			37.6			16.8			26.2	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)												
Lane Group Flow (vph)	47	43	0	0	37	0	32	232	0	56	380	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			0			14			14	
Link Offset(ft)		-6			6			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15		9	15		9	20		15	20		15
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 44.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	36	11	2	18	3	10	5	4	15	7	6
Future Volume (vph)	3	36	11	2	18	3	10	5	4	15	7	6
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	0	1659	0	0	1676	0	0	1624	0	0	1621	0
Flt Permitted		0.997			0.995			0.974			0.974	
Satd. Flow (perm)	0	1659	0	0	1676	0	0	1624	0	0	1621	0
Link Speed (mph)		30			25			30			25	
Link Distance (ft)		1656			1314			1319			463	
Travel Time (s)		37.6			35.8			30.0			12.6	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	64	0	0	30	0	0	24	0	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			6			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 13.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	6	23	40	16	14	3
Future Volume (vph)	6	23	40	16	14	3
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	1519	0	0	1657	1676	0
Flt Permitted	0.989			0.966		
Satd. Flow (perm)	1519	0	0	1657	1676	0
Link Speed (mph)	25			35	30	
Link Distance (ft)	276			1024	1319	
Travel Time (s)	7.5			19.9	30.0	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)						
Lane Group Flow (vph)	32	0	0	62	18	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 20.0%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	500	27	191	700	20	12	9	88	6	11	13
Future Volume (vph)	12	500	27	191	700	20	12	9	88	6	11	13
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	250		100	400		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	300			300			25			25		
Satd. Flow (prot)	1646	1733	1473	1646	1733	1473	0	1552	0	0	1632	0
Flt Permitted	0.950			0.950				0.994			0.991	
Satd. Flow (perm)	1646	1733	1473	1646	1733	1473	0	1552	0	0	1632	0
Link Speed (mph)		55			55			35			35	
Link Distance (ft)		5854			492			1428			324	
Travel Time (s)		72.6			6.1			27.8			6.3	
Confl. Peds. (#/hr)						4			4			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	532	29	203	745	21	0	117	0	0	32	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		14			14			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		0			0			10			10	
Two way Left Turn Lane												
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	20		15	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 62.5%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	56	3	7	53	116	113
Future Volume (vph)	56	3	7	53	116	113
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	1627	0	0	1705	1601	0
Flt Permitted	0.954			0.994		
Satd. Flow (perm)	1627	0	0	1705	1601	0
Link Speed (mph)	30			35	35	
Link Distance (ft)	1803			1328	1428	
Travel Time (s)	41.0			25.9	27.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)						
Lane Group Flow (vph)	66	0	0	68	257	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 24.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	30	26	34	40	15	20
Future Volume (vph)	30	26	34	40	15	20
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Lane Width (ft)	12	12	12	12	10	10
Satd. Flow (prot)	1609	0	0	1678	1449	0
Flt Permitted				0.978	0.979	
Satd. Flow (perm)	1609	0	0	1678	1449	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	3765			1803	629	
Travel Time (s)	102.7			49.2	17.2	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)						
Lane Group Flow (vph)	63	0	0	83	39	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.11	1.11	1.21	1.21
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.0%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	25	5	2	45	7	3	0	2	4	0	8
Future Volume (vph)	12	25	5	2	45	7	3	0	2	4	0	8
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	0	1666	0	0	1681	0	0	1576	0	0	1533	0
Flt Permitted		0.986			0.998			0.971			0.985	
Satd. Flow (perm)	0	1666	0	0	1681	0	0	1576	0	0	1533	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		1024			2778			460			318	
Travel Time (s)		19.9			54.1			12.5			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	45	0	0	59	0	0	5	0	0	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		5			5			16			5	
Two way Left Turn Lane												
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 18.0%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	20	5	8	40	82	34
Future Volume (vph)	20	5	8	40	82	34
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	1603	0	0	1702	1649	0
Flt Permitted	0.962			0.992		
Satd. Flow (perm)	1603	0	0	1702	1649	0
Link Speed (mph)	25			45	45	
Link Distance (ft)	1300			1453	1328	
Travel Time (s)	35.5			22.0	20.1	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)						
Lane Group Flow (vph)	28	0	0	54	130	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	5			5	5	
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 19.4%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	257	92	209	269	208	67	308	123	131	345	57
Future Volume (vph)	68	257	92	209	269	208	67	308	123	131	345	57
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.89
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1630	1716	1419	1646	1733	1473	1662	1750	1464	1662	1750	1326
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1630	1716	1419	1646	1733	1473	1662	1750	1464	1662	1750	1326
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	70	265	95	215	277	214	69	318	127	135	356	59
RTOR Reduction (vph)	0	0	72	0	0	94	0	0	72	0	0	40
Lane Group Flow (vph)	70	265	23	215	277	120	69	318	55	135	356	19
Confl. Peds. (#/hr)			4						4			52
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	6.9	19.7	19.7	15.0	27.8	27.8	6.5	21.5	36.5	12.0	27.0	27.0
Effective Green, g (s)	7.4	21.1	21.1	15.5	29.2	29.2	7.0	22.0	37.5	12.5	27.5	27.5
Actuated g/C Ratio	0.08	0.24	0.24	0.18	0.34	0.34	0.08	0.25	0.43	0.14	0.32	0.32
Clearance Time (s)	4.5	5.4	5.4	4.5	5.4	5.4	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	2.5	4.0	4.0	2.5	4.0	4.0	2.5	2.5	2.5	2.5	2.5	2.5
Lane Grp Cap (vph)	138	415	343	292	580	493	133	442	697	238	552	418
v/s Ratio Prot	0.04	c0.15		c0.13	0.16		0.04	c0.18	0.01	c0.08	0.20	
v/s Ratio Perm			0.02			0.08			0.02			0.01
v/c Ratio	0.51	0.64	0.07	0.74	0.48	0.24	0.52	0.72	0.08	0.57	0.64	0.04
Uniform Delay, d1	38.1	29.6	25.4	33.9	22.9	21.0	38.4	29.7	14.6	34.8	25.6	20.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.1	3.6	0.1	8.8	0.8	0.4	2.5	5.2	0.0	2.5	2.3	0.0
Delay (s)	40.2	33.2	25.5	42.6	23.8	21.3	41.0	34.9	14.7	37.3	27.9	20.7
Level of Service	D	C	C	D	C	C	D	C	B	D	C	C
Approach Delay (s)		32.6			28.8			30.7			29.4	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	30.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	87.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	8	10	7	4	54	15	326	10	79	409	27
Future Volume (Veh/h)	35	8	10	7	4	54	15	326	10	79	409	27
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	38	9	11	8	4	58	16	351	11	85	440	29
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1068	1018	454	1014	1028	356	469			362		
vC1, stage 1 conf vol	624	624		388	388							
vC2, stage 2 conf vol	443	394		626	639							
vCu, unblocked vol	1068	1018	454	1014	1028	356	469			362		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5		6.1	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	89	98	98	98	99	92	99			93		
cM capacity (veh/h)	344	378	606	368	379	688	1093			1197		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	58	70	16	362	85	469
Volume Left	38	8	16	0	85	0
Volume Right	11	58	0	11	0	29
cSH	380	600	1093	1700	1197	1700
Volume to Capacity	0.15	0.12	0.01	0.21	0.07	0.28
Queue Length 95th (ft)	13	10	1	0	6	0
Control Delay (s)	16.2	11.8	8.3	0.0	8.2	0.0
Lane LOS	C	B	A		A	
Approach Delay (s)	16.2	11.8	0.4		1.3	
Approach LOS	C	B				

Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	48.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	13	30	5	5	27	32	223	7	55	310	66
Future Volume (Veh/h)	47	13	30	5	5	27	32	223	7	55	310	66
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (vph)	47	13	30	5	5	27	32	225	7	56	313	67
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	777	754	346	754	784	228	380			232		
vC1, stage 1 conf vol	458	458		292	292							
vC2, stage 2 conf vol	318	296		462	492							
vCu, unblocked vol	777	754	346	754	784	228	380			232		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5		6.1	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	90	97	96	99	99	97	97			96		
cM capacity (veh/h)	466	470	697	449	451	811	1178			1336		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	47	43	37	32	232	56	380
Volume Left	47	0	5	32	0	56	0
Volume Right	0	30	27	0	7	0	67
cSH	466	608	666	1178	1700	1336	1700
Volume to Capacity	0.10	0.07	0.06	0.03	0.14	0.04	0.22
Queue Length 95th (ft)	8	6	4	2	0	3	0
Control Delay (s)	13.6	11.4	10.7	8.1	0.0	7.8	0.0
Lane LOS	B	B	B	A		A	
Approach Delay (s)	12.5		10.7	1.0		1.0	
Approach LOS	B		B				

Intersection Summary			
Average Delay	2.7		
Intersection Capacity Utilization	44.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	3	36	11	2	18	3	10	5	4	15	7	6
Future Volume (vph)	3	36	11	2	18	3	10	5	4	15	7	6
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	4	46	14	3	23	4	13	6	5	19	9	8

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	64	30	24	36
Volume Left (vph)	4	3	13	19
Volume Right (vph)	14	4	5	8
Hadj (s)	-0.08	-0.03	0.02	0.01
Departure Headway (s)	4.0	4.1	4.2	4.1
Degree Utilization, x	0.07	0.03	0.03	0.04
Capacity (veh/h)	886	866	836	848
Control Delay (s)	7.3	7.2	7.3	7.3
Approach Delay (s)	7.3	7.2	7.3	7.3
Approach LOS	A	A	A	A

Intersection Summary			
Delay	7.3		
Level of Service	A		
Intersection Capacity Utilization	13.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	6	23	40	16	14	3
Future Volume (Veh/h)	6	23	40	16	14	3
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	7	25	44	18	15	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	122	16	18			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	122	16	18			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	98	97			
cM capacity (veh/h)	849	1063	1599			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	32	62	18
Volume Left	7	44	0
Volume Right	25	0	3
cSH	1007	1599	1700
Volume to Capacity	0.03	0.03	0.01
Queue Length 95th (ft)	2	2	0
Control Delay (s)	8.7	5.3	0.0
Lane LOS	A	A	
Approach Delay (s)	8.7	5.3	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	5.4		
Intersection Capacity Utilization	20.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	500	27	191	700	20	12	9	88	6	11	13
Future Volume (Veh/h)	12	500	27	191	700	20	12	9	88	6	11	13
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	13	532	29	203	745	21	13	10	94	6	12	14
Pedestrians					4						4	
Lane Width (ft)					12.0						12.0	
Walking Speed (ft/s)					3.5						3.5	
Percent Blockage					0						0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	749			532			1715	1713	536	1722	1713	749
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	749			532			1715	1713	536	1722	1713	749
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			80			74	86	83	86	83	97
cM capacity (veh/h)	861			1041			51	72	546	44	72	414

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	13	532	29	203	745	21	117	32
Volume Left	13	0	0	203	0	0	13	6
Volume Right	0	0	29	0	0	21	94	14
cSH	861	1700	1700	1041	1700	1700	207	95
Volume to Capacity	0.02	0.31	0.02	0.20	0.44	0.01	0.57	0.34
Queue Length 95th (ft)	1	0	0	18	0	0	77	33
Control Delay (s)	9.2	0.0	0.0	9.3	0.0	0.0	42.9	61.1
Lane LOS	A			A			E	F
Approach Delay (s)	0.2			1.9			42.9	61.1
Approach LOS							E	F

Intersection Summary			
Average Delay	5.3		
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	56	3	7	53	116	113
Future Volume (Veh/h)	56	3	7	53	116	113
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	63	3	8	60	130	127
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	270	194	130			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	270	194	130			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	91	100	99			
cM capacity (veh/h)	716	848	1455			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	66	68	257
Volume Left	63	8	0
Volume Right	3	0	127
cSH	721	1455	1700
Volume to Capacity	0.09	0.01	0.15
Queue Length 95th (ft)	8	0	0
Control Delay (s)	10.5	0.9	0.0
Lane LOS	B	A	
Approach Delay (s)	10.5	0.9	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	1.9		
Intersection Capacity Utilization	24.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	30	26	34	40	15	20
Future Volume (Veh/h)	30	26	34	40	15	20
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	34	29	38	45	17	22
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			63		170	48
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			63		170	48
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		98	98
cM capacity (veh/h)			1540		800	1020

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	63	83	39
Volume Left	0	38	17
Volume Right	29	0	22
cSH	1700	1540	911
Volume to Capacity	0.04	0.02	0.04
Queue Length 95th (ft)	0	2	3
Control Delay (s)	0.0	3.5	9.1
Lane LOS		A	A
Approach Delay (s)	0.0	3.5	9.1
Approach LOS			A

Intersection Summary			
Average Delay	3.5		
Intersection Capacity Utilization	21.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	25	5	2	45	7	3	0	2	4	0	8
Future Volume (Veh/h)	12	25	5	2	45	7	3	0	2	4	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	27	5	2	49	8	3	0	2	4	0	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	57			32			122	116	30	114	115	53
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	57			32			122	116	30	114	115	53
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	100	100	99
cM capacity (veh/h)	1547			1580			840	766	1045	854	768	1014

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	45	59	5	13
Volume Left	13	2	3	4
Volume Right	5	8	2	9
cSH	1547	1580	911	959
Volume to Capacity	0.01	0.00	0.01	0.01
Queue Length 95th (ft)	1	0	0	1
Control Delay (s)	2.2	0.3	9.0	8.8
Lane LOS	A	A	A	A
Approach Delay (s)	2.2	0.3	9.0	8.8
Approach LOS			A	A

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	18.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	20	5	8	40	82	34
Future Volume (Veh/h)	20	5	8	40	82	34
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	22	6	9	45	92	38
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	174	111	130			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	174	111	130			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	99	99			
cM capacity (veh/h)	811	942	1455			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	28	54	130
Volume Left	22	9	0
Volume Right	6	0	38
cSH	836	1455	1700
Volume to Capacity	0.03	0.01	0.08
Queue Length 95th (ft)	3	0	0
Control Delay (s)	9.5	1.3	0.0
Lane LOS	A	A	
Approach Delay (s)	9.5	1.3	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	19.4%	ICU Level of Service	A
Analysis Period (min)	15		

Appendix E

2026 Synchro Reports

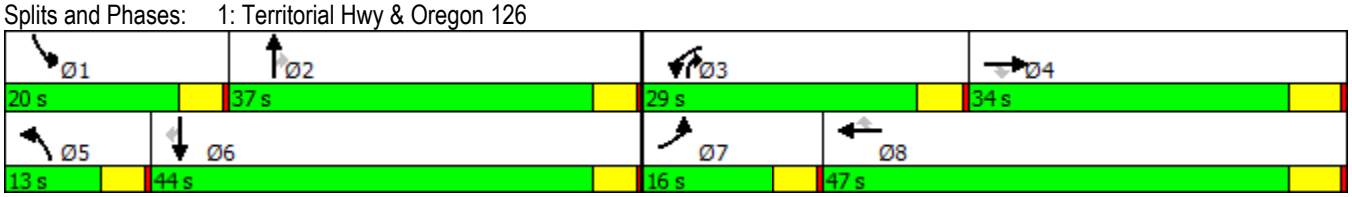
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	285	92	223	295	230	65	306	123	135	357	60
Future Volume (vph)	75	285	92	223	295	230	65	306	123	135	357	60
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	225		120	170		75	140		175	135		125
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	135			200			140			25		
Satd. Flow (prot)	1630	1716	1458	1646	1733	1473	1662	1750	1488	1662	1750	1488
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1716	1415	1646	1733	1473	1662	1750	1444	1662	1750	1276
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			177			146			127			145
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		634			5854			1994			407	
Travel Time (s)		9.6			88.7			38.8			7.9	
Confl. Peds. (#/hr)			4						4			52
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	77	294	95	230	304	237	67	315	127	139	368	62
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		16			16			14			14	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	20		15	15		9	20		15	20		15
Number of Detectors	2	2	1	2	2	1	2	2	1	2	2	1
Detector Template												
Leading Detector (ft)	78	323	83	78	323	53	78	223	143	78	223	78
Trailing Detector (ft)	2	157	77	2	157	47	2	107	137	2	107	72
Detector 1 Position(ft)	2	157	77	2	157	47	2	107	137	2	107	72
Detector 1 Size(ft)	20	6	6	20	6	6	20	6	6	20	6	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	72	317		72	317		72	217		72	217	
Detector 2 Size(ft)	6	6		6	6		6	6		6	6	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	3	1	6	6
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	10.0	10.0	4.0	6.0	6.0	4.0	6.0	4.0	4.0	6.0	6.0
Minimum Split (s)	13.0	30.4	30.4	13.0	30.4	30.4	13.0	29.5	13.0	13.0	29.5	29.5
Total Split (s)	16.0	34.0	34.0	29.0	47.0	47.0	13.0	37.0	29.0	20.0	44.0	44.0
Total Split (%)	13.3%	28.3%	28.3%	24.2%	39.2%	39.2%	10.8%	30.8%	24.2%	16.7%	36.7%	36.7%
Maximum Green (s)	11.5	28.6	28.6	24.5	41.6	41.6	8.5	32.5	24.5	15.5	39.5	39.5
Yellow Time (s)	4.0	4.7	4.7	4.0	4.7	4.7	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.5	0.7	0.7	0.5	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	-0.5	-1.4	-1.4	-0.5	-1.4	-1.4	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.5	4.0	4.0	2.5	4.0	4.0	2.5	2.5	2.5	2.5	2.5	2.5
Minimum Gap (s)	2.0	2.7	2.7	2.0	2.7	2.7	2.0	2.0	2.0	2.0	2.0	2.0
Time Before Reduce (s)	8.0	10.0	10.0	8.0	10.0	10.0	8.0	8.0	8.0	8.0	8.0	8.0
Time To Reduce (s)	4.0	13.0	13.0	4.0	13.0	13.0	4.0	4.0	4.0	4.0	4.0	4.0
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	7.0
Flash Dont Walk (s)		18.0	18.0		18.0	18.0		18.0			18.0	18.0
Pedestrian Calls (#/hr)		4	4		0	0		4			52	52
Act Effct Green (s)	9.7	21.2	21.2	16.8	31.6	31.6	8.4	20.7	37.5	12.8	28.3	28.3
Actuated g/C Ratio	0.11	0.24	0.24	0.19	0.36	0.36	0.09	0.23	0.42	0.14	0.32	0.32
v/c Ratio	0.44	0.72	0.20	0.74	0.49	0.38	0.43	0.77	0.18	0.58	0.66	0.12
Control Delay	52.1	44.8	1.0	52.3	28.9	12.4	55.0	47.9	3.4	51.8	36.0	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.1	44.8	1.0	52.3	28.9	12.4	55.0	47.9	3.4	51.8	36.0	0.5
LOS	D	D	A	D	C	B	D	D	A	D	D	A
Approach Delay		37.1			30.8			37.8			36.0	
Approach LOS		D			C			D			D	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 88.8
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.77
Intersection Signal Delay: 34.9 — Intersection LOS: C
Intersection Capacity Utilization 69.6% — ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: Territorial Hwy & Oregon 126



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	7	11	10	5	60	17	345	11	60	425	30
Future Volume (vph)	40	7	11	10	5	60	17	345	11	60	425	30
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Lane Width (ft)	12	12	12	12	12	12	12	12	12	14	12	12
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			75			75		
Satd. Flow (prot)	0	1616	0	0	1520	0	1630	1707	0	1739	1699	0
Flt Permitted		0.967			0.993		0.950			0.950		
Satd. Flow (perm)	0	1616	0	0	1520	0	1630	1707	0	1739	1699	0
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		593			3765			1344			1994	
Travel Time (s)		16.2			102.7			26.2			38.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	0	0	81	0	18	383	0	65	489	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			14			14	
Link Offset(ft)		-10			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.02	1.11	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 49.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	7	33	5	1	22	35	238	5	40	335	72
Future Volume (vph)	52	7	33	5	1	22	35	238	5	40	335	72
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	300		0	0		0	100		0	100		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	250			25			75			75		
Satd. Flow (prot)	1630	1503	0	0	1520	0	1630	1711	0	1630	1669	0
Flt Permitted	0.950				0.991		0.950			0.950		
Satd. Flow (perm)	1630	1503	0	0	1520	0	1630	1711	0	1630	1669	0
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		756			1656			860			1344	
Travel Time (s)		14.7			37.6			16.8			26.2	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	40	0	0	28	0	35	245	0	40	411	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			0			14			14	
Link Offset(ft)		-6			6			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15		9	15		9	20		15	20		15
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 47.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	17	14	1	8	3	11	5	2	17	8	7
Future Volume (vph)	3	17	14	1	8	3	11	5	2	17	8	7
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	0	1613	0	0	1649	0	0	1634	0	0	1621	0
Flt Permitted		0.995			0.997			0.970			0.974	
Satd. Flow (perm)	0	1613	0	0	1649	0	0	1634	0	0	1621	0
Link Speed (mph)		30			25			30			25	
Link Distance (ft)		1656			1314			1319			463	
Travel Time (s)		37.6			35.8			30.0			12.6	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	44	0	0	15	0	0	23	0	0	41	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			6			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	5	19	35	18	9	2
Future Volume (vph)	5	19	35	18	9	2
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	1513	0	0	1661	1676	0
Flt Permitted	0.990			0.968		
Satd. Flow (perm)	1513	0	0	1661	1676	0
Link Speed (mph)	25			35	30	
Link Distance (ft)	276			1033	1319	
Travel Time (s)	7.5			20.1	30.0	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)						
Lane Group Flow (vph)	26	0	0	58	12	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 19.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	550	30	143	770	22	13	10	57	7	12	15
Future Volume (vph)	13	550	30	143	770	22	13	10	57	7	12	15
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	250		75	400		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	300			300			25			25		
Satd. Flow (prot)	1646	1733	1473	1646	1733	1473	0	1569	0	0	1629	0
Flt Permitted	0.950			0.950				0.992			0.990	
Satd. Flow (perm)	1646	1733	1473	1646	1733	1473	0	1569	0	0	1629	0
Link Speed (mph)		55			55			35			35	
Link Distance (ft)		5854			492			1428			324	
Travel Time (s)		72.6			6.1			27.8			6.3	
Confl. Peds. (#/hr)						4			4			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	585	32	152	819	23	0	86	0	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		14			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		0			0			10			10	
Two way Left Turn Lane												
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	20		15	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 64.9%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	40	5	10	37	92	90
Future Volume (vph)	40	5	10	37	92	90
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	1617	0	0	1699	1601	0
Flt Permitted	0.958			0.990		
Satd. Flow (perm)	1617	0	0	1699	1601	0
Link Speed (mph)	30			35	35	
Link Distance (ft)	1803			1328	1428	
Travel Time (s)	41.0			25.9	27.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)						
Lane Group Flow (vph)	51	0	0	53	204	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.5%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	35	2	2	45	1	1
Future Volume (vph)	35	2	2	45	1	1
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Lane Width (ft)	12	12	12	12	10	10
Satd. Flow (prot)	1704	0	0	1712	1457	0
Flt Permitted				0.998	0.976	
Satd. Flow (perm)	1704	0	0	1712	1457	0
Link Speed (mph)	25			25	20	
Link Distance (ft)	3765			1803	629	
Travel Time (s)	102.7			49.2	21.4	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)						
Lane Group Flow (vph)	41	0	0	53	2	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.11	1.11	1.21	1.21
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 14.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	28	5	2	50	0	3	0	2	0	0	0
Future Volume (vph)	0	28	5	2	50	0	3	0	2	0	0	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	0	1683	0	0	1712	0	0	1576	0	0	1716	0
Flt Permitted					0.998			0.971				
Satd. Flow (perm)	0	1683	0	0	1712	0	0	1576	0	0	1716	0
Link Speed (mph)		35			35			30			25	
Link Distance (ft)		1033			2778			225			318	
Travel Time (s)		20.1			54.1			5.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	35	0	0	56	0	0	5	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		5			5			16			5	
Two way Left Turn Lane												
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 14.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	1	1	45	90	2
Future Volume (vph)	1	1	1	45	90	2
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Lane Width (ft)	10	12	12	12	12	12
Satd. Flow (prot)	1457	0	0	1714	1711	0
Flt Permitted	0.976			0.999		
Satd. Flow (perm)	1457	0	0	1714	1711	0
Link Speed (mph)	20			45	45	
Link Distance (ft)	1300			1453	1328	
Travel Time (s)	44.3			22.0	20.1	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2	0	0	52	103	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	10			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	5			5	5	
Two way Left Turn Lane						
Headway Factor	1.21	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 15.3%	ICU Level of Service A
Analysis Period (min) 15	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	285	92	223	295	230	65	306	123	135	357	60
Future Volume (vph)	75	285	92	223	295	230	65	306	123	135	357	60
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.89
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1630	1716	1419	1646	1733	1473	1662	1750	1465	1662	1750	1321
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1630	1716	1419	1646	1733	1473	1662	1750	1465	1662	1750	1321
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	77	294	95	230	304	237	67	315	127	139	368	62
RTOR Reduction (vph)	0	0	71	0	0	95	0	0	72	0	0	43
Lane Group Flow (vph)	77	294	24	230	304	142	67	315	55	139	368	19
Confl. Peds. (#/hr)			4						4			52
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	7.3	21.1	21.1	16.3	30.1	30.1	6.1	21.6	37.9	12.2	27.7	27.7
Effective Green, g (s)	7.8	22.5	22.5	16.8	31.5	31.5	6.6	22.1	38.9	12.7	28.2	28.2
Actuated g/C Ratio	0.09	0.25	0.25	0.19	0.35	0.35	0.07	0.25	0.43	0.14	0.31	0.31
Clearance Time (s)	4.5	5.4	5.4	4.5	5.4	5.4	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	2.5	4.0	4.0	2.5	4.0	4.0	2.5	2.5	2.5	2.5	2.5	2.5
Lane Grp Cap (vph)	141	428	354	306	605	514	121	429	697	234	547	413
v/s Ratio Prot	0.05	c0.17		c0.14	0.18		0.04	0.18	0.01	c0.08	c0.21	
v/s Ratio Perm			0.02			0.10			0.02			0.01
v/c Ratio	0.55	0.69	0.07	0.75	0.50	0.28	0.55	0.73	0.08	0.59	0.67	0.05
Uniform Delay, d1	39.5	30.6	25.8	34.7	23.1	21.1	40.3	31.3	15.1	36.3	26.9	21.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.4	4.9	0.1	9.5	0.9	0.4	4.3	6.0	0.0	3.4	3.0	0.0
Delay (s)	42.8	35.5	25.9	44.2	24.0	21.5	44.7	37.3	15.1	39.6	29.9	21.6
Level of Service	D	D	C	D	C	C	D	D	B	D	C	C
Approach Delay (s)		34.8			29.3			32.8			31.4	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	31.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	90.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	7	11	10	5	60	17	345	11	60	425	30
Future Volume (Veh/h)	40	7	11	10	5	60	17	345	11	60	425	30
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	43	8	12	11	5	65	18	371	12	65	457	32
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1078	1022	473	1016	1032	377	489			383		
vC1, stage 1 conf vol	603	603		413	413							
vC2, stage 2 conf vol	474	419		603	619							
vCu, unblocked vol	1078	1022	473	1016	1032	377	489			383		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5		6.1	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	88	98	98	97	99	90	98			94		
cM capacity (veh/h)	345	387	591	377	386	670	1074			1175		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	63	81	18	383	65	489
Volume Left	43	11	18	0	65	0
Volume Right	12	65	0	12	0	32
cSH	381	582	1074	1700	1175	1700
Volume to Capacity	0.17	0.14	0.02	0.23	0.06	0.29
Queue Length 95th (ft)	15	12	1	0	4	0
Control Delay (s)	16.3	12.2	8.4	0.0	8.2	0.0
Lane LOS	C	B	A		A	
Approach Delay (s)	16.3	12.2	0.4		1.0	
Approach LOS	C	B				

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	49.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	7	33	5	1	22	35	238	5	40	335	72
Future Volume (Veh/h)	52	7	33	5	1	22	35	238	5	40	335	72
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (vph)	53	7	33	5	1	22	35	240	5	40	338	73
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	787	770	374	767	804	242	411			245		
vC1, stage 1 conf vol	454	454		312	312							
vC2, stage 2 conf vol	332	315		454	491							
vCu, unblocked vol	787	770	374	767	804	242	411			245		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5		6.1	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	89	99	95	99	100	97	97			97		
cM capacity (veh/h)	473	473	672	453	450	796	1148			1321		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	53	40	28	35	245	40	411
Volume Left	53	0	5	35	0	40	0
Volume Right	0	33	22	0	5	0	73
cSH	473	626	685	1148	1700	1321	1700
Volume to Capacity	0.11	0.06	0.04	0.03	0.14	0.03	0.24
Queue Length 95th (ft)	9	5	3	2	0	2	0
Control Delay (s)	13.6	11.1	10.5	8.2	0.0	7.8	0.0
Lane LOS	B	B	B	A		A	
Approach Delay (s)	12.5		10.5	1.0		0.7	
Approach LOS	B		B				

Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	47.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	3	17	14	1	8	3	11	5	2	17	8	7
Future Volume (vph)	3	17	14	1	8	3	11	5	2	17	8	7
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	4	22	18	1	10	4	14	6	3	22	10	9

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	44	15	23	41
Volume Left (vph)	4	1	14	22
Volume Right (vph)	18	4	3	9
Hadj (s)	-0.19	-0.11	0.08	0.01
Departure Headway (s)	3.9	4.0	4.1	4.1
Degree Utilization, x	0.05	0.02	0.03	0.05
Capacity (veh/h)	911	887	845	870
Control Delay (s)	7.1	7.0	7.3	7.2
Approach Delay (s)	7.1	7.0	7.3	7.2
Approach LOS	A	A	A	A

Intersection Summary			
Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	19	35	18	9	2
Future Volume (Veh/h)	5	19	35	18	9	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	5	21	38	20	10	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	107	11	12			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	107	11	12			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	98	98			
cM capacity (veh/h)	869	1070	1607			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	26	58	12
Volume Left	5	38	0
Volume Right	21	0	2
cSH	1025	1607	1700
Volume to Capacity	0.03	0.02	0.01
Queue Length 95th (ft)	2	2	0
Control Delay (s)	8.6	4.8	0.0
Lane LOS	A	A	
Approach Delay (s)	8.6	4.8	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	5.3		
Intersection Capacity Utilization	19.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	550	30	143	770	22	13	10	57	7	12	15
Future Volume (Veh/h)	13	550	30	143	770	22	13	10	57	7	12	15
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	14	585	32	152	819	23	14	11	61	7	13	16
Pedestrians					4						4	
Lane Width (ft)					12.0						12.0	
Walking Speed (ft/s)					3.5						3.5	
Percent Blockage					0						0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	823			585			1742	1740	589	1750	1740	823
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	823			585			1742	1740	589	1750	1740	823
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			85			72	85	88	85	82	96
cM capacity (veh/h)	808			995			50	73	510	46	73	375

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	14	585	32	152	819	23	86	36
Volume Left	14	0	0	152	0	0	14	7
Volume Right	0	0	32	0	0	23	61	16
cSH	808	1700	1700	995	1700	1700	155	96
Volume to Capacity	0.02	0.34	0.02	0.15	0.48	0.01	0.55	0.37
Queue Length 95th (ft)	1	0	0	13	0	0	70	37
Control Delay (s)	9.5	0.0	0.0	9.3	0.0	0.0	53.6	63.2
Lane LOS	A			A			F	F
Approach Delay (s)	0.2			1.4			53.6	63.2
Approach LOS							F	F

Intersection Summary			
Average Delay	4.8		
Intersection Capacity Utilization	64.9%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	40	5	10	37	92	90
Future Volume (Veh/h)	40	5	10	37	92	90
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	45	6	11	42	103	101
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	218	154	103			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	218	154	103			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	94	99	99			
cM capacity (veh/h)	765	892	1489			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	51	53	204
Volume Left	45	11	0
Volume Right	6	0	101
cSH	778	1489	1700
Volume to Capacity	0.07	0.01	0.12
Queue Length 95th (ft)	5	1	0
Control Delay (s)	10.0	1.6	0.0
Lane LOS	A	A	
Approach Delay (s)	10.0	1.6	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	1.9		
Intersection Capacity Utilization	21.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	35	2	2	45	1	1
Future Volume (Veh/h)	35	2	2	45	1	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	39	2	2	51	1	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			41		95	40
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			41		95	40
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1568		903	1031

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	41	53	2
Volume Left	0	2	1
Volume Right	2	0	1
cSH	1700	1568	963
Volume to Capacity	0.02	0.00	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.3	8.7
Lane LOS		A	A
Approach Delay (s)	0.0	0.3	8.7
Approach LOS			A

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	14.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	28	5	2	50	0	3	0	2	0	0	0
Future Volume (Veh/h)	0	28	5	2	50	0	3	0	2	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	30	5	2	54	0	3	0	2	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	54			35			90	90	32	92	93	54
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	54			35			90	90	32	92	93	54
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1551			1576			893	799	1041	889	796	1013

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	35	56	5	0
Volume Left	0	2	3	0
Volume Right	5	0	2	0
cSH	1551	1576	947	1700
Volume to Capacity	0.00	0.00	0.01	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.3	8.8	0.0
Lane LOS		A	A	A
Approach Delay (s)	0.0	0.3	8.8	0.0
Approach LOS			A	A

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	14.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	1	1	45	90	2
Future Volume (Veh/h)	1	1	1	45	90	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	1	1	1	51	101	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	155	102	103			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	155	102	103			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	836	953	1489			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	2	52	103
Volume Left	1	1	0
Volume Right	1	0	2
cSH	891	1489	1700
Volume to Capacity	0.00	0.00	0.06
Queue Length 95th (ft)	0	0	0
Control Delay (s)	9.1	0.1	0.0
Lane LOS	A	A	
Approach Delay (s)	9.1	0.1	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	15.3%	ICU Level of Service	A
Analysis Period (min)	15		

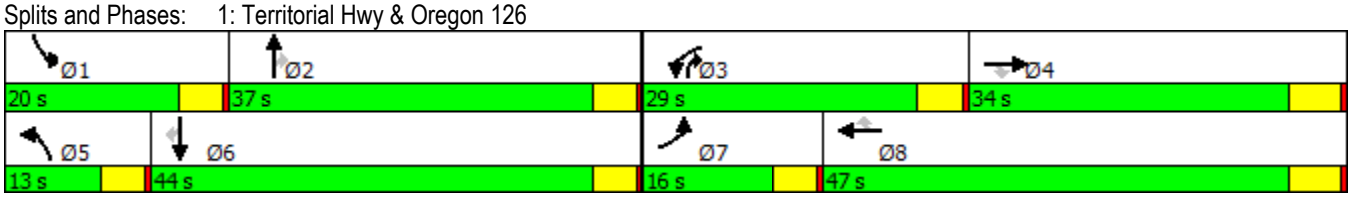
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	285	100	229	295	230	69	318	127	135	377	60
Future Volume (vph)	75	285	100	229	295	230	69	318	127	135	377	60
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	225		120	170		75	140		175	135		125
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	135			200			140			25		
Satd. Flow (prot)	1630	1716	1458	1646	1733	1473	1662	1750	1488	1662	1750	1488
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1716	1415	1646	1733	1473	1662	1750	1444	1662	1750	1276
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			177			146			131			145
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		634			5854			1994			407	
Travel Time (s)		9.6			88.7			38.8			7.9	
Confl. Peds. (#/hr)			4						4			52
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	77	294	103	236	304	237	71	328	131	139	389	62
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		16			16			14			14	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	20		15	15		9	20		15	20		15
Number of Detectors	2	2	1	2	2	1	2	2	1	2	2	1
Detector Template												
Leading Detector (ft)	78	323	83	78	323	53	78	223	143	78	223	78
Trailing Detector (ft)	2	157	77	2	157	47	2	107	137	2	107	72
Detector 1 Position(ft)	2	157	77	2	157	47	2	107	137	2	107	72
Detector 1 Size(ft)	20	6	6	20	6	6	20	6	6	20	6	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	72	317		72	317		72	217		72	217	
Detector 2 Size(ft)	6	6		6	6		6	6		6	6	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	3	1	6	6
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	10.0	10.0	4.0	6.0	6.0	4.0	6.0	4.0	4.0	6.0	6.0
Minimum Split (s)	13.0	30.4	30.4	13.0	30.4	30.4	13.0	29.5	13.0	13.0	29.5	29.5
Total Split (s)	16.0	34.0	34.0	29.0	47.0	47.0	13.0	37.0	29.0	20.0	44.0	44.0
Total Split (%)	13.3%	28.3%	28.3%	24.2%	39.2%	39.2%	10.8%	30.8%	24.2%	16.7%	36.7%	36.7%
Maximum Green (s)	11.5	28.6	28.6	24.5	41.6	41.6	8.5	32.5	24.5	15.5	39.5	39.5
Yellow Time (s)	4.0	4.7	4.7	4.0	4.7	4.7	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.5	0.7	0.7	0.5	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	-0.5	-1.4	-1.4	-0.5	-1.4	-1.4	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.5	4.0	4.0	2.5	4.0	4.0	2.5	2.5	2.5	2.5	2.5	2.5
Minimum Gap (s)	2.0	2.7	2.7	2.0	2.7	2.7	2.0	2.0	2.0	2.0	2.0	2.0
Time Before Reduce (s)	8.0	10.0	10.0	8.0	10.0	10.0	8.0	8.0	8.0	8.0	8.0	8.0
Time To Reduce (s)	4.0	13.0	13.0	4.0	13.0	13.0	4.0	4.0	4.0	4.0	4.0	4.0
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	7.0
Flash Dont Walk (s)		18.0	18.0		18.0	18.0		18.0			18.0	18.0
Pedestrian Calls (#/hr)		4	4		0	0		4			52	52
Act Effct Green (s)	9.7	21.4	21.4	17.2	32.2	32.2	8.5	21.4	38.6	12.8	28.9	28.9
Actuated g/C Ratio	0.11	0.24	0.24	0.19	0.36	0.36	0.09	0.24	0.43	0.14	0.32	0.32
v/c Ratio	0.44	0.72	0.22	0.75	0.49	0.38	0.46	0.79	0.19	0.59	0.69	0.12
Control Delay	53.0	45.6	1.1	53.5	29.1	12.5	56.5	49.2	3.4	52.8	37.4	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.0	45.6	1.1	53.5	29.1	12.5	56.5	49.2	3.4	52.8	37.4	0.5
LOS	D	D	A	D	C	B	E	D	A	D	D	A
Approach Delay		37.1			31.4			38.8			37.2	
Approach LOS		D			C			D			D	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 90.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 35.6 — Intersection LOS: D
Intersection Capacity Utilization 70.6% — ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: Territorial Hwy & Oregon 126



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	10	11	10	7	72	17	359	11	85	450	30
Future Volume (vph)	40	10	11	10	7	72	17	359	11	85	450	30
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Lane Width (ft)	12	12	12	12	12	12	12	12	12	14	12	12
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			75			75		
Satd. Flow (prot)	0	1619	0	0	1521	0	1630	1707	0	1739	1700	0
Flt Permitted		0.968			0.994		0.950			0.950		
Satd. Flow (perm)	0	1619	0	0	1521	0	1630	1707	0	1739	1700	0
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		593			3765			1344			1994	
Travel Time (s)		16.2			102.7			26.2			38.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	66	0	0	96	0	18	398	0	91	516	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			14			14	
Link Offset(ft)		-10			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.02	1.11	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 51.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	15	33	5	5	30	35	245	7	60	340	72
Future Volume (vph)	52	15	33	5	5	30	35	245	7	60	340	72
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	300		0	0		0	100		0	100		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	250			25			75			75		
Satd. Flow (prot)	1630	1539	0	0	1533	0	1630	1709	0	1630	1671	0
Flt Permitted	0.950				0.994		0.950			0.950		
Satd. Flow (perm)	1630	1539	0	0	1533	0	1630	1709	0	1630	1671	0
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		756			1656			860			1344	
Travel Time (s)		14.7			37.6			16.8			26.2	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	48	0	0	40	0	35	254	0	61	416	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			0			14			14	
Link Offset(ft)		-6			6			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15		9	15		9	20		15	20		15
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 47.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	38	12	2	19	3	11	5	4	17	8	7
Future Volume (vph)	3	38	12	2	19	3	11	5	4	17	8	7
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	0	1659	0	0	1678	0	0	1624	0	0	1621	0
Flt Permitted		0.997			0.995			0.973			0.974	
Satd. Flow (perm)	0	1659	0	0	1678	0	0	1624	0	0	1621	0
Link Speed (mph)		30			25			30			25	
Link Distance (ft)		1656			1314			1319			463	
Travel Time (s)		37.6			35.8			30.0			12.6	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	67	0	0	31	0	0	25	0	0	41	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			6			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 13.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	7	25	43	18	15	3
Future Volume (vph)	7	25	43	18	15	3
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	1520	0	0	1657	1680	0
Flt Permitted	0.989			0.966		
Satd. Flow (perm)	1520	0	0	1657	1680	0
Link Speed (mph)	25			35	30	
Link Distance (ft)	276			1033	1319	
Travel Time (s)	7.5			20.1	30.0	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)						
Lane Group Flow (vph)	35	0	0	67	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 20.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	550	30	204	770	22	13	12	93	7	15	15
Future Volume (vph)	13	550	30	204	770	22	13	12	93	7	15	15
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	250		75	400		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	300			300			25			25		
Satd. Flow (prot)	1646	1733	1473	1646	1733	1473	0	1555	0	0	1639	0
Flt Permitted	0.950			0.950				0.994			0.991	
Satd. Flow (perm)	1646	1733	1473	1646	1733	1473	0	1555	0	0	1639	0
Link Speed (mph)		55			55			35			35	
Link Distance (ft)		5854			492			1428			324	
Travel Time (s)		72.6			6.1			27.8			6.3	
Confl. Peds. (#/hr)						4			4			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	585	32	217	819	23	0	126	0	0	39	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		14			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		0			0			10			10	
Two way Left Turn Lane												
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	20		15	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 67.2%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	60	5	10	56	124	122
Future Volume (vph)	60	5	10	56	124	122
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	1622	0	0	1704	1601	0
Flt Permitted	0.956			0.993		
Satd. Flow (perm)	1622	0	0	1704	1601	0
Link Speed (mph)	30			35	35	
Link Distance (ft)	1803			1328	1428	
Travel Time (s)	41.0			25.9	27.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)						
Lane Group Flow (vph)	73	0	0	74	276	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 25.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	35	26	34	45	15	20
Future Volume (vph)	35	26	34	45	15	20
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Lane Width (ft)	12	12	12	12	10	10
Satd. Flow (prot)	1616	0	0	1680	1449	0
Flt Permitted				0.979	0.979	
Satd. Flow (perm)	1616	0	0	1680	1449	0
Link Speed (mph)	25			25	20	
Link Distance (ft)	3765			1803	629	
Travel Time (s)	102.7			49.2	21.4	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)						
Lane Group Flow (vph)	68	0	0	89	39	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.11	1.11	1.21	1.21
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	28	5	2	50	7	3	1	2	4	1	8
Future Volume (vph)	12	28	5	2	50	7	3	1	2	4	1	8
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Satd. Flow (prot)	0	1670	0	0	1683	0	0	1599	0	0	1544	0
Flt Permitted		0.987			0.998			0.976			0.986	
Satd. Flow (perm)	0	1670	0	0	1683	0	0	1599	0	0	1544	0
Link Speed (mph)		35			35			30			25	
Link Distance (ft)		1033			2778			225			318	
Travel Time (s)		20.1			54.1			5.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	48	0	0	64	0	0	6	0	0	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		5			5			16			5	
Two way Left Turn Lane												
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 18.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	20	5	8	45	90	34
Future Volume (vph)	20	5	8	45	90	34
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Lane Width (ft)	10	12	12	12	12	12
Satd. Flow (prot)	1496	0	0	1704	1652	0
Flt Permitted	0.962			0.993		
Satd. Flow (perm)	1496	0	0	1704	1652	0
Link Speed (mph)	20			45	45	
Link Distance (ft)	1300			1453	1328	
Travel Time (s)	44.3			22.0	20.1	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)						
Lane Group Flow (vph)	28	0	0	60	139	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	10			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	5			5	5	
Two way Left Turn Lane						
Headway Factor	1.21	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 20.0%	ICU Level of Service A
Analysis Period (min) 15	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	285	100	229	295	230	69	318	127	135	377	60
Future Volume (vph)	75	285	100	229	295	230	69	318	127	135	377	60
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.89
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1630	1716	1419	1646	1733	1473	1662	1750	1464	1662	1750	1319
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1630	1716	1419	1646	1733	1473	1662	1750	1464	1662	1750	1319
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	77	294	103	236	304	237	71	328	131	139	389	62
RTOR Reduction (vph)	0	0	77	0	0	95	0	0	74	0	0	42
Lane Group Flow (vph)	77	294	26	236	304	142	71	328	57	139	389	20
Confl. Peds. (#/hr)			4						4			52
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	7.4	21.4	21.4	16.7	30.7	30.7	6.2	22.3	39.0	12.3	28.4	28.4
Effective Green, g (s)	7.9	22.8	22.8	17.2	32.1	32.1	6.7	22.8	40.0	12.8	28.9	28.9
Actuated g/C Ratio	0.09	0.25	0.25	0.19	0.35	0.35	0.07	0.25	0.44	0.14	0.32	0.32
Clearance Time (s)	4.5	5.4	5.4	4.5	5.4	5.4	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	2.5	4.0	4.0	2.5	4.0	4.0	2.5	2.5	2.5	2.5	2.5	2.5
Lane Grp Cap (vph)	140	427	353	309	607	516	121	435	703	232	552	416
v/s Ratio Prot	0.05	c0.17		c0.14	0.18		0.04	0.19	0.02	c0.08	c0.22	
v/s Ratio Perm			0.02			0.10			0.02			0.01
v/c Ratio	0.55	0.69	0.07	0.76	0.50	0.28	0.59	0.75	0.08	0.60	0.70	0.05
Uniform Delay, d1	40.1	31.2	26.3	35.3	23.4	21.4	41.1	31.8	15.1	37.0	27.6	21.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.7	5.0	0.1	10.2	0.9	0.4	5.9	6.9	0.0	3.5	3.8	0.0
Delay (s)	43.8	36.1	26.4	45.5	24.3	21.8	47.0	38.7	15.1	40.5	31.4	21.8
Level of Service	D	D	C	D	C	C	D	D	B	D	C	C
Approach Delay (s)		35.3			30.0			34.0			32.5	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	32.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	91.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	10	11	10	7	72	17	359	11	85	450	30
Future Volume (Veh/h)	40	10	11	10	7	72	17	359	11	85	450	30
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	43	11	12	11	8	77	18	386	12	91	484	32
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1185	1116	500	1112	1126	392	516			398		
vC1, stage 1 conf vol	682	682		428	428							
vC2, stage 2 conf vol	503	434		684	698							
vCu, unblocked vol	1185	1116	500	1112	1126	392	516			398		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5		6.1	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	86	97	98	97	98	88	98			92		
cM capacity (veh/h)	299	349	571	333	350	657	1050			1161		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	66	96	18	398	91	516
Volume Left	43	11	18	0	91	0
Volume Right	12	77	0	12	0	32
cSH	336	554	1050	1700	1161	1700
Volume to Capacity	0.20	0.17	0.02	0.23	0.08	0.30
Queue Length 95th (ft)	18	16	1	0	6	0
Control Delay (s)	18.3	12.8	8.5	0.0	8.4	0.0
Lane LOS	C	B	A		A	
Approach Delay (s)	18.3	12.8	0.4		1.3	
Approach LOS	C	B				

Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	51.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	15	33	5	5	30	35	245	7	60	340	72
Future Volume (Veh/h)	52	15	33	5	5	30	35	245	7	60	340	72
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (vph)	53	15	33	5	5	30	35	247	7	61	343	73
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	851	826	380	826	858	250	416			254		
vC1, stage 1 conf vol	502	502		320	320							
vC2, stage 2 conf vol	350	324		506	538							
vCu, unblocked vol	851	826	380	826	858	250	416			254		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5		6.1	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	88	97	95	99	99	96	97			95		
cM capacity (veh/h)	433	444	667	413	423	788	1143			1311		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	53	48	40	35	254	61	416
Volume Left	53	0	5	35	0	61	0
Volume Right	0	33	30	0	7	0	73
cSH	433	577	645	1143	1700	1311	1700
Volume to Capacity	0.12	0.08	0.06	0.03	0.15	0.05	0.24
Queue Length 95th (ft)	10	7	5	2	0	4	0
Control Delay (s)	14.5	11.8	10.9	8.2	0.0	7.9	0.0
Lane LOS	B	B	B	A		A	
Approach Delay (s)	13.2		10.9	1.0		1.0	
Approach LOS	B		B				

Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	47.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	3	38	12	2	19	3	11	5	4	17	8	7
Future Volume (vph)	3	38	12	2	19	3	11	5	4	17	8	7
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	4	48	15	3	24	4	14	6	5	22	10	9

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	67	31	25	41
Volume Left (vph)	4	3	14	22
Volume Right (vph)	15	4	5	9
Hadj (s)	-0.09	-0.02	0.03	0.01
Departure Headway (s)	4.0	4.1	4.2	4.1
Degree Utilization, x	0.07	0.04	0.03	0.05
Capacity (veh/h)	882	860	831	844
Control Delay (s)	7.3	7.2	7.3	7.3
Approach Delay (s)	7.3	7.2	7.3	7.3
Approach LOS	A	A	A	A

Intersection Summary			
Delay	7.3		
Level of Service	A		
Intersection Capacity Utilization	13.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	7	25	43	18	15	3
Future Volume (Veh/h)	7	25	43	18	15	3
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	8	27	47	20	16	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	132	18	19			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	132	18	19			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	97	97			
cM capacity (veh/h)	837	1061	1597			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	35	67	19
Volume Left	8	47	0
Volume Right	27	0	3
cSH	1000	1597	1700
Volume to Capacity	0.03	0.03	0.01
Queue Length 95th (ft)	3	2	0
Control Delay (s)	8.7	5.2	0.0
Lane LOS	A	A	
Approach Delay (s)	8.7	5.2	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	5.4		
Intersection Capacity Utilization	20.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	550	30	204	770	22	13	12	93	7	15	15
Future Volume (Veh/h)	13	550	30	204	770	22	13	12	93	7	15	15
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	14	585	32	217	819	23	14	13	99	7	16	16
Pedestrians					4						4	
Lane Width (ft)					12.0						12.0	
Walking Speed (ft/s)					3.5						3.5	
Percent Blockage					0						0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	823			585			1874	1870	589	1880	1870	823
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	823			585			1874	1870	589	1880	1870	823
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			78			59	77	81	76	71	96
cM capacity (veh/h)	808			995			34	56	510	30	56	375

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	14	585	32	217	819	23	126	39
Volume Left	14	0	0	217	0	0	14	7
Volume Right	0	0	32	0	0	23	99	16
cSH	808	1700	1700	995	1700	1700	151	69
Volume to Capacity	0.02	0.34	0.02	0.22	0.48	0.01	0.84	0.56
Queue Length 95th (ft)	1	0	0	21	0	0	137	59
Control Delay (s)	9.5	0.0	0.0	9.6	0.0	0.0	93.6	110.1
Lane LOS	A			A			F	F
Approach Delay (s)	0.2			2.0			93.6	110.1
Approach LOS							F	F

Intersection Summary			
Average Delay	9.9		
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	60	5	10	56	124	122
Future Volume (Veh/h)	60	5	10	56	124	122
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	67	6	11	63	139	137
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	292	208	139			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	292	208	139			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	90	99	99			
cM capacity (veh/h)	693	833	1445			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	73	74	276
Volume Left	67	11	0
Volume Right	6	0	137
cSH	703	1445	1700
Volume to Capacity	0.10	0.01	0.16
Queue Length 95th (ft)	9	1	0
Control Delay (s)	10.7	1.2	0.0
Lane LOS	B	A	
Approach Delay (s)	10.7	1.2	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	2.1		
Intersection Capacity Utilization	25.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	35	26	34	45	15	20
Future Volume (Veh/h)	35	26	34	45	15	20
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	39	29	38	51	17	22
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			68		180	54
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			68		180	54
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		98	98
cM capacity (veh/h)			1533		789	1014

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	68	89	39
Volume Left	0	38	17
Volume Right	29	0	22
cSH	1700	1533	902
Volume to Capacity	0.04	0.02	0.04
Queue Length 95th (ft)	0	2	3
Control Delay (s)	0.0	3.3	9.2
Lane LOS		A	A
Approach Delay (s)	0.0	3.3	9.2
Approach LOS			A

Intersection Summary			
Average Delay	3.3		
Intersection Capacity Utilization	21.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	28	5	2	50	7	3	1	2	4	1	8
Future Volume (Veh/h)	12	28	5	2	50	7	3	1	2	4	1	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	30	5	2	54	8	3	1	2	4	1	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	62			35			130	124	32	123	123	58
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	62			35			130	124	32	123	123	58
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	100	100	99
cM capacity (veh/h)	1541			1576			828	759	1041	843	760	1008

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	48	64	6	14
Volume Left	13	2	3	4
Volume Right	5	8	2	9
cSH	1541	1576	874	934
Volume to Capacity	0.01	0.00	0.01	0.01
Queue Length 95th (ft)	1	0	1	1
Control Delay (s)	2.0	0.2	9.1	8.9
Lane LOS	A	A	A	A
Approach Delay (s)	2.0	0.2	9.1	8.9
Approach LOS			A	A

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	18.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	20	5	8	45	90	34
Future Volume (Veh/h)	20	5	8	45	90	34
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	22	6	9	51	101	38
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	189	120	139			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	189	120	139			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	99	99			
cM capacity (veh/h)	795	931	1445			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	28	60	139
Volume Left	22	9	0
Volume Right	6	0	38
cSH	821	1445	1700
Volume to Capacity	0.03	0.01	0.08
Queue Length 95th (ft)	3	0	0
Control Delay (s)	9.5	1.2	0.0
Lane LOS	A	A	
Approach Delay (s)	9.5	1.2	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	20.0%	ICU Level of Service	A
Analysis Period (min)	15		

Appendix F

2026 Trip Cap & Sarto Village Synchro Reports

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	550	30	200	770	22	13	12	90	7	15	15
Future Volume (vph)	13	550	30	200	770	22	13	12	90	7	15	15
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	250		75	400		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	300			300			25			25		
Satd. Flow (prot)	1646	1733	1473	1646	1733	1473	0	1557	0	0	1475	0
Flt Permitted	0.950			0.950				0.994			0.991	
Satd. Flow (perm)	1646	1733	1473	1646	1733	1473	0	1557	0	0	1475	0
Link Speed (mph)		55			55			35			35	
Link Distance (ft)		5854			492			1428			324	
Travel Time (s)		72.6			6.1			27.8			6.3	
Confl. Peds. (#/hr)						4			4			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Parking (#/hr)											0	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	585	32	213	819	23	0	123	0	0	39	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		14			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		0			0			10			10	
Two way Left Turn Lane												
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.27	1.11
Turning Speed (mph)	20		15	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 67.0%	ICU Level of Service C
Analysis Period (min) 15	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	550	30	200	770	22	13	12	90	7	15	15
Future Volume (Veh/h)	13	550	30	200	770	22	13	12	90	7	15	15
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	14	585	32	213	819	23	14	13	96	7	16	16
Pedestrians					4						4	
Lane Width (ft)					12.0						12.0	
Walking Speed (ft/s)					3.5						3.5	
Percent Blockage					0						0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	823			585			1866	1862	589	1872	1862	823
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	823			585			1866	1862	589	1872	1862	823
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			79			60	77	81	77	72	96
cM capacity (veh/h)	808			995			35	57	510	31	57	375

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	14	585	32	213	819	23	123	39
Volume Left	14	0	0	213	0	0	14	7
Volume Right	0	0	32	0	0	23	96	16
cSH	808	1700	1700	995	1700	1700	151	71
Volume to Capacity	0.02	0.34	0.02	0.21	0.48	0.01	0.82	0.55
Queue Length 95th (ft)	1	0	0	20	0	0	132	58
Control Delay (s)	9.5	0.0	0.0	9.6	0.0	0.0	90.2	106.5
Lane LOS	A			A			F	F
Approach Delay (s)	0.2			1.9			90.2	106.5
Approach LOS							F	F

Intersection Summary			
Average Delay	9.4		
Intersection Capacity Utilization	67.0%	ICU Level of Service	C
Analysis Period (min)	15		

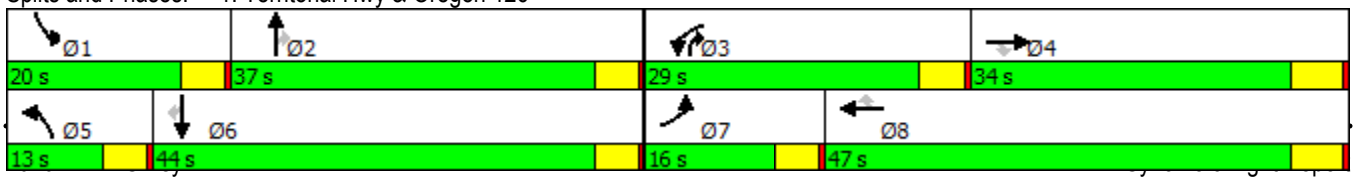
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	285	97	225	295	230	69	311	125	135	364	60
Future Volume (vph)	75	285	97	225	295	230	69	311	125	135	364	60
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	225		120	170		75	140		175	135		125
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	135			200			140			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.97						0.97			0.86
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1716	1458	1646	1733	1473	1662	1750	1488	1662	1750	1488
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1716	1415	1646	1733	1473	1662	1750	1444	1662	1750	1276
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			177			146			129			145
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		634			5854			1994			407	
Travel Time (s)		9.6			88.7			38.8			7.9	
Confl. Peds. (#/hr)			4						4			52
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	77	294	100	232	304	237	71	321	129	139	375	62
Shared Lane Traffic (%)												
Lane Group Flow (vph)	77	294	100	232	304	237	71	321	129	139	375	62
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		16			16			14			14	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	20		15	15		9	20		15	20		15
Number of Detectors	2	2	1	2	2	1	2	2	1	2	2	1
Detector Template												
Leading Detector (ft)	78	323	83	78	323	53	78	223	143	78	223	78
Trailing Detector (ft)	2	157	77	2	157	47	2	107	137	2	107	72
Detector 1 Position(ft)	2	157	77	2	157	47	2	107	137	2	107	72
Detector 1 Size(ft)	20	6	6	20	6	6	20	6	6	20	6	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	72	317		72	317		72	217		72	217	
Detector 2 Size(ft)	6	6		6	6		6	6		6	6	
Detector 2 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	3	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	6.0	6.0	4.0	6.0	4.0	4.0	6.0	6.0
Minimum Split (s)	13.0	30.4	30.4	13.0	30.4	30.4	13.0	29.5	13.0	13.0	29.5	29.5
Total Split (s)	16.0	34.0	34.0	29.0	47.0	47.0	13.0	37.0	29.0	20.0	44.0	44.0
Total Split (%)	13.3%	28.3%	28.3%	24.2%	39.2%	39.2%	10.8%	30.8%	24.2%	16.7%	36.7%	36.7%
Maximum Green (s)	11.5	28.6	28.6	24.5	41.6	41.6	8.5	32.5	24.5	15.5	39.5	39.5
Yellow Time (s)	4.0	4.7	4.7	4.0	4.7	4.7	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.5	0.7	0.7	0.5	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	-0.5	-1.4	-1.4	-0.5	-1.4	-1.4	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.5	4.0	4.0	2.5	4.0	4.0	2.5	2.5	2.5	2.5	2.5	2.5
Minimum Gap (s)	2.0	2.7	2.7	2.0	2.7	2.7	2.0	2.0	2.0	2.0	2.0	2.0
Time Before Reduce (s)	8.0	10.0	10.0	8.0	10.0	10.0	8.0	8.0	8.0	8.0	8.0	8.0
Time To Reduce (s)	4.0	13.0	13.0	4.0	13.0	13.0	4.0	4.0	4.0	4.0	4.0	4.0
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	7.0
Flash Dont Walk (s)		18.0	18.0		18.0	18.0		18.0			18.0	18.0
Pedestrian Calls (#/hr)		4	4		0	0		4			52	52
Act Effct Green (s)	9.7	21.3	21.3	17.0	31.9	31.9	8.5	20.9	37.9	12.8	28.5	28.5
Actuated g/C Ratio	0.11	0.24	0.24	0.19	0.36	0.36	0.10	0.23	0.42	0.14	0.32	0.32
v/c Ratio	0.44	0.72	0.21	0.74	0.49	0.38	0.45	0.78	0.19	0.59	0.67	0.12
Control Delay	52.5	45.1	1.0	52.8	29.0	12.4	55.8	48.5	3.4	52.2	36.5	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.5	45.1	1.0	52.8	29.0	12.4	55.8	48.5	3.4	52.2	36.5	0.5
LOS	D	D	A	D	C	B	E	D	A	D	D	A
Approach Delay		37.0			31.0			38.4			36.4	
Approach LOS		D			C			D			D	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 89.3
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.78
Intersection Signal Delay: 35.2 — Intersection LOS: D
Intersection Capacity Utilization 70.0% — ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: Territorial Hwy & Oregon 126



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	7	11	10	5	69	17	351	11	68	436	30
Future Volume (vph)	40	7	11	10	5	69	17	351	11	68	436	30
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Lane Width (ft)	12	12	12	12	12	12	12	12	12	14	12	12
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			75			75		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.974			0.889			0.995			0.990	
Flt Protected		0.967			0.994		0.950			0.950		
Satd. Flow (prot)	0	1616	0	0	1516	0	1630	1707	0	1739	1699	0
Flt Permitted		0.967			0.994		0.950			0.950		
Satd. Flow (perm)	0	1616	0	0	1516	0	1630	1707	0	1739	1699	0
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		593			3765			1344			1994	
Travel Time (s)		16.2			102.7			26.2			38.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	43	8	12	11	5	74	18	377	12	73	469	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	0	0	90	0	18	389	0	73	501	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			14			14	
Link Offset(ft)		-10			0			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.02	1.11	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 50.4%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	10	33	5	3	24	35	242	5	49	337	72
Future Volume (vph)	52	10	33	5	3	24	35	242	5	49	337	72
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	300		0	0		0	100		0	100		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	250			25			75			75		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.885			0.899			0.997			0.973	
Flt Protected	0.950				0.992		0.950			0.950		
Satd. Flow (prot)	1630	1518	0	0	1530	0	1630	1711	0	1630	1669	0
Flt Permitted	0.950				0.992		0.950			0.950		
Satd. Flow (perm)	1630	1518	0	0	1530	0	1630	1711	0	1630	1669	0
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		756			1656			860			1344	
Travel Time (s)		14.7			37.6			16.8			26.2	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	53	10	33	5	3	24	35	244	5	49	340	73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	43	0	0	32	0	35	249	0	49	413	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			0			14			14	
Link Offset(ft)		-6			6			0			0	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15		9	15		9	20		15	20		15
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 47.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	24	19	1	12	3	11	5	3	17	8	7
Future Volume (vph)	3	24	19	1	12	3	11	5	3	17	8	7
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.944			0.973			0.977			0.970	
Flt Protected		0.997			0.998			0.972			0.974	
Satd. Flow (prot)	0	1615	0	0	1666	0	0	1629	0	0	1621	0
Flt Permitted		0.997			0.998			0.972			0.974	
Satd. Flow (perm)	0	1615	0	0	1666	0	0	1629	0	0	1621	0
Link Speed (mph)		30			25			30			25	
Link Distance (ft)		1656			1314			1319			463	
Travel Time (s)		37.6			35.8			30.0			12.6	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	4	30	24	1	15	4	14	6	4	22	10	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	58	0	0	20	0	0	24	0	0	41	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			6			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 13.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	6	22	40	18	14	2
Future Volume (vph)	6	22	40	18	14	2
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.895				0.984	
Flt Protected	0.989			0.967		
Satd. Flow (prot)	1519	0	0	1659	1688	0
Flt Permitted	0.989			0.967		
Satd. Flow (perm)	1519	0	0	1659	1688	0
Link Speed (mph)	25			35	30	
Link Distance (ft)	276			1033	1319	
Travel Time (s)	7.5			20.1	30.0	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	7	24	44	20	15	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	31	0	0	64	17	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 20.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	550	30	165	770	22	13	11	76	7	13	15
Future Volume (vph)	13	550	30	165	770	22	13	11	76	7	13	15
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	250		75	400		100	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	300			300			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.898			0.942	
Flt Protected	0.950			0.950				0.994			0.991	
Satd. Flow (prot)	1646	1733	1473	1646	1733	1473	0	1562	0	0	1634	0
Flt Permitted	0.950			0.950				0.994			0.991	
Satd. Flow (perm)	1646	1733	1473	1646	1733	1473	0	1562	0	0	1634	0
Link Speed (mph)		55			55			35			35	
Link Distance (ft)		5854			492			1428			324	
Travel Time (s)		72.6			6.1			27.8			6.3	
Confl. Peds. (#/hr)						4			4			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	14	585	32	176	819	23	14	12	81	7	14	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	585	32	176	819	23	0	107	0	0	37	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		14			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		0			0			10			10	
Two way Left Turn Lane												
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	20		15	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 66.1%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	51	5	10	47	106	101
Future Volume (vph)	51	5	10	47	106	101
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.987				0.934	
Flt Protected	0.957			0.991		
Satd. Flow (prot)	1621	0	0	1700	1602	0
Flt Permitted	0.957			0.991		
Satd. Flow (perm)	1621	0	0	1700	1602	0
Link Speed (mph)	30			35	35	
Link Distance (ft)	1803			1328	1428	
Travel Time (s)	41.0			25.9	27.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	57	6	11	53	119	113
Shared Lane Traffic (%)						
Lane Group Flow (vph)	63	0	0	64	232	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 22.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	35	26	34	45	15	20
Future Volume (vph)	35	26	34	45	15	20
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Lane Width (ft)	12	12	12	12	10	10
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.942				0.924	
Flt Protected				0.979	0.979	
Satd. Flow (prot)	1616	0	0	1680	1449	0
Flt Permitted				0.979	0.979	
Satd. Flow (perm)	1616	0	0	1680	1449	0
Link Speed (mph)	25			25	20	
Link Distance (ft)	3765			1803	629	
Travel Time (s)	102.7			49.2	21.4	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	39	29	38	51	17	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	68	0	0	89	39	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.11	1.11	1.11	1.11	1.21	1.21
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	28	5	2	50	3	3	1	2	2	1	5
Future Volume (vph)	8	28	5	2	50	3	3	1	2	2	1	5
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.985			0.993			0.955			0.916	
Flt Protected		0.990			0.998			0.976			0.988	
Satd. Flow (prot)	0	1673	0	0	1700	0	0	1599	0	0	1553	0
Flt Permitted		0.990			0.998			0.976			0.988	
Satd. Flow (perm)	0	1673	0	0	1700	0	0	1599	0	0	1553	0
Link Speed (mph)		35			35			30			25	
Link Distance (ft)		1033			2778			225			318	
Travel Time (s)		20.1			54.1			5.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	30	5	2	54	3	3	1	2	2	1	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	44	0	0	59	0	0	6	0	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		5			5			16			5	
Two way Left Turn Lane												
Headway Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 15.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	11	3	3	45	90	16
Future Volume (vph)	11	3	3	45	90	16
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Lane Width (ft)	10	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.973				0.980	
Flt Protected	0.962			0.997		
Satd. Flow (prot)	1499	0	0	1711	1681	0
Flt Permitted	0.962			0.997		
Satd. Flow (perm)	1499	0	0	1711	1681	0
Link Speed (mph)	20			45	45	
Link Distance (ft)	1300			1453	1328	
Travel Time (s)	44.3			22.0	20.1	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	12	3	3	51	101	18
Shared Lane Traffic (%)						
Lane Group Flow (vph)	15	0	0	54	119	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	10			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	5			5	5	
Two way Left Turn Lane						
Headway Factor	1.21	1.11	1.11	1.11	1.11	1.11
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 16.2%	ICU Level of Service A
Analysis Period (min) 15	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	285	97	225	295	230	69	311	125	135	364	60
Future Volume (vph)	75	285	97	225	295	230	69	311	125	135	364	60
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.89
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1630	1716	1419	1646	1733	1473	1662	1750	1465	1662	1750	1320
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1630	1716	1419	1646	1733	1473	1662	1750	1465	1662	1750	1320
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	77	294	100	232	304	237	71	321	129	139	375	62
RTOR Reduction (vph)	0	0	75	0	0	95	0	0	73	0	0	43
Lane Group Flow (vph)	77	294	25	232	304	142	71	321	56	139	375	19
Confl. Peds. (#/hr)			4						4			52
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	7.3	21.2	21.2	16.4	30.3	30.3	6.2	21.9	38.3	12.2	27.9	27.9
Effective Green, g (s)	7.8	22.6	22.6	16.9	31.7	31.7	6.7	22.4	39.3	12.7	28.4	28.4
Actuated g/C Ratio	0.09	0.25	0.25	0.19	0.35	0.35	0.07	0.25	0.43	0.14	0.31	0.31
Clearance Time (s)	4.5	5.4	5.4	4.5	5.4	5.4	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	2.5	4.0	4.0	2.5	4.0	4.0	2.5	2.5	2.5	2.5	2.5	2.5
Lane Grp Cap (vph)	140	428	353	307	606	515	122	432	700	232	548	413
v/s Ratio Prot	0.05	c0.17		c0.14	0.18		0.04	0.18	0.01	c0.08	c0.21	
v/s Ratio Perm			0.02			0.10			0.02			0.01
v/c Ratio	0.55	0.69	0.07	0.76	0.50	0.28	0.58	0.74	0.08	0.60	0.68	0.05
Uniform Delay, d1	39.7	30.8	26.0	34.9	23.2	21.2	40.6	31.4	15.0	36.6	27.2	21.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.7	4.9	0.1	9.7	0.9	0.4	5.7	6.4	0.0	3.5	3.2	0.0
Delay (s)	43.4	35.7	26.1	44.6	24.1	21.6	46.3	37.9	15.1	40.0	30.4	21.7
Level of Service	D	D	C	D	C	C	D	D	B	D	C	C
Approach Delay (s)		34.9			29.5			33.4			31.8	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	32.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	90.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	7	11	10	5	69	17	351	11	68	436	30
Future Volume (Veh/h)	40	7	11	10	5	69	17	351	11	68	436	30
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	43	8	12	11	5	74	18	377	12	73	469	32
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1120	1056	485	1050	1066	383	501			389		
vC1, stage 1 conf vol	631	631		419	419							
vC2, stage 2 conf vol	490	425		631	647							
vCu, unblocked vol	1120	1056	485	1050	1066	383	501			389		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5		6.1	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	87	98	98	97	99	89	98			94		
cM capacity (veh/h)	326	373	582	362	373	664	1063			1170		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	63	90	18	389	73	501
Volume Left	43	11	18	0	73	0
Volume Right	12	74	0	12	0	32
cSH	362	580	1063	1700	1170	1700
Volume to Capacity	0.17	0.16	0.02	0.23	0.06	0.29
Queue Length 95th (ft)	16	14	1	0	5	0
Control Delay (s)	17.0	12.3	8.4	0.0	8.3	0.0
Lane LOS	C	B	A		A	
Approach Delay (s)	17.0	12.3	0.4		1.1	
Approach LOS	C	B				

Intersection Summary			
Average Delay	2.6		
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	10	33	5	3	24	35	242	5	49	337	72
Future Volume (Veh/h)	52	10	33	5	3	24	35	242	5	49	337	72
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (vph)	53	10	33	5	3	24	35	244	5	49	340	73
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	814	794	376	792	828	246	413			249		
vC1, stage 1 conf vol	474	474		316	316							
vC2, stage 2 conf vol	340	319		476	511							
vCu, unblocked vol	814	794	376	792	828	246	413			249		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5		6.1	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	88	98	95	99	99	97	97			96		
cM capacity (veh/h)	456	460	670	436	438	792	1146			1317		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	53	43	32	35	249	49	413
Volume Left	53	0	5	35	0	49	0
Volume Right	0	33	24	0	5	0	73
cSH	456	606	658	1146	1700	1317	1700
Volume to Capacity	0.12	0.07	0.05	0.03	0.15	0.04	0.24
Queue Length 95th (ft)	10	6	4	2	0	3	0
Control Delay (s)	13.9	11.4	10.7	8.2	0.0	7.8	0.0
Lane LOS	B	B	B	A		A	
Approach Delay (s)	12.8		10.7	1.0		0.8	
Approach LOS	B		B				

Intersection Summary			
Average Delay	2.6		
Intersection Capacity Utilization	47.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	3	24	19	1	12	3	11	5	3	17	8	7
Future Volume (vph)	3	24	19	1	12	3	11	5	3	17	8	7
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	4	30	24	1	15	4	14	6	4	22	10	9

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	58	20	24	41
Volume Left (vph)	4	1	14	22
Volume Right (vph)	24	4	4	9
Hadj (s)	-0.20	-0.08	0.05	0.01
Departure Headway (s)	3.9	4.0	4.2	4.1
Degree Utilization, x	0.06	0.02	0.03	0.05
Capacity (veh/h)	911	874	839	858
Control Delay (s)	7.1	7.1	7.3	7.3
Approach Delay (s)	7.1	7.1	7.3	7.3
Approach LOS	A	A	A	A

Intersection Summary			
Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	13.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	6	22	40	18	14	2
Future Volume (Veh/h)	6	22	40	18	14	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	7	24	44	20	15	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	124	16	17			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	124	16	17			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	98	97			
cM capacity (veh/h)	847	1063	1600			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	31	64	17
Volume Left	7	44	0
Volume Right	24	0	2
cSH	1005	1600	1700
Volume to Capacity	0.03	0.03	0.01
Queue Length 95th (ft)	2	2	0
Control Delay (s)	8.7	5.1	0.0
Lane LOS	A	A	
Approach Delay (s)	8.7	5.1	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	5.3		
Intersection Capacity Utilization	20.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	550	30	165	770	22	13	11	76	7	13	15
Future Volume (Veh/h)	13	550	30	165	770	22	13	11	76	7	13	15
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	14	585	32	176	819	23	14	12	81	7	14	16
Pedestrians					4						4	
Lane Width (ft)					12.0						12.0	
Walking Speed (ft/s)					3.5						3.5	
Percent Blockage					0						0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	823			585			1791	1788	589	1798	1788	823
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	823			585			1791	1788	589	1798	1788	823
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			82			68	82	84	82	79	96
cM capacity (veh/h)	808			995			44	66	510	39	66	375

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	14	585	32	176	819	23	107	37
Volume Left	14	0	0	176	0	0	14	7
Volume Right	0	0	32	0	0	23	81	16
cSH	808	1700	1700	995	1700	1700	162	85
Volume to Capacity	0.02	0.34	0.02	0.18	0.48	0.01	0.66	0.44
Queue Length 95th (ft)	1	0	0	16	0	0	94	45
Control Delay (s)	9.5	0.0	0.0	9.4	0.0	0.0	62.6	76.8
Lane LOS	A			A			F	F
Approach Delay (s)	0.2			1.6			62.6	76.8
Approach LOS							F	F

Intersection Summary				
Average Delay	6.3			
Intersection Capacity Utilization	66.1%	ICU Level of Service	C	
Analysis Period (min)	15			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	51	5	10	47	106	101
Future Volume (Veh/h)	51	5	10	47	106	101
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	57	6	11	53	119	113
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	250	176	119			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	250	176	119			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	92	99	99			
cM capacity (veh/h)	732	868	1469			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	63	64	232
Volume Left	57	11	0
Volume Right	6	0	113
cSH	744	1469	1700
Volume to Capacity	0.08	0.01	0.14
Queue Length 95th (ft)	7	1	0
Control Delay (s)	10.3	1.3	0.0
Lane LOS	B	A	
Approach Delay (s)	10.3	1.3	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	22.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	35	26	34	45	15	20
Future Volume (Veh/h)	35	26	34	45	15	20
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	39	29	38	51	17	22
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			68		180	54
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			68		180	54
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		98	98
cM capacity (veh/h)			1533		789	1014

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	68	89	39
Volume Left	0	38	17
Volume Right	29	0	22
cSH	1700	1533	902
Volume to Capacity	0.04	0.02	0.04
Queue Length 95th (ft)	0	2	3
Control Delay (s)	0.0	3.3	9.2
Lane LOS		A	A
Approach Delay (s)	0.0	3.3	9.2
Approach LOS			A

Intersection Summary			
Average Delay	3.3		
Intersection Capacity Utilization	21.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	28	5	2	50	3	3	1	2	2	1	5
Future Volume (Veh/h)	8	28	5	2	50	3	3	1	2	2	1	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	30	5	2	54	3	3	1	2	2	1	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	57			35			116	112	32	112	112	56
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	57			35			116	112	32	112	112	56
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	100	100	100
cM capacity (veh/h)	1547			1576			851	773	1041	858	772	1011

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	44	59	6	8
Volume Left	9	2	3	2
Volume Right	5	3	2	5
cSH	1547	1576	890	933
Volume to Capacity	0.01	0.00	0.01	0.01
Queue Length 95th (ft)	0	0	1	1
Control Delay (s)	1.5	0.3	9.1	8.9
Lane LOS	A	A	A	A
Approach Delay (s)	1.5	0.3	9.1	8.9
Approach LOS			A	A

Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	15.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	3	3	45	90	16
Future Volume (Veh/h)	11	3	3	45	90	16
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	12	3	3	51	101	18
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	167	110	119			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	167	110	119			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	822	943	1469			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	15	54	119
Volume Left	12	3	0
Volume Right	3	0	18
cSH	844	1469	1700
Volume to Capacity	0.02	0.00	0.07
Queue Length 95th (ft)	1	0	0
Control Delay (s)	9.3	0.4	0.0
Lane LOS	A	A	
Approach Delay (s)	9.3	0.4	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	16.2%	ICU Level of Service	A
Analysis Period (min)	15		

Exhibit C

Oregon

Kate Brown, Governor

Department of Transportation
Region 2 Tech Center
455 Airport Road SE, Building A
Salem, Oregon 97301-5397
Telephone (503) 986-2990
Fax (503) 986-2839

DATE: August 9, 2016

TO: Bill Johnston
Region 2 Senior Planner

FROM: Keith P. Blair, PE
Region 2 Senior Transportation Analyst

SUBJECT: Sarto Village (Veneta) – Transportation Planning Rule
TPR Analysis Review Comments

ODOT Region 2 Traffic has completed our review of the submitted traffic impact analysis (dated August 5, 2016) to address traffic impacts due to the Sarto Village proposed plan amendment and zone change on three large parcels in the city of Veneta, with respect to consistency and compliance with current versions of ODOT's *Analysis Procedures Manual* (*APM*). Both versions of the *APM* were most recently updated in May 2016. Current versions are consistently published online at: http://www.oregon.gov/ODOT/TD/TP/Pages/APM.aspx. As a result, we submit the following comments for the City's consideration:

Analysis items to note:

- Region Traffic assumes all land uses and densities offered under both the current and proposed zones are consistent with the City's code as cited in the report.
- This study does not contain a simulation-based queuing analysis. Such analysis would have been scoped if this study had been required under ODOT's authority.

Recommended analysis items to be addressed:

1. It appears this study has produced and utilized software reports that utilize outdated methodology from the *Highway Capacity Manual 2000* rather than that of the current *Highway Capacity Manual 2010* (HCM 2010) for the unsignalized intersections. As the v/c for the OR 126 @ Huston Road unsignalized study intersection is approaching the mobility target under the TPR analysis and trip cap proposals, the study should be modified to report and utilize operational performance per HCM 2010 methodology. This is likely to have an effect on the operational analysis and may be significant to have an effect on the conclusions of the TPR analysis, such as altering or possibly eliminating the proposed trip cap. However, as the trips generated from the proposed development are anticipated to be significantly less than the proposed trip cap, the City may choose to accept the conclusions of the study as submitted.

Proposed mitigation comments:

2. ODOT maintains jurisdiction of the Florence-Eugene Highway No. 62 (OR 126) and the Territorial Highway No. 200 (OR 200). ODOT approval shall be required for any proposed mitigation measures to these facilities.

Thank you for the opportunity to review this traffic impact analysis. As the Synchro files were not provided, Region 2 Traffic has only reviewed the submitted report. It is likely comment #1 will have an effect on the operational analysis results which may be significant enough to have an effect on the proposed trip cap. As such, ODOT recommends the TPR analysis be revised to address this comment. However, as the proposed development will generate trips which are approximately half the currently proposed trip cap, the City may choose to accept the conclusions of the study as submitted. If the City determines the need for reanalysis, we would be willing and able to assist with an additional round of review. If there are any questions regarding these comments, please contact me at (503) 986-2857 or Keith.P.Blair@odot.state.or.us.

Exhibit D

Access Engineering LLC

134 E. 13th Ave. Suite 2
Eugene, Oregon 97401
Phone & Fax
541-485-3215
info@accesseng.com

Transportation Engineering
Traffic Design
Trip Generation
Access Management
Traffic Counts
Street Lighting

TECHNICAL MEMORANDUM

Date: August 17, 2016

To: Lisa Garbett, City of Veneta
Lane Branch, City Engineer

From: Mike Weishar, PE Access Engineering LLC

RE: ODOT Requirement to Use HCM2010 at ODOT Unsignalized Intersections

The Oregon Department of Transportation (ODOT) has recently changed acceptance of the Highway Capacity Manual (HCM) software versions for unsignalized intersection analysis from HCM2000 to HCM2010. This change will have an effect on the three unsignalized ODOT intersections in the Sarto Village Zone Change Traffic Impact Analysis:

Oregon 126 at Huston Road

Territorial Hwy. @ Hunter Road

Territorial Hwy. @ Bolton Hill/E. Bolton Road

The Synchro analysis was rerun for the above three intersections for full build-out of the maximum single-family development of 227 units (generating 220 trips) on the site in the Horizon Year, 2026. No changes were made to any analysis parameters. The only change was to use the HCM2010 analysis instead of the HCM2000 analysis. The results now show no intersections will exceed the mobility standards for the worst-case single-family development. The revised Table 9 is on the following page with the changed results shown in red.

Since no study area intersections will now exceed the ODOT or Lane County mobility standards through the Horizon Year, 2026, no off-site traffic mitigation should be required. The recommendation is changed to:

The proposed zone change from City Rural Residential to City General Residential is recommended for approval with NO off-site mitigation required.

REGISTERED PROFESSIONAL ENGINEER
10536
OREGON
JULY 13, 1979
MICHAEL WEISHAR

RENEWS
6/30/18

Changes to Table 9 using HCM2010 are shown in Red. The Synchro reports are attached.

Revised Table 9: Horizon Year, 2026, Operational Analysis

Intersection Movement (Controlled)	Mobility Standard	Existing Zoning			Proposed Zoning		
		V/C	Delay (sec.)	LOS	V/C	Delay (sec.)	LOS
Oregon 126 @ Territorial Road	0.80	0.70	31.7	C	0.72	32.6	C
Oregon 126 @ Huston Road							
Westbound Left turn	0.80	0.15	9.3	A	0.22	9.6	A
Southbound Movements	0.85	0.34	54.9	F	0.53	99.1	F
Northbound Movements	0.85	0.42	35.2	E	0.72	65.3	F
Territorial Road @ Hunter Road							
Eastbound Approach	0.85	0.30	30.1	D	0.39	39.5	E
Southbound Thru + Right	0.95	0.06	8.2	A	0.08	8.4	A
Territorial Road @ Bolton Hill/E. Bolton Road							
Eastbound Left turn	0.85	0.18	20.2	C	0.21	22.7	C
Southbound Thru + Right	0.90	0.03	7.8	A	0.05	7.9	A
E. Bolton Road @ Pine Street/Trinity Street							
Eastbound Movements	0.85	0.05	7.1	A	0.07	7.3	A
E. Bolton Road @ Cheney Drive							
Eastbound Movements	0.85	0.03	8.6	A	0.03	8.7	A
Huston Road @ Hunter Road							
Eastbound Movements	0.90	0.07	10.0	A	0.10	10.7	B
Hunter Road @ Baker Lane							
Northbound Movements	0.90	0.00	8.7	A	0.04	9.2	A
E. Bolton Road @ Erdman Way							
Northbound Movements	0.90	0.01	8.8	A	0.01	9.1	A
Huston Road @ Josee Lane							
Eastbound Movements	0.90	0.0	9.1	A	0.03	9.5	A

As a check on the proposed Sarto Village development (140 Senior Adult Housing units, a 100-unit Congregate Care Facility, and a 100-bed Assited Living facility) the Synchro program was rerun for the Horizon Year, 2026, correcting a misprint on Figure 10 adding one northbound right turn and two westbound left turns at Oregon 126 and Huston Road. The Synchro report is attached.

Table 12: Horizon Year, 2026, Operational Analysis Sarto Village

Intersection Movement	Mobility Standard	V/C	Delay (sec.)	LOS
Oregon 126 @ Huston Road				
Westbound Left turn	0.80	0.18	9.4	A
Southbound Movements	0.85	0.40	67.5	F
Northbound Movements	0.85	0.50	37.4	E

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	7	11	10	5	60	17	345	11	60	425	30
Future Vol, veh/h	40	7	11	10	5	60	17	345	11	60	425	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	8	12	11	5	65	18	371	12	65	457	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1050	1021	473	1025	1031	377	489	0	0	383	0	0
Stage 1	602	602	-	413	413	-	-	-	-	-	-	-
Stage 2	448	419	-	612	618	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	205	236	591	213	233	670	1074	-	-	1175	-	-
Stage 1	486	489	-	616	594	-	-	-	-	-	-	-
Stage 2	590	590	-	480	481	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	172	219	591	192	216	670	1074	-	-	1175	-	-
Mov Cap-2 Maneuver	172	219	-	192	216	-	-	-	-	-	-	-
Stage 1	478	462	-	606	584	-	-	-	-	-	-	-
Stage 2	519	580	-	437	454	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	30.1	14.6	0.4	1
HCM LOS	D	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1074	-	-	205	455	1175	-	-
HCM Lane V/C Ratio	0.017	-	-	0.304	0.177	0.055	-	-
HCM Control Delay (s)	8.4	-	-	30.1	14.6	8.2	-	-
HCM Lane LOS	A	-	-	D	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.2	0.6	0.2	-	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	7	33	5	1	22	35	238	5	40	335	72
Future Vol, veh/h	52	7	33	5	1	22	35	238	5	40	335	72
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	99	99	99	99	99	99	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	53	7	33	5	1	22	35	240	5	40	338	73

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	781	772	375	790	806	243	411	0	0	245	0	0
Stage 1	456	456	-	314	314	-	-	-	-	-	-	-
Stage 2	325	316	-	476	492	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	312	330	671	308	316	796	1148	-	-	1321	-	-
Stage 1	584	568	-	697	656	-	-	-	-	-	-	-
Stage 2	687	655	-	570	548	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	289	310	671	274	297	796	1148	-	-	1321	-	-
Mov Cap-2 Maneuver	289	310	-	274	297	-	-	-	-	-	-	-
Stage 1	566	551	-	676	636	-	-	-	-	-	-	-
Stage 2	646	635	-	519	531	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.6	11.7	1	0.7
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1148	-	-	289	557	568	1321	-	-
HCM Lane V/C Ratio	0.031	-	-	0.182	0.073	0.05	0.031	-	-
HCM Control Delay (s)	8.2	-	-	20.2	12	11.7	7.8	-	-
HCM Lane LOS	A	-	-	C	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.7	0.2	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	550	30	143	770	22	13	10	57	7	12	15
Future Vol, veh/h	13	550	30	143	770	22	13	10	57	7	12	15
Conflicting Peds, #/hr	0	0	0	0	0	4	0	0	4	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	Free	-	-	Stop	-	-	Stop
Storage Length	250	-	75	400	-	100	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1	0	0	0	0	0	0
Mvmt Flow	14	585	32	152	819	23	14	11	61	7	13	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	819	0	-	585	0	0	1743	1736	589	1745	1736	819
Stage 1	-	-	-	-	-	-	613	613	-	1123	1123	-
Stage 2	-	-	-	-	-	-	1130	1123	-	622	613	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	814	-	0	995	-	0	69	88	512	68	88	379
Stage 1	-	-	0	-	-	0	483	486	-	252	283	-
Stage 2	-	-	0	-	-	0	250	283	-	478	486	-
Platoon blocked, %		-			-							
Mov Cap-1 Maneuver	814	-	-	991	-	-	50	73	510	46	73	379
Mov Cap-2 Maneuver	-	-	-	-	-	-	50	73	-	46	73	-
Stage 1	-	-	-	-	-	-	475	478	-	248	240	-
Stage 2	-	-	-	-	-	-	192	240	-	403	478	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	1.5	35.2	54.9
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBL	WBT	SBLn1
Capacity (veh/h)	202	814	-	991	-	107
HCM Lane V/C Ratio	0.421	0.017	-	0.154	-	0.338
HCM Control Delay (s)	35.2	9.5	-	9.3	-	54.9
HCM Lane LOS	E	A	-	A	-	F
HCM 95th %tile Q(veh)	1.9	0.1	-	0.5	-	1.3

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	10	11	10	7	72	17	359	11	85	450	30
Future Vol, veh/h	40	10	11	10	7	72	17	359	11	85	450	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	11	12	11	8	77	18	386	12	91	484	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1154	1117	500	1122	1127	392	516	0	0	398	0	0
Stage 1	683	683	-	428	428	-	-	-	-	-	-	-
Stage 2	471	434	-	694	699	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	174	207	571	183	205	657	1050	-	-	1161	-	-
Stage 1	439	449	-	605	585	-	-	-	-	-	-	-
Stage 2	573	581	-	433	442	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	138	188	571	159	186	657	1050	-	-	1161	-	-
Mov Cap-2 Maneuver	138	188	-	159	186	-	-	-	-	-	-	-
Stage 1	431	414	-	595	575	-	-	-	-	-	-	-
Stage 2	490	571	-	381	407	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	39.5	15.9	0.4	1.3
HCM LOS	E	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1050	-	-	168	424	1161	-	-
HCM Lane V/C Ratio	0.017	-	-	0.39	0.226	0.079	-	-
HCM Control Delay (s)	8.5	-	-	39.5	15.9	8.4	-	-
HCM Lane LOS	A	-	-	E	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.7	0.9	0.3	-	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	15	33	5	5	30	35	245	7	60	340	72
Future Vol, veh/h	52	15	33	5	5	30	35	245	7	60	340	72
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	99	99	99	99	99	99	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	53	15	33	5	5	30	35	247	7	61	343	73

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	840	826	380	847	859	251	416	0	0	255	0	0
Stage 1	501	501	-	322	322	-	-	-	-	-	-	-
Stage 2	339	325	-	525	537	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	285	307	667	282	294	788	1143	-	-	1310	-	-
Stage 1	552	543	-	690	651	-	-	-	-	-	-	-
Stage 2	676	649	-	536	523	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	255	284	667	242	272	788	1143	-	-	1310	-	-
Mov Cap-2 Maneuver	255	284	-	242	272	-	-	-	-	-	-	-
Stage 1	535	518	-	669	631	-	-	-	-	-	-	-
Stage 2	625	629	-	471	499	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.3	12.5	1	1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1143	-	-	255	469	519	1310	-	-
HCM Lane V/C Ratio	0.031	-	-	0.206	0.103	0.078	0.046	-	-
HCM Control Delay (s)	8.2	-	-	22.7	13.6	12.5	7.9	-	-
HCM Lane LOS	A	-	-	C	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.8	0.3	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	550	30	204	770	22	13	12	93	7	15	15
Future Vol, veh/h	13	550	30	204	770	22	13	12	93	7	15	15
Conflicting Peds, #/hr	0	0	0	0	0	4	0	0	4	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	Free	-	-	Stop	-	-	Stop
Storage Length	250	-	75	400	-	100	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1	0	0	0	0	0	0
Mvmt Flow	14	585	32	217	819	23	14	13	99	7	16	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	819	0	-	585	0	0	1874	1866	589	1876	1866	819
Stage 1	-	-	-	-	-	-	613	613	-	1253	1253	-
Stage 2	-	-	-	-	-	-	1261	1253	-	623	613	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	814	-	0	995	-	0	55	73	512	55	73	379
Stage 1	-	-	0	-	-	0	483	486	-	213	246	-
Stage 2	-	-	0	-	-	0	211	246	-	477	486	-
Platoon blocked, %		-			-							
Mov Cap-1 Maneuver	814	-	-	991	-	-	34	56	510	30	56	379
Mov Cap-2 Maneuver	-	-	-	-	-	-	34	56	-	30	56	-
Stage 1	-	-	-	-	-	-	475	478	-	209	192	-
Stage 2	-	-	-	-	-	-	145	192	-	366	478	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	2	65.3	99.1
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBL	WBT	SBLn1
Capacity (veh/h)	175	814	-	991	-	74
HCM Lane V/C Ratio	0.717	0.017	-	0.219	-	0.532
HCM Control Delay (s)	65.3	9.5	-	9.6	-	99.1
HCM Lane LOS	F	A	-	A	-	F
HCM 95th %tile Q(veh)	4.4	0.1	-	0.8	-	2.2

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	550	30	167	770	22	13	11	77	7	13	15
Future Vol, veh/h	13	550	30	167	770	22	13	11	77	7	13	15
Conflicting Peds, #/hr	0	0	0	0	0	4	0	0	4	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	Free	-	-	Stop	-	-	Stop
Storage Length	250	-	75	400	-	100	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1	0	0	0	0	0	0
Mvmt Flow	14	585	32	178	819	23	14	12	82	7	14	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	819	0	-	585	0	0	1794	1787	589	1797	1787	819
Stage 1	-	-	-	-	-	-	613	613	-	1174	1174	-
Stage 2	-	-	-	-	-	-	1181	1174	-	623	613	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	814	-	0	995	-	0	63	82	512	63	82	379
Stage 1	-	-	0	-	-	0	483	486	-	236	268	-
Stage 2	-	-	0	-	-	0	234	268	-	477	486	-
Platoon blocked, %		-			-							
Mov Cap-1 Maneuver	814	-	-	991	-	-	43	66	510	39	66	379
Mov Cap-2 Maneuver	-	-	-	-	-	-	43	66	-	39	66	-
Stage 1	-	-	-	-	-	-	475	478	-	232	220	-
Stage 2	-	-	-	-	-	-	172	220	-	382	478	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	1.7	37.4	67.5
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBL	WBT	SBLn1
Capacity (veh/h)	215	814	-	991	-	93
HCM Lane V/C Ratio	0.5	0.017	-	0.179	-	0.4
HCM Control Delay (s)	37.4	9.5	-	9.4	-	67.5
HCM Lane LOS	E	A	-	A	-	F
HCM 95th %tile Q(veh)	2.5	0.1	-	0.7	-	1.6

Figure 10

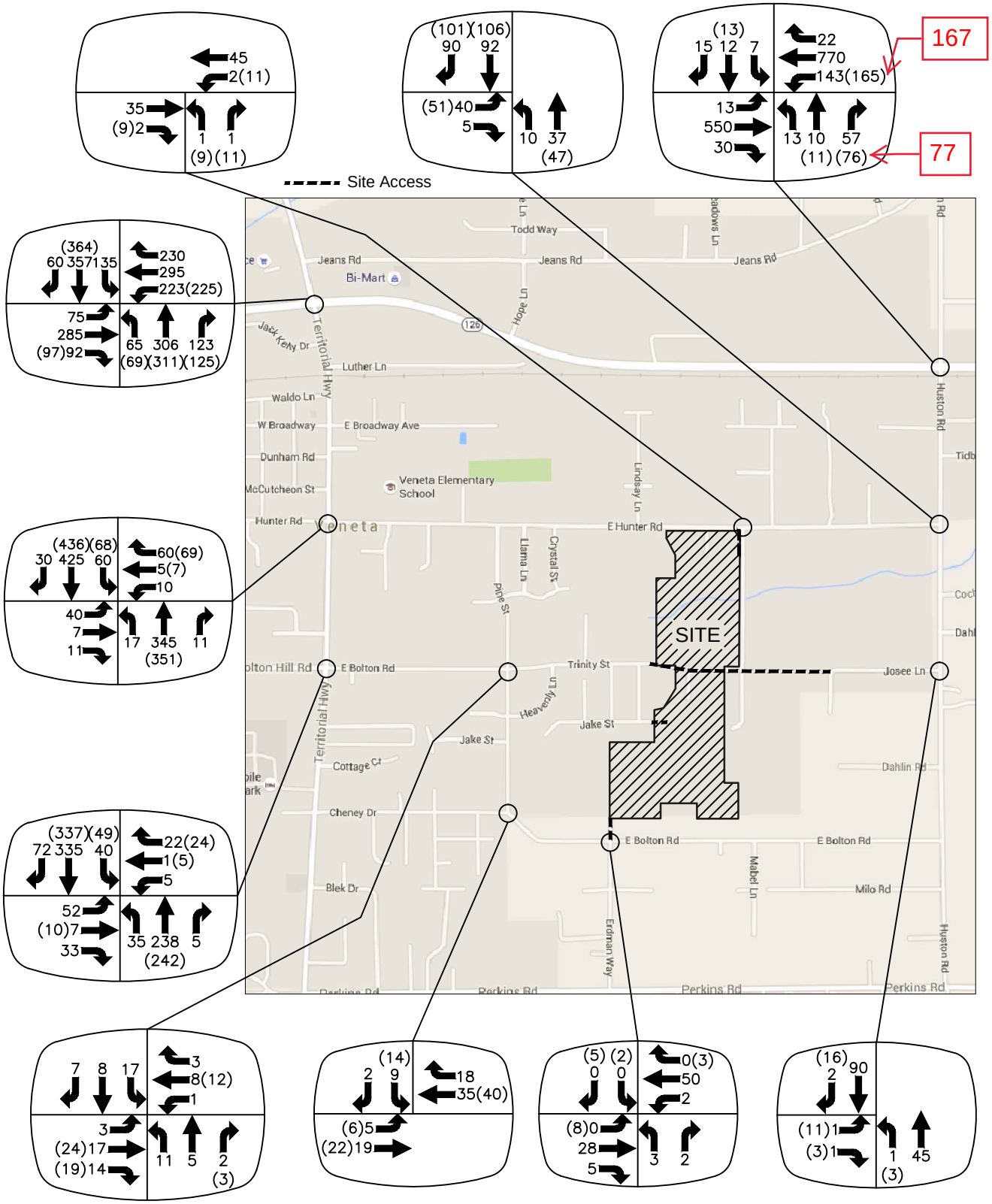
Sarto Village Zone Change Traffic Impact Study

2026 DHV's with Sarto Village

LEGEND

XX - No Build

(XX) - Build Sarto Village (where different)



Access Engineering

Oregon
Kate Brown, Governor

Department of Transportation
Region 2 Tech Center
455 Airport Road SE, Building A
Salem, Oregon 97301-5397
Telephone (503) 986-2990
Fax (503) 986-2839

DATE: August 9, 2016

TO: Bill Johnston
Region 2 Senior Planner

FROM: Keith P. Blair, PE
Region 2 Senior Transportation Analyst

SUBJECT: Sarto Village (Veneta) – Transportation Planning Rule
TPR Analysis Review Comments

ODOT Region 2 Traffic has completed our review of the submitted traffic impact analysis (dated August 5, 2016) to address traffic impacts due to the Sarto Village proposed plan amendment and zone change on three large parcels in the city of Veneta, with respect to consistency and compliance with current versions of ODOT's *Analysis Procedures Manual* (*APM*). Both versions of the *APM* were most recently updated in May 2016. Current versions are consistently published online at: http://www.oregon.gov/ODOT/TD/TP/Pages/APM.aspx. As a result, we submit the following comments for the City's consideration:

Analysis items to note:

- Region Traffic assumes all land uses and densities offered under both the current and proposed zones are consistent with the City's code as cited in the report.
- This study does not contain a simulation-based queuing analysis. Such analysis would have been scoped if this study had been required under ODOT's authority.

Recommended analysis items to be addressed:

1. It appears this study has produced and utilized software reports that utilize outdated methodology from the *Highway Capacity Manual 2000* rather than that of the current *Highway Capacity Manual 2010* (HCM 2010) for the unsignalized intersections. As the v/c for the OR 126 @ Huston Road unsignalized study intersection is approaching the mobility target under the TPR analysis and trip cap proposals, the study should be modified to report and utilize operational performance per HCM 2010 methodology. This is likely to have an effect on the operational analysis and may be significant to have an effect on the conclusions of the TPR analysis, such as altering or possibly eliminating the proposed trip cap. However, as the trips generated from the proposed development are anticipated to be significantly less than the proposed trip cap, the City may choose to accept the conclusions of the study as submitted.

Proposed mitigation comments:

2. ODOT maintains jurisdiction of the Florence-Eugene Highway No. 62 (OR 126) and the Territorial Highway No. 200 (OR 200). ODOT approval shall be required for any proposed mitigation measures to these facilities.

Thank you for the opportunity to review this traffic impact analysis. As the Synchro files were not provided, Region 2 Traffic has only reviewed the submitted report. It is likely comment #1 will have an effect on the operational analysis results which may be significant enough to have an effect on the proposed trip cap. As such, ODOT recommends the TPR analysis be revised to address this comment. However, as the proposed development will generate trips which are approximately half the currently proposed trip cap, the City may choose to accept the conclusions of the study as submitted. If the City determines the need for reanalysis, we would be willing and able to assist with an additional round of review. If there are any questions regarding these comments, please contact me at (503) 986-2857 or Keith.P.Blair@odot.state.or.us.

Exhibit E

MGA
MYHRE GROUP ARCHITECTS

August 24, 2016

City of Veneta – Planning Commission
C/O Lisa Garbett, Associate Planner
88184 8th St
PO Box 458
Veneta, OR 97487

RE: Sarto Village - Response to new evidence submitted during open record extension
Project Name: Sarto Village Zone Change
Project #151820

Dear Veneta Planning Commission,

As a follow up and respond to the new information submitted during the open record period Sarto Village offers the following items:

- Our understanding is that the corporate status of a Property Owner is not an approval criteria for a Zone Change & Comprehensive Plan Amendment request. If this were the case than many Non-profit organizations such as Hospitals, Churches and Senior Living facilities would not be possible in many Communities. All of these organizations provide important and unique contribution to the Community they populate. Furthermore the final corporate status for this project has not been determined at this time.

- Sarto Village's Zone Change & Comprehensive Plan Amendment request is based on a substantial need for housing and specifically senior housing as outlined in the original application in the City of Veneta and surrounding area. It is our belief that a full spectrum of housing including non-profit options are needed in the City of Veneta and this request has the potential to substantially contribute to this need.

- Sarto Village has no test or preferences for residents based on religion.

- Traffic safety is of great concern by all parties and Sarto Village is dedicated to providing many improvements as part of their development. These will be addressed in more detail in upcoming public works and approval processes with the City of Veneta. Sarto Village is committed to provide their fair share of public works improvements as is standard for similar projects.

- During the Planning Commission Hearing on August 2, 2016 Sarto Village requested a modification to the City Staff requested Condition of Approval for a Trip Cap. Therefore the Planning Commission requested that the Applicant's Traffic Engineer supplement the TIA to establish a Trip Cap that would be acceptable to the Applicant, not trigger mitigation and be supported by the City Engineer. Therefore the Applicant's Traffic Engineer (Access Engineering, LLC) initial discussed and evaluated the Trip Cap with the City Engineer to keep below the threshold for required mitigation. This updated study was ran using the HCM2000 version.

ODOT reviewed the conclusions and requested the study be redone using HCM2010. ODOT's request was done and incorporate in the final technical memorandum dated August 17, 2016 by Access Engineering, LLC to the original TIA. This updated memorandum supports a development of 227 family dwellings that could generate 220 trips with no mitigation required due to the fact that in the analysis Huston Road at Oregon 126 intersection is not failing within the required timeline.

Therefore Sarto Village respectfully request that the new Condition of Approval utilize a Trip Cap of 220 and the Planning Commission recommend approval of this Zone Change & Comprehensive Plan Amendment request to the City Council.

Sincerely,
MYHRE GROUP ARCHITECTS, INC.

Raymond Yancey, AIA, NCARB
Principal

End of Document

Exhibit F

TECHNICAL MEMORANDUM

Branch ENGINEERING inc
Since 1977
civil · transportation
structural · geotechnical
SURVEYING
www.BranchEngineering.com

DATE: August 26, 2016

PROJECT: Sarto Village Zone Change (CP/ZC-1-16)

TO: Lisa Garbett, Associate Planner
City of Veneta

FROM: Lane Branch, Branch Engineering

RE: Revised Traffic Impact Analysis Review Comments

Thank you for the opportunity to assist the City and provide findings and conditions for the Sarto Village Zone Change. The following is a summary of findings and recommendations for the City's consideration regarding the revised traffic impact analysis:

Traffic Impact Analysis

Items Reviewed

Sarto Village Zone Change Revised TIA, dated August 5, 2016 and Sarto Village Addendum, dated August 17, 2016 prepared by Access Engineering, Inc.

Comments: Revised Sarto Village TIA, August 5, 2016

TIA1. The proposed trip cap for limiting the amount of traffic from the April 15th TIA was increased from 100 to 200 pm peak hour trips in the August 5th, 2016 Revised TIA as indicated on pages 1, 12, 13, 14 and Figures 7-10 in Appendix A. Supporting SYNCHRO files with the revised traffic volumes were provided in Appendix F. The revised TIA did not include stipulations for proposed age related housing/development; only the number of PM peak hour trips (200) the site can support in future year scenarios analyzed without causing facilities to fail to meet the performance mobility standards identified by their jurisdictional authority. The controlling facility appears to be the intersection of Huston Road at Highway 126, which is owned and maintained by the Oregon Department of Transportation as reported in the revised TIA. This intersection would operate with a v/c ratio near the tolerable limit of the 0.85 in the year 2026 traffic conditions with worst case scenario development traffic associated with the proposed zoning.

TIA2. The proposed development includes construction of adult housing and various elder and congregate care types of uses on the buildable area of the site's 50.78 acres, including a portion of the site that is currently zoned for single family residential (SFR) uses. The combined total trip generation from the proposed development would be less than 100 PM peak hour trips and would not require a traffic study per Section 5.27 of City of Veneta Development Ordinance 493, Article 5. The SFR component of the existing site is identified in the analysis and on the zoning map as the southwest corner of taxlot 602 of assessor's

map 17-05-31-34 and totals approximately 7.17 acres according to the traffic study. The area already zoned SFR is not proposed to be changed to the GR zoning with the site's land use applications. The revised traffic impact analysis concludes that the proposed trip cap of 200 pm peak hour trips applicable to the zone change does not include the 7.17 acres of land currently zoned for SFR uses even though the development area appears to include the 7.17 acres of land in its development density and trip generation calculations.

FINDING: Since the zone change application is based on planned development/uses of the entire site, and a site plan has been prepared to support the planned development that includes all of the site property in the development scenario, the site should be considered as one development site. If actual development on the site occurs in phases, the trip generation from the entire site should be evaluated by the owner/developer's traffic engineer prior to issuance of any building permits to determine if the site as a whole generates 100 or more peak hour trips. If/when the site generates 100 or more PM peak hour trips and when any development on the site occurs after the 100 PM peak hour trip threshold is exceeded; a traffic study should be prepared by the owner/developer's traffic engineer to address traffic conditions per Section 5.27 of the City of Veneta's Land Use Ordinance No. 493.

FINDING: The existing Hunter Road roadway conditions do not include bike lanes or pedestrian facilities that are identified in the City of Veneta's transportation system plan for the major collector street functional classification. The TPR criterion addresses the functional classification and capacity at the planning level for motor vehicle traffic (i.e. what is planned during the TSP plan year) and does not include stipulations for bike lanes and/or pedestrian facilities.

FINDING: If required with future development proposal(s), a traffic impact analysis should include an inventory and assessment of the adequacy of the existing level of improvements for motor vehicle, bicycle and pedestrian users and the capability of existing facilities within the study area to accommodate both motorized and non-motorized modes of traffic and any potential for increase with development.

<u>Comments: Sarto Village Technical Memorandum, August 17, 2016</u>

TIA3. The trip cap of 200 PM peak hour trips for limiting the amount of traffic proposed in the August 5, 2016 Revised TIA is proposed to be removed. Comments were received from the Oregon Department of Transportation concerning the analysis procedure methodology resulting in a reanalysis of the traffic conditions by the applicant's traffic engineer using the current ODOT standard procedures methodology. The current ODOT standard analysis procedure includes analysis of unsignalized intersections utilizing year 2010 Highway Capacity Manual (HCM) analysis procedures and the year 2000 HCM for signalized intersections. Previous analyses for Sarto Village utilized the year 2000 HCM methodology for both signalized and unsignalized intersections. The two HCM analysis procedures have different methodologies and yield different v/c and LOS results with the same inputs. The intersection of Huston Road at Highway 126, which is owned and maintained by the Oregon Department of Transportation, would operate with a v/c ratio of 0.72 in the year 2026 with worst case scenario development traffic associated with the proposed zoning's maximum allowed development density and the site's buildable land area. The v/c ratio of 0.72 is below the ODOT maximum performance standard v/c of 0.85. The conclusion from the Technical Memorandum is that the trip cap is not required to mitigate future potential traffic conditions to satisfy the TPR. This conclusion appears to be supported by SYNCHRO outputs that utilize the 2010 HCM for unsignalized intersections.

TIA4. The technical memorandum identifies with 220 PM peak hour trips supported during the year 2026 traffic conditions without requiring mitigation. A follow-up response from the applicant's architect representative (Myhre Group) refers to a trip cap of 220 PM peak hour trips. Previous analyses proposed trip caps of 97 PM peak hour trips and 200 PM peak hour trips, while documenting that the site could support up to 227 single family dwellings based on the buildable land and the development density permitted by the City of Veneta's Development Ordinances. The potential for development of 227 dwelling units was documented to generate up to 217 PM peak hour trips that could result in exceeding the performance mobility standards at nearby facilities. The potential worst case development scenario is the maximum amount of development the site could support if it were developed to the maximum development densities (units/acre) permitted in City of Veneta Development Ordinances.

FINDING: The zone change to allow a greater development density is documented through the TIA process and the proposed zoning conditions and buildable land on the site is shown to support up to 227 single family residences that could generate up to 217 PM peak hour trips without a trip cap. If the applicant is proposing a trip cap of 220 PM peak hour trips, the trip generation should be documented based on the number of potential dwellings and should utilize trip generation rates consistent with the previous analyses applied to the number of dwelling units. The development of 227 single family dwellings discussed throughout the TIA process is not consistent with 220 PM peak hour trips. Further, the August 17, 2016 technical memorandum states that a trip cap is not required, while the August 24, 2016 Myhre Group response letter states that a trip cap of 220 PM peak hour trips is proposed.

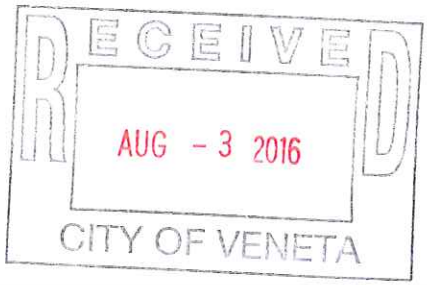
FINDING: The applicant should provide documentation indicating why the proposed mitigation evolved from 97 PM peak hour trips commensurate with various elder and congregate care types of uses to 200 PM peak hour trips to no mitigation and then 220 PM peak hour trips.

Please let me know if you have any questions about this review.

Sincerely,

Branch Engineering Inc.

Exhibit G



August 3, 2016

City of Veneta Planning Commission
88181 8th st
Veneta, OR 97487

To Whom It May Concern:

I am writing in support of the Sarto Village request to change the land use to Medium Density Housing. Most opposition to this project has a fundamental objection to this area being developed in any way. I start my reasoning with a pre-set understanding that Veneta will continue to grow and the area in question is within the city and urban growth area. Assuming these 50 acres will be developed then what type of development would best serve the community? I think the concept of a senior living community, park, and assisted living facility would be a great addition to Veneta. The developers and church seem to be making an effort to be good neighbors, and are including improvements the whole community will enjoy, and are planning a community that will not negatively effect their neighbors property values. My only long-term concern would be their goal of non-profit status for the homes, and the financial strain it might add to city services, especially the Fire and Police.

Thank you,

Doug James
25355 Trinity St
Veneta, OR 97487
541-954-7225

Exhibit H

Lisa Garbett

From: Bonnie Pleier <bonniepleier@hotmail.com>
Sent: Thursday, August 11, 2016 5:38 PM
To: Lisa Garbett
Subject: Yes on Sarto village

I own a home on Jake st. This village will add value.
Thank you!
Bonita Pleier

Sent from my iPad

RECEIVED
AUG 11 2016
CITY OF VENETA

Exhibit I

RECEIVED
AUG 12 2016
CITY OF VENETA

Re: CP/ZC -1-16

Veneta Public Comment with respect to the 50 acre development that was the subject of a meeting at city hall on August 2, 2016.

My name is Jackie Miller Burnett. My address is 88154 Lindsay Lane, Veneta Oregon. I attended the August 2ond meeting. My concerns are:

1. The planned development is too large for existing infrastructure. While it is true that money is now available for some minor fixes on Highway 126, the planned fixes are woefully inadequate and do not sufficiently address the problems between Veneta and Eugene beyond Fern Ridge Lake.
2. The fact that there are apparently no plans to widen Hunter Road and construct sidewalks before beginning a development of the scale discussed at the meeting is mind boggling! Hunter Road is used daily by children on bicycles and roller blades, mothers walking with young children and babies in carriages, disabled people in wheel chairs, people using walkers, groups of folks walking for exercise, they are all out there every day, on a narrow road with no place to go when two vehicles come from opposite directions. The drop is close to 2 feet on the sides of the road. I know because I recently fell in.
3. The tax exempt nature of the development is also a problem for many of the folks with whom I have spoken. Does it mean the property owners of Veneta will be paying even more property taxes? It borders on the outrageous!
4. I respectfully ask the members of the Veneta City Council not to rezone or allow this development. I ask that necessary future development be undertaken with prudent attention to all areas of infrastructure.

Jackie Miller Burnett
12 August 2016

Exhibit J

CP/ZC – 1 – 16
Re: Sarto Village, a 50 acre development
Veneta Public Comment
8-12-16

RECEIVED
AUG 12 2016
CITY OF VENETA

Veneta Planning Committee
PO Box 458
Veneta, OR 97487

Patricia Hodurski
25010 Meadowdale Lane
Veneta, OR 97487

SAFETY IS THE FIRST ISSUE WHICH NEEDS TO BE ADDRESSED. A SIDEWALK NEEDS TO BE PROVIDED BEFORE FURTHER DEVELOPMENT. The plan sites Hunter Rd. as the access road for development of Sarto Village. There are no sidewalks on Hunter Road. There is an abrupt ditch on both sides of the road measuring 18" to 24" deep, which is covered in some areas with loose gravel. Currently, besides cars, Hunter Rd. is heavily used by pedestrians, bike riders, skate boaders, mothers pushing baby carriages & seniors using walkers. During the school year, children walk to & from school in groups. Big trucks used in the development of Sarto Village will add to the congestion which already exists, & be a danger to those not in cars, as they will be forced into the ditch.

50 ACRES IS TOO LARGE AN AREA TO REMOVE FROM PROPERTY TAX IN RELATION TO THE TOTAL CITY LIMITS OF VENETA UNLESS IT IS OF BENEFIT TO ALL RESIDENTS OF VENETA. The planned development would be property tax exempt & require the expenditure of city money for roads & emergency response. The 55+ facility would use emergency

response help more so than other typical residents. At present, it is not requiring city money for roads and emergency response.

THE COST OF EMERGENCY RESPONSE FOR THE 55+ COMMUNITY WILL BE PAID FOR BY CURRENT RESIDENTS OF VENETA, NOT THOSE WHO LIVE IN SARTO VILLAGE OR THOMAS BECKET ROMAN CHURCH, BECAUSE THE PROJECT WILL BE PROPERTY TAX EXEMPT. Please refer to the attachments, IRS ...Section 501 c (3), 2015 ORS 307.130, 2015 ORS 307.140, and 2015 ORS 307.375 which are laws allowing property tax exemption for the project. The relevant sections are underlined. Also UBIT Unrelated Business Income Tax

The population anticipated for Sarto Village is over 500. Veneta's current population is only 2,035. If we want to maintain the current emergency response to population ratio, we would have to pass a bond to pay for additional training and manpower. If residents of Veneta do not vote to pass a bond, current emergency responders will be greatly understaffed in accommodating such a large increase of people 55+ who require a greater frequency of emergency response support. Property owners in Veneta will have the choice, pay more to maintain the current level of emergency response or do with 25% less Emergency Response Provision than we currently have.

THE UNDERLYING VISION OF THE SALVO VILLAGE DEVELOPMENT, AS MENTIONED IN THE 8-2-16 PLANNING MEETING, IS TO HAVE "BROTHERS HELPING BROTHERS". THIS WILL NOT BE A RETIREMENT FACILITY FOR VENETA AND OUTLYING COMMUNITIES BUT A FACILITY FOR THE INTERNATIONAL PRIESTLY FRATERNITY & SSPX, SOCIETY OF ST. PIUS X, OF WHICH ST. THOMAS BECKET IS ASSOCIATED,

and started by Archbishop Marcel Lefebreve. THEY ARE GLOBAL ORGANIZATIONS.

I would welcome such a group and institution if this very small community of Veneta, population 2,035, weren't going to be paying for much of the expense of developing and maintaining such a development.

IRS

Exempt Purposes - Internal Revenue Code Section 501(c)(3)

The exempt purposes set forth in section 501(c)(3) are charitable, religious, educational, scientific, literary, testing for public safety, fostering national or international amateur sports competition, and preventing cruelty to children or animals. The term *charitable* is used in its generally accepted legal sense and includes relief of the poor, the distressed, or the underprivileged; advancement of religion; advancement of education or science; erecting or maintaining public buildings, monuments, or works; lessening the burdens of government; lessening neighborhood tensions; eliminating prejudice and discrimination; defending human and civil rights secured by law; and combating community deterioration and juvenile delinquency.

Page Last Reviewed or Updated: 08-Jun-2016

2015 ORS § 307.130[1]

Property of certain museums, volunteer fire departments or literary, benevolent, charitable and scientific institutions

(1) As used in this section:

(a) Art museum means a nonprofit corporation organized to display works of art to the public.

(b) History museum or science museum means a nonprofit corporation organized to display historical or scientific exhibits, or both, to the public.

(c) Nonprofit corporation means a corporation that:

(A) Is organized not for profit, pursuant to ORS chapter 65 or any predecessor of ORS chapter 65; **or**

(B) Is organized and operated as described under section 501(c) of the Internal Revenue Code as defined in ORS 305.842 (Application of Internal Revenue Code to certain property tax laws).

(d) Volunteer fire department means a nonprofit corporation organized to provide fire protection services in a specific response area.

(2) Upon compliance with ORS 307.162 (Claiming exemption), the following property owned or being purchased by art museums, volunteer fire departments, or incorporated literary, benevolent, charitable and scientific institutions shall be exempt from taxation:

(a) Except as provided in ORS 748.414 (Funds exempt from certain taxes), only such real or personal property, or proportion thereof, as is actually and exclusively occupied or used in the literary, benevolent, charitable or scientific work carried on by such institutions.

(b) Parking lots used for parking or any other use as long as that parking or other use is permitted without charge for no fewer than 355 days during the tax year.

(c) All real or personal property of a rehabilitation facility or any retail outlet thereof, including inventory. As used in this subsection, rehabilitation facility means either those facilities defined in ORS 344.710 (Rehabilitation facility defined for ORS 344.720 and 344.730) or facilities which provide individuals who have physical, mental or emotional disabilities with occupational rehabilitation activities of an educational or therapeutic nature, even if remuneration is received by the individual.

(d) All real and personal property of a retail store dealing exclusively in donated inventory, where the inventory is distributed without cost as part of a welfare program or where the proceeds of the sale of any inventory sold to the general public are used to support a welfare program. As used in this subsection, welfare program means the providing of food, shelter, clothing or health care, including

program whose purpose is to:

(i) Acquire property and construct housing for resale to individuals at or below the cost of acquisition and construction; **and**

(ii) Provide loans bearing no interest to individuals purchasing housing through the program.

(3) An art museum or institution shall not be deprived of an exemption under this section solely because its primary source of funding is from one or more governmental entities.

(4) An institution shall not be deprived of an exemption under this section because its purpose or the use of its property is not limited to relieving pain, alleviating disease or removing constraints.

Note: Sections 1 and 2, chapter 7, Oregon Laws 2014, provide:

Sec. 1. (1) For purposes of ORS 307.130 (Property of certain museums, volunteer fire departments or literary, benevolent, charitable and scientific institutions) (2)(a), real or personal property of a nonprofit corporation is actually and exclusively occupied or used in the benevolent or charitable work carried on by the nonprofit corporation, and is exempt from ad valorem property taxation, if, for the tax year beginning on July 1, 2012, the property was actually:

(a) Offered, occupied or used as low-income housing; **and**

(b) Granted exemption under ORS 307.130 (Property of certain museums, volunteer fire departments or literary, benevolent, charitable and scientific institutions) (2)(a) by the county in which the property is located.

(2) The exemption provided under subsection (1) of this section continues until the end of the earliest tax year in which the property described in subsection (1) of this section:

(a) Is no longer actually offered, occupied or used as low-income housing;

(b) Changes ownership other than by sale or transfer to a nonprofit corporation under whose ownership the property continues to be offered, occupied or used as low-income housing; **or**

(c) Is leased in its entirety by the nonprofit corporation claiming the exemption, other than by leases for occupancy of individual units as low-income housing. [2014 c.7 §1]

Sec. 2. (1) Section 1 of this 2014 Act applies to property tax years beginning on or after July 1, 2012.

(2) The exemption provided under section 1 of this 2014 Act may not be granted for tax years beginning on or after July 1, 2018. [2014 c.7 §2]

• • •

2015 ORS § 307.140[1]
Property of religious organizations

Upon compliance with ORS 307.162 (Claiming exemption), the following property owned or being purchased by religious organizations shall be exempt from taxation:

(1) All houses of public worship and other additional buildings and property used solely for administration, education, literary, benevolent, charitable, entertainment and recreational purposes by religious organizations, the lots on which they are situated, and the pews, slips and furniture therein. However, any part of any house of public worship or other additional buildings or property which is kept or used as a store or shop or for any purpose other than those stated in this section shall be assessed and taxed the same as other taxable property.

(2) Parking lots used for parking or any other use as long as that parking or other use is permitted without charge for no fewer than 355 days during the tax year.

(3) Land and the buildings thereon held or used solely for cemetery or crematory purposes, including any buildings solely used to store machinery or equipment used exclusively for maintenance of such lands. [Amended by 1955 c.258 §1; 1959 c.207 §2; 1973 c.397 §1; 1974 c.52 §2; 1987 c.756 §3; 1993 c.655 §5]

• • •

Notes of Decisions

A farm owned by a church, from which the profits flowed to the benefit of the churchs charity, was not exempt from property taxation. Parkhurst v. Dept. of Rev., 4 OTR 586 (1971); Corporation of Presiding Bishop v. Dept. of Rev., 6 OTR 268 (1975), affd 276 Or 775, 556 P2d 685 (1976)

Property used for church purposes other than conducting worship services must qualify under exemption granted for charitable use property rather than as exempt place of worship. Archdiocese of Portland v. Dept. of Rev., 5 OTR 111 (1972), affd266 Or 419, 513 P2d 1137 (1973)

The tax-exempt hospital did not qualify for property tax exemption for property it leased to the county health department. Albany Gen. Hosp. v. Dept. of Rev., 6 OTR 446 (1976), affd 277 Or 727, 561 P2d 1029 (1977)

Where full use of property by religious organization was prevented solely by delay of planning commission in approving conditional use permit, partial use of property, involving possession and presence of personal property and maintenance work, was sufficient to qualify for religious exemption under this section. Reorganized Church LDS v. Dept. of Rev., 6 OTR 510 (1976)

Although evidence was insufficient to show that use of parsonage was such as to exempt it from property taxes, low-rent apartments provided to needy and older members of congregation were entitled to exemption to extent they were actually rented to those in need. German Apostolic Christian Church v. Dept. of Rev., 279 Or 637, 569 P2d 596 (1977)

Building owned by incorporated religious organization housing members of organization, who lived communally by dictates of their religion, was exempt from real property taxation under this section. House of Good Shepherd v. Department of Revenue, 300 Or 340, 710 P2d 778 (1985)

Where evidence did not demonstrate which portion of entire parcel was devoted to exempt activities, no partial exemption could be allowed. Golden Writ of God v. Dept. of Rev., 300 Or 479, 713 P2d 605 (1986)

Exemption was allowable for building fulfilling functions of churches of more traditional religions and for portion of guest ranch used in organizations religious activities and disallowed for caretakers residence, counselors residence and bulk of guest ranch already assessed for timber tax exemption. Found. of Human Understanding v. Dept. of Rev., 301 Or 254, 722 P2d 1 (1986)

Where house was primarily used as a home for pastor, use of some parts of house for purposes connected with work of church does not make it building used primarily for benefit of church. Washington County v. Dept. of Rev., 11 OTR 251 (1989)

Owned means only legal ownership, not equitable ownership. First Love Ministries v. Dept. of Rev., 12 OTR 97 (1991)

Where property involves living quarters, initial inquiry is whether it is reasonably necessary for person occupying living quarters to be physically on site. Roman Catholic Archdiocese v. Dept. of Rev., 13 OTR 211 (1995)

Where rectory or parsonage is reasonably necessary for work of church, inquiry is whether actual use of property is consistent with fulfilling religious purposes of church. Roman Catholic Archdiocese v. Dept. of Rev., 13 OTR 211 (1995)

Exemption from property taxation applies only with regard to taxes assessed on ad valorem basis. Multnomah County v. Dept. of Rev., 13 OTR 281 (1995)

Where description of property is sufficiently broad in original exemption application, construction of new improvement on property does not require filing of new application. Lake Baptist Church, Inc. v. Dept. of Revenue, 14 OTR 297 (1998)

Where Property Used Primarily for Benefit of Church Is Residence, Property Is Exempt If

1) church official is required by church doctrine or practical necessity to live in residence; and 2) proximity of residence to house of worship is necessary to further religious objectives. Washington County Assessor v. West Beaverton Congregation of Jehovahs

Witnesses, Inc., 18 OTR 409 (2006)

9

§§ 307.130 (Property of certain museums, volunteer fire departments or literary, benevolent, charitable and scientific institutions) to 307.162 (Claiming exemption)

Notes of Decisions

Assessor Must Notify Owner of Property Which Would Otherwise Be Exempt Under These Sections of Intent to Assess Taxes Against Such Property Only When

(1) property was treated as exempt in immediately preceding year and, (2) assessor contemplates assessment of property in current year because of change of ownership or use for which no application for exemption has been made. Worrell v. Dept. of Rev., 7 OTR 128 (1977)

Chapter 307

Atty. Gen. Opinions

Validity of ad valorem and severance taxation of logs destined for export, (1975) Vol 37, p 427; application of Article XI, section 11b of Oregon Constitution to this chapter, (1990) Vol 46, p 388

Law Review Citations

5 EL 516 (1975)

Related Statutes[2]

- 307.035
  Publishing summary of certain exempt real property
- 307.112
  Property held under lease, sublease or lease-purchase by institution, organization or public body other than state
- 307.155
  When land exempt under ORS 97.660, 307.140 or 307.150 taxable
- 307.162
  Claiming exemption

2015 ORS § 307.375[1]

10

Type of corporation to which exemption under ORS 307.370 applicable

The exemption provided in ORS 307.370 (Property of nonprofit homes for elderly persons) may be permitted only as to a corporation organized and operated only for the purpose of furnishing permanent residential, recreational and social facilities primarily for elderly persons, that:

(1) Is organized not for profit, pursuant to ORS chapter 65 or any statute repealed by chapter 580, Oregon Laws 1959;

(2) Receives not less than 95 percent of its operating gross income, excluding any investment income, solely from payments for living, medical, recreational and social services and facilities, paid by or on behalf of elderly persons using the facilities of such corporation;

(3) Permits no part of its net earnings to inure to the benefit of any private stockholder or individual; **and**

(4) Provides in its articles or other governing instrument that, upon dissolution, the assets remaining after satisfying all lawful debts and liabilities shall be distributed to one or more corporations exempt from taxation under this chapter as corporations organized and operated exclusively for religious, charitable, scientific, literary or educational purposes, or to the State of Oregon. [1969 c.587 §3]

• • •

Atty. Gen. Opinions

Homestead as applied to a shareholder-tenant in a cooperative apartment, (1971) Vol 35, p 897

Chapter 307

Atty. Gen. Opinions

Validity of ad valorem and severance taxation of logs destined for export, (1975) Vol 37, p 427; application of Article XI, section 11b of Oregon Constitution to this chapter, (1990) Vol 46, p 388

Law Review Citations

5 EL 516 (1975)

Related Statutes[3]

- 307.242
  Property of nonprofit corporation providing housing to elderly persons
- 307.370
  Property of nonprofit homes for elderly persons
- 307.380
  Claiming exemption under ORS 307.370
- 308.490
  Determining value of homes for elderly persons
- 317.112
  Energy conservation loans to residential fuel oil customers or wood heating residents

[1] Legislative Counsel Committee, *CHAPTER 307—Property Subject to Taxation; Exemptions*, https://www.-oregonlegislature.gov/bills_laws/ors/ors307.html (2015) (last accessed Jul. 16, 2016).

[2] Legislative Counsel Committee, *Annotations to the Oregon Revised Statutes, Cumulative Supplement - 2015, Chapter 307*, https://www.oregonlegislature.gov/bills_laws/ors/ano307.html (2015) (last accessed Jul. 16, 2016).

[3] OregonLaws.org assembles these lists by analyzing references between Sections. Each listed item refers back to the current Section in its own text. The result reveals relationships in the code that may not have otherwise been apparent.

by Robb Shecter, robb@oregonlaws.org
www.oregonlaws.org

Unrelated Business Income Tax (UBIT)

Net Income Subject to the UBIT

Churches and religious organizations, like other tax-exempt organizations, may engage in income-producing activities unrelated to their tax-exempt purposes, as long as the unrelated activities aren't a substantial part of the organization's activities. However, the net income from these activities will be subject to the UBIT if the following three conditions are met:

- the activity constitutes a trade or business,
- the trade or business is regularly carried on, and
- the trade or business is not substantially related to the organization's exempt purpose. (The fact that the organization uses the income to further its charitable or religious purposes does not make the activity substantially related to its exempt purposes.)

Exceptions to UBIT

Even if an activity meets the above criteria, the income may not be subject to tax if it meets one of the following exceptions: (a) substantially all the work in operating the trade or business is performed by volunteers, (b) the activity is conducted by the organization primarily for the convenience of its members or (c) the trade or business involves the selling of merchandise substantially all of which was donated.

In general, rents from real property, royalties, capital gains, and interest and dividends aren't subject to the unrelated business income tax unless financed with borrowed money.

Examples of Unrelated Trade or Business Activities

Unrelated trade or business activities vary depending on types of activities.

Advertising

Many tax-exempt organizations sell advertising in their publications or other forms of public communication. Generally, income from the sale of advertising is unrelated trade or business income. This may include the sale of advertising space in weekly bulletins, magazines or journals, or on church or religious organization websites.

Gaming

Most forms of gaming, if regularly carried on, may be considered the conduct of an unrelated trade or business. This can include the sale of pull-tabs and raffles. Income derived from bingo games may be eligible for a special tax exception (in addition to the exception regarding uncompensated volunteer labor), if: (a) the

bingo game is the traditional type of bingo (as opposed to instant bingo, a variation of pull-tabs), (b) the conduct of the bingo game is not an activity carried out by for-profit organizations in the local area and (c) the operation of the bingo game does not violate any state or local law.

Sale of merchandise and publications

The sale of merchandise and publications (including the actual publication of materials) can be considered the conduct of an unrelated trade or business if the items involved do not have a substantial relationship to the exempt purposes of the organization.

Rental income

Generally, income derived from the rental of real property and incidental personal property is excluded from unrelated business income. However, there are certain situations in which rental income may be unrelated business taxable income:

- if a church rents out property on which there is debt outstanding (for example, a mortgage note), the rental income may constitute unrelated debt-financed income subject to UBIT. (However, if a church or convention or association of churches acquires debt-financed land and intends to use it for exempt purposes within 15 years of the time of acquisition, then income from the rental of the land may not constitute unrelated business income.)

- if personal services are rendered in connection with the rental, then the income may be unrelated business taxable income.

Parking lots

If a church owns a parking lot that is used by church members and visitors while attending church services, any parking fee paid to the church would not be subject to UBIT. However, if a church operates a parking lot that is used by members of the general public, parking fees would be taxable, as this activity would not be substantially related to the church's exempt purpose, and parking fees are not treated as rent from real property. If the church enters into a lease with a third party who operates the church's parking lot and pays rent to the church, these payments would not be subject to tax, as they would constitute rent from real property.

Whether an income-producing activity is an unrelated trade or business activity depends on all the facts and circumstances. For more information, see IRS Publication 598, *Tax on Unrelated Business Income of Exempt Organizations.*

Tax on Income-Producing Activities

If a church, or other exempt organization, has gross income of $1,000 or more for any taxable year from the conduct of any unrelated trade or business, it must file IRS Form 990-T, *Exempt Organization Business Income Tax Return*, for that year.

Exhibit K

Veneta Planning Commission

We are Tom & Vivian Cummings @ 25357 Trinity Street, Veneta OR 97487.

We wish to comment on the proposed Sarto Village Project, and rezoning of the property involved. We have no objection to Sarto Village itself. The planning and layout of Sarto Village seems well Thought out, and would enhance the community. We do have concerns about the streets and city infra-structure Surrounding the Project. We feel that city streets surrounding are already inadequate for the way they are used. Major concerns are E. Bolton from Territorial to Trinity, Hunter from Territorial to Huston, And Huston from 126 to Perkins. Improvements: widening, bicycle lanes, sidewalks are already needed. No Project is worth compromising the safety of those around it. When we saw the layout of the Sarto Village Project we were happy to see a Park included. Our property is adjacent to the proposed park and felt a park was a welcome addition to the neighborhood. However of some concern to us is how much the community of Veneta will be expected to subsidize the service needs of the proposed non-profit. We feel that a profitable Non-profit could agree to help mitigate the financial burden on the community.

An adult retirement village would be an asset to Veneta but at what cost?

One lingering question, once zoning is changed if this project does not go forward what uses are opened for these parcels.

Sincerely,

Tom & Vivian Cummings

RECEIVED
AUG 15 2016
CITY OF VENETA

Exhibit L

RECEIVED
AUG 15 2016
CITY OF VENETA

12 August 2016

City of Veneta
Attention: Lisa Gerbett
P.O. Box 458
Veneta, OR 97487

Dear Miss Gerbett,

I am writing in support of the proposed Sarto Village project, file # CP/ZC-1-16.

My wife and I returned a few days ago from a visit to the site and were impressed with the location and the intended project. I expect that there are many in and near Veneta who are in favor of this development, but I wanted to let you know that it is also supported by many, including myself, from outside of the vicinity.

I expect that such a project would bring additional residents, jobs, and visitors to the area and it seems to me to be an ideal way to do so, offering suitable and desirable lodging to a number of people.

In short, I encourage the City's approval of the Sarto Village project.

Sincerely,

Peter Buschmann

Peter Buschmann
Dayton, MN

Exhibit M

RECEIVED
AUG 16 2016
CITY OF VENETA

August 15, 2016
1245 Montello Dr.
Eugene, OR 97404

Planning Commission
Veneta, OR 97487
Attn: Lisa Garbett

Ms. Garbett,

I'm writing in support of the building of Sarto Village.

I believe it is needed in Veneta for the number of seniors looking for a nice, retirement community and also it will benefit the area with improvement & employment.

Thank you for your attention.

Sincerely,
Jo Ann Woolworth

Exhibit N

Lisa Garbett

From: james.eagleeye@viox-services.com
Sent: Tuesday, August 16, 2016 2:09 PM
To: Lisa Garbett
Subject: Additional Comments for rezone CP/ZC-1-16

Would like to comment specifically on the 97 PM peak hour trip cap proposed for this site. As commented by members of the community there is a safety concern regarding traffic on the roads adjacent to the site, these hazards will only be increased by allowing a denser zoning. The trip cap may help provide a compromise between rezoning to greater density and public safety.
I believe the cap would be in the cities best interest and as suggested by the city engineer should be enforced by encumbrances recorded on the property deed. Once again I believe we need to consider that the supporting roadway infrastructure has not been completed to city standards and does not function as such and we should be concerned with pedestrian safety as well as performance at intersections. This trip cap would not prevent the site from being developed as presented.

Thank you for your time, Jim Eagle Eye

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Exhibit O

To: **VENETA PLANNING COMMISSION**

From: Anthony R. Clemons

25156 Cherry Lane

Veneta, OR 97487-9751

RECEIVED
AUG 16 2016
CITY OF VENETA

I am writing this letter to express my opinion that the variance submitted by Sarto Village should be denied. I base my opinion on Hardcopy versus Human considerations. I will explain.

By Hardcopy considerations, I mean the submitted and required paperwork to address the variance and amendment changes as specified by the City of Veneta. I have studied the paperwork for many days and it appears that all the information and forms have been filed and accepted by the City of Veneta. The consideration of our elderly population, Designated Land Use Studies, Trip Studies, Comprehensive Plan, Zone Designation, Density Studies, Layout of the Designed Facilities, Senior Living Project Plans, Trip Gap Studies, Water Supply, Sewer Supply, Streets, Population Growth, Etc. The paperwork and future theory components of this proposed land development project appears non-contestable and understandably correct. This is my meaning of Hard Copy considerations.

By Human considerations, I mean factual situations of the effect that these variance and amendment changes will have on the lives and everyday functioning of our living citizens; the people.

I drive, walk, and jog on Hunter Rd. and Perkins Road. It is frequently unsafe to walk, ride or jog on Perkins Rd. Perkins Rd. is wider and, presently, has more traffic and walkers and bicyclists than Hunter Rd. With the added population numbers of Sarto Village and the age of most of the residents there, there will be an increase in the number of humans on Hunter Rd., with no plans to development or widen Hunter Rd. at this time. I quote a line from the Veneta Planning Commission Staff Report " Public safety is not a criteria applied to the proposed amendments". The Safety of peoples should be the primary concern of any and all projects.

Monetary requirements should be, but maybe is not, a factor for the Veneta Planning Commission to take into account in the consideration of people living in the city of Veneta. City Services is subject that has a direct influence on the lives of the Citizens of Veneta. With the added population of Sarto Village comes the added need for City Services. We will be in a situation where the extra population growth will be an added tax burden for the majority of citizens to pay for the cost of Library Services, City Parks, Police Patrol Safety, Fire Safety, Etc. It is an accepted conclusion that the Planning Commission does not consider property taxes in this variance and amendment request, nor can you discriminated against a Non-Profit Organization, but, you must consider the situation that the majority of Venetians are being placed.

I have listened to land owners who will be directly affected by the Sarto Village Project. History has taught them that flooding will most likely occur. The cost of these citizens being required to connect to Veneta City Sewer, if mandated, will be in the double digit thousands of dollars. The decrease in land value, the altered ambience of their extant community, traffic flow, etc. These may not be required but should be considered in any decision to allow changes to any standing policies.

One of my greatest concerns is the preservation of our Wetlands, Green Spaces, and Flood Zones. It is a non-arguable fact that construction and building will be taken place on/in a Federal, State, and City protected area. To what extent is the only question to be researched. According to the "What can I do with Wetlands"

as listed on the City of Veneta webpage, many restrictions are listed. A few listed restrictions which you are definitely not allowed to do are:

1. New development or expansion of existing development.
2. No storage or use of pesticides, fertilizers, or other hazardous material.
3. Channelizing or straightening natural drainage ways.
4. Filling, grading. and/or excavating wetland areas.

The City of Veneta has current maps of the proposed Sarto Village Project and current maps of the significant wetlands, green spaces, and flood zones affected by the project. It appears that construction will be conducted on/in those protected zones. If a Wetland Variance is going to be issued to the builders of Sarto Village, it should be reconsidered and revoked. Extensions to Trinity Street/ Baker Lane/Erdman Way are forecasted to be completed. These street extensions and construction are located in protected wetland, green space, flood zone areas. If wetlands and surrounding are to be preserved, the statement by Sarto Village Builders "A considerable effort to preserve significant portions of the existing wetlands and natural features" is suspect.

In closing, I reiterate my decision expressed in this letter. My testimony concerning the Comprehensive Plan and Zone changes and Variance request submitted by the Sarto Village Project Group is that the request be denied.

If the points of my listed testimony should be submitted in a different forum, Please consider my submitted testimony as relevant in any case. Thank you.

Anthony R. Clemon

08/16/2016

Exhibit P

Lisa Garbett

From: Judith Terry <jtpianolady1@gmail.com>
Sent: Tuesday, August 16, 2016 4:09 PM
To: Lisa Garbett
Subject: Sarto Village Zone Change

Mrs. Judith Terry
88154 Lindsay Ln
Veneta, Oregon, 97487

I have carefully read, and appreciate the Veneta planning Commission Staff Report (CP/ZC-1-16) August 2, 2016.

My concerns are these:

1. There is very little I would add in regard to the traffic and danger to bikers, hikers, joggers, etc. on E. Hunter Rd. The road is narrow with no room for walking or biking without someone getting off the road (car or hiker/biker) when two cars meet. Mom's with strollers, people in wheel chairs, people walking their dog(s) - makes for a nerve wracking trip. Did I mention the school buses? I would hope this very troublsome problem would be addressed BEFORE more stress is added.

2. Another concern I have is related to the city approving the cutting of "a few" trees on Hunter Rd. near Lindsay Ln. a couple of years ago. We were lead to believe that the owner of the property would go in, cut some trees, clean up the mess and leave. We know that didn't happen, and there is still a big (fire hazard) mess there, along with some unsightly equipment left to rust.

3. How can we be assured that Sarto Village Project will not fall through at some point leaving another mess?

4. I would be much more on board with the project if it were being proposed by a local bank and construction company rather than Canadian based enterprises.

5. It is not clear to me where the money for this project is coming from, given that the Society of Saint Pius X (SSPX) is not a large organization world wide, and the local SSPX has recently had to close their High School program here in Veneta for "lack of tuition paying students and donations..." *(exerpt from a recent Webmaster's note - Saint Thomas Becket Roman Catholic Church)

Sincerely.
Judith L Terry
(541-935-8073)

VENETA PLANNING COMMISSION'S
STAFF REPORT

Conditional Use Permit, Day Care Facility (Sweet Cheeks Childcare Center)
at the Valley United Methodist Church
CUP-2-16

Application Received:	July 21, 2016
Application Deemed Complete:	July 22, 2016
Public Notice Mailed:	July 26, 2016
Public Notice Posted at City Hall:	July 26, 2016
Public Notice Posted on Property:	July 27, 2016
Public Notice Published in Fern Ridge Review:	August 3, 2016
120 days from Completeness:	November 19, 2016

Referrals:	Dean Chappell, Lane Fire Authority David Mortier, City Building Official (The Building Department, LLC)
Staff Report Date:	August 23, 2016
Public Hearing Date:	September 6, 2016
Prepared by:	Lisa Garbett, Associate Planner

BASIC DATA

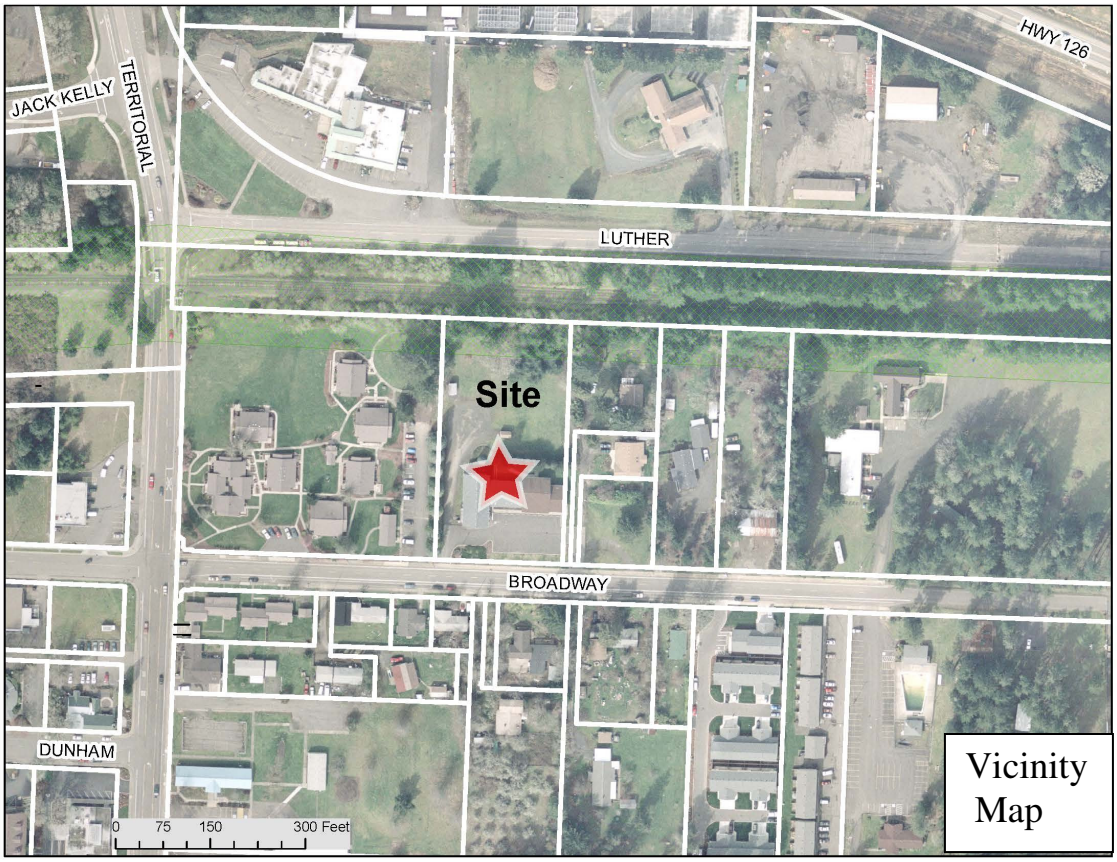
Applicant:	Holly Lang 24921 Woodland Avenue Veneta, OR 97487
Property Owner:	Valley United Methodist Church P.O. Box 337 Veneta, OR 97487
Assessor's Map:	17-05-31-23-00600
Site Address:	25133 E. Broadway Avenue, Veneta, OR 97487
Area:	+/-1.78 acres
Plan Designation:	M- Medium Density Residential and OS-Open Space/ Greenway
Zoning Designation:	General Residential and Greenway Overlay Zone

REQUEST

The applicant is proposing to locate a Day Care facility (Sweet Cheeks Childcare Center), serving sixteen or more children, at the Valley United Methodist Church.

PROPERTY CHARACTERISTICS

The subject property is zoned General Residential with a Greenway-Open Space Subzone and is developed as church since the early 1960's. Multi-family housing exists to the west and three single family flag lots exist to the east of the property. The railroad exists immediately to the north.



Wastewater Service

City services are currently servicing this property.

Storm water

Storm drainage is already in place for the site. Proposed changes will not increase impervious surface or runoff.

Water Service

City services are currently servicing this property.

Natural Resources

The proposal does not affect the Greenway-Open Space Subzone which runs along the northern property line.

APPROVAL CRITERIA

Veneta Land Development Ordinance No. 493, Section 8.10 – General Standards of Approval and Section 8.11 – Special Standards Governing Conditional Uses. Specifically, Veneta Land Development Ordinance No. 493, Section 8.11(10) – Day care facilities.

AGENCY COMMENTS

Agency comments were received from the following and attached as Exhibit:

- David Mortier, City Building Official, The Building Dept. LLC
- Dean Chappell, Fire Inspector, Lane Fire Authority

PUBLIC NOTICE

A notice was mailed to all property owners and tenants within 300-feet of the site on July 26, 2016 in accordance with Veneta's Land Development Ordinance No. 493, Section 2.11. Notice was also posted at the site on July 27, 2016. Notice was published in the Fern Ridge Review on August 3, 2016.

PUBLIC COMMENTS

None.

ISSUES

Outdoor play area

The code requires a minimum of 2,700 square feet of outdoor play and socializing area (at least 75 square feet per child) in accordance with Veneta Land Development Ordinance No. 493, Section 8.11(10(a) – Special Standards Governing Conditional Uses. The Site Plan provided does not indicate a scale but does provide a proposed area of fenced outdoor play. In order to ensure the outdoor play area is of sufficient size to meet code requirements, a condition of approval is recommended for the applicant to submit a revised Site Plan (to scale) showing a minimum of 2,700 square feet of outdoor play area. As a note, staff did an analysis of available outdoor area on the site and the site can accommodate this requirement.

State of Oregon approval documentation

Veneta Land Development Ordinance No. 493, Section 8.11(10)(e) requires the facility meet all applicable state licensing requirements. The applicant provided documentation of a Pre-Certification Consultation with the Oregon Department of Education, Early Learning Division. In speaking with a State of Oregon representative, the state is not allowed to approve a day care facility until they have received approval by the local jurisdiction. A recommended condition of approval is included in the proposed final order which will require the applicant to provide documentation to the city from the State of Oregon, prior to occupancy, of an approved Day Care Facility at this location, which meets applicable state licensing requirements.

Greenway – Open Space Subzone

The site contains a Greenway-Open Space Subzone along the northern property line. Development (including fence construction) is prohibited within the Greenway-Open Space subzone per Veneta Land Development Ordinance No. 493, Section 4.12(5)(a). In order to ensure the Greenway-Open Space Subzone is not impacted with fence construction, a recommended condition of approval will require the applicant to provide a revised Site Plan (to

scale) showing the location of the proposed fenced outdoor play area and the location of the Greenway-Open Space Subzone in order to ensure that fence construction is outside the Greenway-Open Space Subzone boundary.

Floor plan/ exits

The City Building Official has commented that approval of a floor plan for the day care area and exists will need to be provided and approved. He also indicated that one (1) exit from each class room to the outside needs to be provided. A recommended condition of approval is included in the final order which requires the applicant to provide and receive City approval of a floor plan for the day care area and exits from each classroom.

STAFF RECOMMENDATIONS

Staff recommends approval of the Conditional Use Permit based on the findings and conditions outlined in the Proposed Final Orders.

The Planning Commission may:

1. Approve the Conditional Use Permit based on the findings and conditions of approval in the Proposed Final Order.

2. Modify the proposed findings and/or conditions of approval in the Proposed Final Order.

3. Deny the Conditional Use Permit, based on findings by the Commission as to why the applicant does not meet the Conditional Use Permit standards and criteria.

4. Continue the public hearing on the Conditional Use Permit if more information is needed.

EXHIBITS

A. Proposed Final Order
B. Applicant's Submittal
C. City Building Official Response
D. Lane Fire Authority Response

FINAL ORDER
VENETA PLANNING COMMISSION
CONDITIONAL USE PERMIT (CUP-2-16),
DAY CARE FACILITY AT THE VALLEY UNITED METHODIST CHURCH

A. The Veneta Planning Commission finds the following:

1. The Veneta Planning Commission held a public hearing on September 6, 2016 on the Conditional Use Permit after providing public notice as required by Section 2.11 of Veneta's Land Development Ordinance 493.

2. The Veneta Planning Commission has reviewed and used as evidence all material relevant to the Conditional Use Permit that has been submitted by the applicant, staff, referral agencies, and the general public in creating the findings and conclusions stated in the proposed final order.

3. The Veneta Planning Commission followed the required procedures and standards for taking action on a Conditional Use Permit as required by Section 8.03 of Veneta's Land Development Ordinance No. 493.

B. The Veneta Planning Commission approves with conditions the Valley United Methodist Church, Conditional Use Permit (CUP-2-16) to allow a day care facility (Sweet Cheeks Childcare Center) serving sixteen or more children, in the General Residential zone at the Valley United Methodist Church.

The applicant shall comply with the following conditions of approval:

<u>CONDITIONS OF APPROVAL</u>

GENERAL CONDITION OF APPROVAL:

1. **The applicant shall provide and receive approval of a final map within one (1) year from the final decision, in accordance with Veneta Land Development Ordinance No. 493, Section 8.05 – Time Limit on an Approved Conditional Use Permit.**

PRIOR TO OCCUPANCY:

1. **The applicant shall provide and receive approval of a revised Site Plan (to scale) showing a minimum of 2,700 square feet of outdoor play and socializing area in accordance with Veneta Land Development Ordinance No. 493, Section 8.11(10(a) – Special Standards Governing Conditional Uses.**

2. **The applicant shall provide the city with documentation from the State of Oregon of an approved day care facility at this location which meets the applicable state licensing requirements.**

3. **The applicant shall provide and receive approval of a revised Site Plan (to scale) showing the location of the proposed fenced outdoor play area and the location of the Greenway-Open Space Subzone to ensure the proposed fence does not impact the Greenway in accordance with Veneta Land Development Ordinance No. 493, Section 4.12(5)(a) – Greenway-Open Space Subzone.**

4. **The applicant shall provide and receive approval of a Floor Plan showing the location of the day care are and a minimum of one (1) exit from each classroom to the outside in accordance with the Veneta Building Official.**

C. IT IS HEREBY ORDERED THAT the Veneta Planning Commission approves with conditions the Conditional Use Permit (CUP-2-16) based on the information presented in the following findings of fact. Applicable code requirements are noted in italic font while findings and conditions are noted in bold font.

The Veneta Land Development Ordinance No. 493, Article 4 – Use Zones.
Section 4.03 <u>General Residential (GR)</u>

(1) Purpose. To provide areas suitable and desirable for a variety of housing types and densities with provisions for associated public service uses and open space, and allowing flexibility through planned developments and other options under controlled conditions. The net density in the GR zone shall not exceed fifteen (15) dwelling units per net acre and twenty (20) units in planned developments, and are subject to the minimum lot area and dimensional standards of the zone.

The proposal is consistent with this standard. The proposed use is a Day Care Facility (Sweet Cheeks Childcare Center) located within the existing structure of the United Valley Methodist Church which will provide a public service in the General Residential zone.

(4) Conditional Uses. In a GR zone, the following uses and their accessory uses may be permitted subject to the provisions of Article 8, Conditional Uses. Some Conditional Uses are also subject to the provisions of Article 6, Site Plan Review

(c) Day care facilities.

The proposal is consistent with this standard. The applicant is pursuing conditional use permit approval for a Day Care Facility (serving sixteen or more children) at the United Valley Methodist Church.

The Veneta Land Development Ordinance No. 493, Article 8 – Conditional Uses.
Section 8.10 <u>General Standards of Approval</u>

A conditional use may be granted only if:
(1) The proposed use is consistent with the Veneta Comprehensive Plan.

The proposal is consistent with this standard. The proposed Day Care Facility will provide a needed public service in conformance with the purpose of the Medium Density Plan Designation and Veneta Comprehensive Plan.

(2) The proposed use is consistent with the purpose of the zoning district.

The proposal is consistent with this standard. The proposed use is permitted with Conditional Use Permit approval in accordance with Veneta's Land Development Ordinance No. 493, Section 4.03(4)(c) – Conditional Uses.

The purpose of the General Residential zone is to provide areas suitable and desirable for a variety of housing types and densities with provisions for associated public uses and open space, and allowing flexibility through planned developments and other options under controlled conditions. The proposed Day Care Facility will provide a public use.

(3) The potential negative impacts of the proposed use on adjacent properties and on the public will be mitigated through the application of existing requirements and conditions of approval.

The proposal is consistent with this standard. The conditions of approval as outlined above will address any potential negative impacts of the proposed use.

(4) All required public facilities have adequate capacity to serve the proposal. Systems Development Charges will be assessed at the time a building permit is issued. Additional SDC's will be assessed for changes in use that are more intense than a pre-existing use.

The proposal is consistent with this standard. The proposal does not involve development of any new structures and the existing United Valley Methodist Church is already connected to public facilities (water and sewer).

(5) The site size, dimensions, location, topography, and access are adequate considering such items as the bulk, coverage or density of the proposed development; the generation of traffic; environmental quality impacts; and health, safety or general welfare concerns.

The proposal is consistent with this standard. The site is adequate to serve the proposed use. The existing site contains paved aprons at vehicular entrances at Jeans Road. The proposed day care facility will not generate enough traffic to require a transportation impact study given Veneta Land Development Ordinance No. 493, Section 5.27 requires an analysis for development that will generate 100 vehicle trips during the a.m. or p.m. peak hour.

Section 8.11 *Special Standards Governing Conditional Uses*

(10) Day care facilities.

(a) At least 75 square feet of outdoor play and socializing area per child or adult shall be provided, but in no case shall the total area be less than 500 square feet.

As conditioned, the proposal is consistent with this standard. According to the applicant's submittal, the facility can accommodate a maximum of thirty-six (36) children per the Pre-Certification consultation report by the Oregon Department of Education. This equates to 2,700 square feet of outdoor play and socializing area (75 square feet per child) required. The applicant shows an area of outdoor play to be fenced to the north of the existing main church facility and indicates that at least 75 square feet of outdoor play and socializing area per child is provided and more than 500 square feet.

Prior to occupancy, the applicant shall provide a revised Site Plan (to scale) showing a minimum of 2,700 square feet of outdoor play and socializing area in accordance with Veneta Land Development Ordinance No. 493, Section 8.11(10(a) – Special Standards Governing Conditional Uses.

(b) If planned for children, the outdoor plan shall be adequately fenced in order to provide for their safety.

The proposal is consistent with this standard. The applicant is proposing a four (4) foot fence to be installed surrounding the proposed outdoor play area.

(c) If the day care facility is not a residential use as provided in ORS 657A.440, the day care facility shall not be located in a single-family residence.

This standard is not applicable. The Day Care Facility is proposed within an existing church, not a single-family residence.

(d) The facility shall be readily accessible for fire and other emergency vehicles.

The proposal is consistent with this standard. The Lane Fire Authority was sent a referral request in which they responded with no needed conditions of approval. Staff verbally spoke with the Lane Fire Authority, Fire Inspector whom indicated the existing access to and from the proposed use is sufficient.

The Veneta Building Official commented that he needs to see a floor plan of the day care area and exits and that one (1) exit from each classroom to the outside needs to be provided.

Prior to certificate of occupancy, the applicant shall provide and receive approval of a Floor Plan showing the location of the day care are and a minimum of one (1) exit from each classroom to the outside in accordance with the Veneta Building Official.

(e) The facility shall meet all applicable state licensing requirements. Proof that these requirements are met shall be provided.

As conditioned, the proposal is consistent with this standard. The applicant provided documentation of a Pre-Certification Consultation with the Oregon Department of Education, Early Learning Division. In speaking with a State of Oregon representative, the state is not allowed to approve a day care facility until they have received approval by the local jurisdiction.

Prior to occupancy, the applicant shall provide the city with documentation from the State of Oregon of an approved day care facility at this location which meets the applicable state licensing requirements.

(f) Adequate space must be provided on-site to allow for drop-off of the children or adults, preferably a circular drive. L-shaped drives and alley drop-offs may also be approved.

The proposal is consistent with this standard. The existing site contains adequate drop-off and pick-up for children with adequate space and two entrances off of E. Broadway which will allow parents to either park and pick up their child and exit out of one of the two exits locations to E. Broadway.

(g) Parking areas and ingress-egress points are designed so as to facilitate traffic, bicycle, and pedestrian safety; to avoid congestion; and to minimize curb cuts on arterial and collector streets.

The proposal is consistent with this standard. The existing parking areas and ingress-egress points are adequate to facilitate traffic, bicycle, and pedestrian safety. Specifically, sidewalks exist on both sides of E. Broadway.

SECTION 5.20 Off-Street Parking Requirements
For each new structure or use, each structure or use increased in area and <u>each change in the use of an existing structure</u>, there shall be provided and maintained off-street parking areas in conformance with the provisions of this section.

(11) Space requirements for off-street parking shall be consistent with Table 5.20(a) below. Fractional space requirements shall be counted as a whole space. When square feet are specified, the area measured shall be the gross floor area of all buildings but shall exclude any space within a building used for off-street parking, loading or service functions not primary to the use. When the requirements are based on the number of employees, the number counted shall be those working on the premises during the largest shift at peak season. A reduction

in the number of required spaces not to exceed (fifty) 50% of the required spaces may be permitted by the Planning Commission. A reduction in excess of 50% may be permitted through a Track 2 Site Plan Review, pursuant to Article 6, if evidence is provided to show that a reduced amount of parking is sufficient and will not cause any detrimental impacts to on-street parking or other parking areas. For example, an employer working with Lane Transit District to provide bus passes to employees or who offers van pools or other transportation demand management measures may need fewer parking spaces for employees.

SECTION 5.20 Off-Street Parking Requirements
Table 5.20(a)

Day care facility
Vehicle Parking Requirement = One (1) space per staff person, based on the maximum staff at the facility during peak time.
Bicycle Parking Requirement = 1 per ten (10) employees
Type and % of Bicycle Parking = 100% Long term

Church
Vehicle Parking Requirement = One (1) space per four (4) seats or eight (8) feet of bench length in the main auditorium or one (1) space for each 35 square feet of floor area of main auditorium not containing fixed seats.

Bicycle Parking Requirement = 1 per 20 fixed seats or 40 feet of bench length or every 200 square feet in main auditorium where no permanent seats or benches are maintained
Type and % of Bicycle Parking = 100% Long term
(Note: +/-180-feet of bench length per past Site Plan review for addition to church).

The proposal is consistent with this standard. The existing site contains twenty-four (24) parking spaces (including two ADA spaces) and no bicycle parking spaces. The proposed use (day care facility) requires five (5) parking spaces based on a maximum of five employees/staff at the facility during peak time and no bicycle parking spaces. Bicycle parking is required at a rate of one (1) bicycle parking space per every ten (10) employees. The number of employees at any one time will not meet the threshold to require bicycle parking.

A Site Plan for the United Methodist Church was approved in the past. Off-street parking for the church use was approved at that time. However, based on the current off-street parking standard, a total of twenty-three (23) vehicular parking spaces are required for the church use. The twenty-three (23) parking space calculation for the church is based on an existing 180-feet of bench length; 18 benches total at 10-feet long each.

Although the church off-street parking needs combined with the day care facility off-street parking needs combined exceed the number of existing parking spaces, the proposed use (day care facility) will utilize parking at a different time than that of the church (i.e. weekends vs. weekdays).

Section 4.12 – Greenway-Open Space Subzone

(5) Prohibited Uses.

(a) Any new structures or development (including fences), other than those allowed as permitted uses or approved as conditional uses, construction or ground disturbing activities, gardens, lawns, dumping of materials of any kind, and operation of heavy machinery.

As conditioned, the proposal is consistent with this standard. The applicant provided a Site Plan showing the location of the proposed fenced outdoor play area. The Site Plan provided is not to scale and does show the location of the existing Greenway-Open Space Subzone. The Greenway-Open Space Subzone prohibits development in the Greenway including fences.

Prior to occupancy, the applicant shall provide a revised Site Plan (to scale) showing the location of the proposed fenced outdoor play area and the location of the Greenway-Open Space Subzone to ensure the proposed fence does not impact the Greenway in accordance with Veneta Land Development Ordinance No. 493, Section 4.12(5)(a) – Greenway-Open Space Subzone.

Section 8.05 – Time Limit on an Approved Conditional Use Permit
Conditional Use permit approvals shall be effective three (3) years from the date of final decision, unless a building permit has been issued, substantial construction pursuant thereto has taken place or the authorized use has commenced. Within one (1) year from the final decision, a final map shall be prepared and filed with the Building and Planning Official, including all required modifications and conditions. Approved conditional use permits that do not have a final map submitted within one (1) year shall be void.

As conditioned, the proposal is consistent with this standard. According to this standard, approved conditional use permits that do not have a final map submitted within one (1) year are void.

As a general condition of approval, the applicant shall provide and receive approval of a final map within one (1) year from the final decision, in accordance with Veneta Land Development Ordinance No. 493, Section 8.05 – Time Limit on an Approved Conditional Use Permit.

D. This approval shall become final on the date this decision and supporting findings of fact are signed by a representative of the Veneta Planning Commission below. An appeal of the Planning Commission's decision must be submitted to the City Council within 15 days after the final order has been signed and mailed. An appeal of the City Council's decision must be submitted to the Land Use Board of Appeals within

21 days of the Council's decision becoming final. Failure of the applicant to raise constitutional or other issues relating to proposed conditions of approval with sufficient specificity to allow the City to respond to the issue precludes an action for damages in circuit court.

_____ _____

James Eagle Eye, Chairperson Date
Veneta Planning Commission

Exhibit B

RECEIVED
JUL 21 2016
CITY OF VENETA

VENETA oregon

GENERAL
LAND USE APPLICATION

Receipt # 25813
Submition Date 7-20-16
Planning File #

Letter of Intent Received
Associated File #

Print Property Owner Name: Valley United Methodist Church Phone:
Mailing Address: P.O. Box 337, Veneta, OR 97487
Print Applicant (*If not owner*): Holly Lang Phone: 5413572878
Mailing Address: 24921 Woodland Ave
Print Agent: Phone:
Mailing Address:

Assessor's Map Number (Township, Range, Section, Quarter Section)	Tax Lot(s)	Acres	Zone

Subject property address(es): 25133 E Broadway Ave. Veneta, 97487
Subzone (if applicable):

Check all applicable APPLICATIONS and DEPOSITS below

X Technical Review/Public Notice Deposit (for ALL applications except Property Line Adjustments) $350

APPLICATION DEPOSITS (Application fees are calculated by ACTUAL PROCESSING COSTS)

SITE PLAN REVIEW

____	Site Plan Review/Major Amendment	$1,350
____	Site Plan Minor Amendment (Administrative)	$350
____	Site Plan Minor Amendment (Planning Commission)	$450

PLANNED DEVELOPMENTS

____	Conceptual Plan	$350
____	General Development Plan	$550+25/unit
____	Final Development Plan	$300

OTHER APPLICATIONS PROCESSED WITH DEPOSITS

X	Conditional Use Permits (Note: Some Conditional Use Permits also require a Site Plan Review)	$775
____	Specific Area Plan Amendment – NE Employment Center & Southwest Area Plan (/SDP)	$7,500
____	Variance to the Veneta Wetland Protection Ordinance (Veneta Municipal Code Chapter 18.10)	$700

APPLICATIONS WITH FIXED FEES (These are non-refundable)

____	Appeals	$525
____	Variance	$425

Amendments (except Specific Area Plan above)

____	Comprehensive Plan (text only)	$800
____	Ordinance (text only)	$200
____	Zone Change (map only)	$600
____	Plan Designation & Zoning Map	$1,000

I HEREBY STATE THAT THE FACTS RELATED IN THE ABOVE APPLICATION AND THE PLANS AND DOCUMENTS SUBMITTED HEREWITH ARE TRUE, COMPLETE, CORRECT, AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

Property Owner Signature: [signature]
Applicant Signature: Holly Lang

APPLICATION FEES & DEPOSITS

Fees and deposits are intended to cover the full cost for processing applications. They are not intended to cover the cost for interpretation of ordinances or for long-range planning. Applicants seeking development which requires more than one type of review (such as site plans and conditional use permits) must pay all applicable fees and deposits. Applicant acknowledges and agrees that Applicant's failure to pay City costs over the base fee amounts, as charged monthly by the City, may result in the City pursuing any or all legal remedies available, including but not limited to liening Property in the amount owed; prosecution for violation of the City's current fee resolution and City land development or division ordinances; issuance of a stop work order, non-issuance of building permits for Property, or cessation of related proceedings; set-off against any reimbursement owed; and turning amounts owed over to a collection agency.

Application Deposits: Certain application fees are represented by a deposit amount. Applicants shall be charged for actual processing costs incurred by the City. City staff time shall be monitored for applications which require a deposit in lieu of a non-refundable fee. Any unused portion of the deposit shall be returned to Applicant upon completion of the application process, conditions of approval, and any ensuing appeals. Any additional costs incurred beyond the deposit amount shall be charged to and paid by Applicant on a monthly basis. Applicant agrees that Applicant's failure to pay these amounts triggers City's option to pursue any or all remedies, as listed above.

Application Fees: Fixed fees are non-refundable and are based on average application processing costs rounded to the nearest $25.

Technical Review/Publication Deposit: The actual costs charged to the City for technical review of land use applications, including but are not limited to City's planning, public works, engineering, administration, legal, wetland specialists, geologists, biologists, arborist, and any other services provided in processing Application, shall be charged to Applicant, at the rate(s) charged to the City. In addition, the actual costs of preparing and mailing notices to abutting property owners or others required to be notified, the costs of publishing notices in newspapers, and any other mandated costs shall be charged to Applicant. Such costs shall be adjusted as soon as the specific amounts are known. Applicant agrees that any deficiencies shall be collected from Applicant, and that Applicant's failure to pay these amounts triggers City's option to pursue any or all remedies, as listed above.

Applicant Holly Lang Owner(s) David Ruder

REQUEST FOR CONSOLIDATION OF LAND DEVELOPMENT AND/OR LAND DIVISION APPLICATIONS

I hereby request that my applications be consolidated. I understand that by consolidating these applications, any limited land use action (site review, partition, subdivision) that is combined with a quasi-judicial action (variance, conditional use permit, or other action requiring a public hearing) may be subject to a public hearing and the 14-day limitation for written comments will be waived. Wetland Variances requiring a joint decision by the City Council and Veneta Planning Commission may <u>not</u> be combined with any other land use hearing.

Applicant Holly Lang Owner(s) David Ruder

The site land use complies with the standards of the lands development ordinance by all of the following

At least 75 sq ft of outdoor play and socializing area per child or adult is provided, and is more then 500 sq ft.

The outdoor play are is currently being adequately fenced for the children's safety.

The daycare facility is not residential and will be held in a commercial property.

The facility is readily accessible for fire and other non emergency vehicle and has already been inspected by the local fire martial and ok'd for use.

The facility meets all state licensing requirements and has been viewed and approved by a state licensure. Included are a copy of her notes and approval.

There is a nice large space available for drop off and pick up that allows adequate space to complete a full turn around.

Parking areas adequately accommodates bicycles and pedestrians safety and are provided in a location to avoid congestion.

These are the notes our licensure le after viewing the center. She can not license us with out your approval for the center to be at this location

Pre-Certification Consultation

Date of Visit	7/19/2016
Facility Name	Sweet cheeks
Telephone Number	541-357-2478
Facility Address	25133 E. Broadway 97487 Veneta
Contact Name	Holly Lange
Telephone Number (if different from above)	

Comments

* Will increase to 36 children Hours. 6:30 am - ~~6:30~~ 6:00 pm. M-Sat
* Will send exception to ask to have 16 preschoolers in room 3 for circle time and table work.
* Church will remove all items from all rooms
* plugs in sockets
* Exception to use park as playground until their playground and fence is available. Will send guidlines.
* Gave packet #2
* Waive fee for change of address - must put money in for increase capacity.
* Will schedule for Aug 2 @ 2:00

Calculation of Activity Area and Capacity

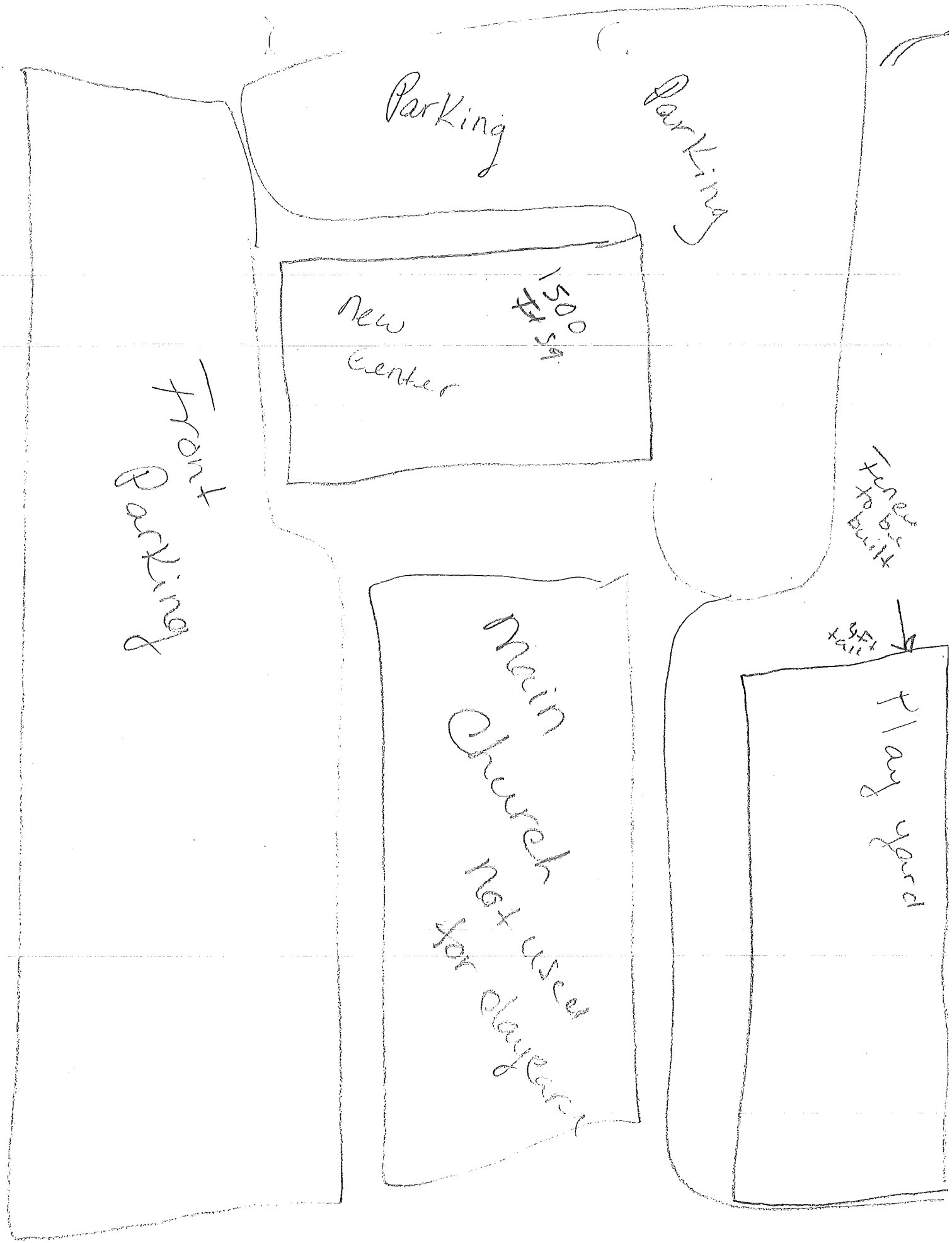
	Sq. Ft.	Planned Use	Age Range	Available at all times Yes	Available at all times No	Potential Capacity
Room 1	→	717.00/35 Preschool / SAC	3 yrs-12 yrs	X		21
Room 2	157.4	Infants				4
Room 3	236.1	preschool				6
Room 4	119.5	toddler				5
Room 5						
Room 6						

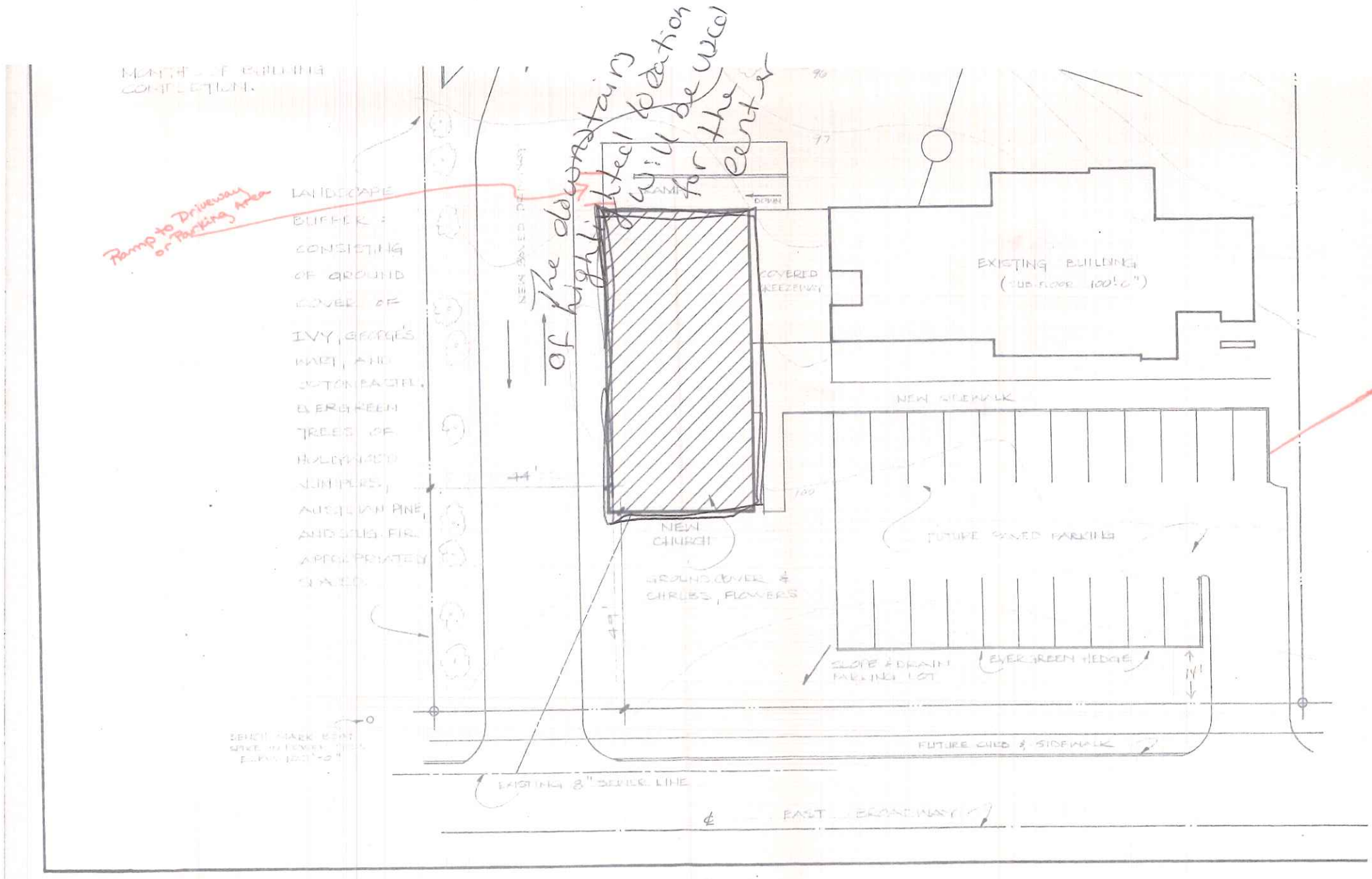
Number of toilets (1:15 children 36 mo. or older): 6	Number of hand washing sinks (1:2 toilets): 3	Outdoor Activity Area (75 sq. ft per child): Sq. ft. = children

Not available @ this tm

Signature: Licensing Specialist — Date 7/19/2016

Distribution: Original - Licensing File
Yellow – Facility


Parking
Parking
New Center
1500 ft sq
Front Parking
Fence to be built
main Church not used for daycare
6 ft tall
Play yard



The downstairs of lighted location will be used for the center

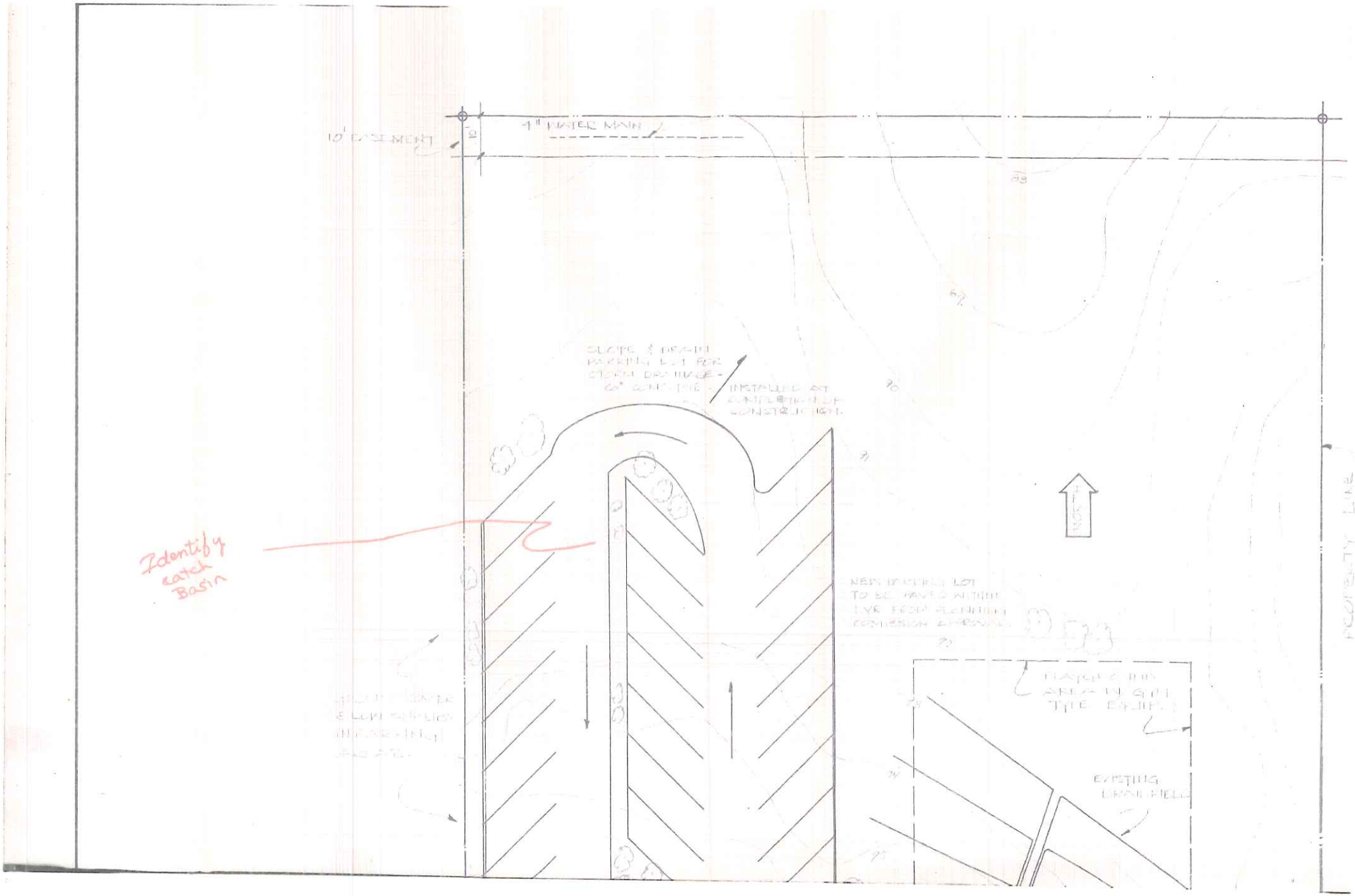

10' EASEMENT
10'
4" WATER MAIN
SLOPE & DRAIN PARKING LOT FOR STORM DRAINAGE - 60' CONCRETE
INSTALLED AT COMPLETION OF CONSTRUCTION
NEW PARKING LOT TO BE PAVED WITHIN 1 YR FROM PLANNING COMMISSION APPROVAL
EXISTING DRAIN FIELD
PROPERTY LINE
Identify catch Basin

Exhibit C

City of Veneta
MEMORANDUM

DATE: July 27, 2016

TO: Veneta Building Official, Attn: David Mortier

FROM: Lisa Garbett, Associate Planner
City of Veneta

RE: CONDITIONAL USE PERMIT CUP-2-16, Sweet Cheeks Childcare Center

Assessor's Map & Tax Lot 17-05-31-23-00600
25133 E. Broadway Ave., Veneta, OR 97487

The City has received a request for conditional use permit approval for a proposed Day care Facility (Sweet Cheeks Child Care Center), serving sixteen or more children and within the existing Valley United Methodist Church located at 25133 E. Broadway Avenue.

See attached application.

This request is being forwarded for your review, comment and conditioning. If you have conditions of approval you would like incorporated into the City's consideration of this request, please list them and return to this office by August 10th, 2016.

Please reference file number CUP-2-16 in your reply.

- ☐ We are not affected by the proposal.
- ☐ We have reviewed the proposal and have no comments.
- ☐ Our comments are attached.
- ☒ Our comments are:

Need to see floor plan of day care area and exits
Exit from each class room to out side

City of Veneta - P.O. Box 458 - Veneta, Oregon 97487
Phone (541) 935-2191 - Fax (541) 935-1838

Exhibit D

City of Veneta
MEMORANDUM

DATE: July 27, 2016

TO: Lane Fire Authority, Attn: Dean Chappell, Fire Inspector

FROM: Lisa Garbett, Associate Planner
City of Veneta

RE: CONDITIONAL USE PERMIT CUP-2-16, Sweet Cheeks Childcare Center

Assessor's Map & Tax Lot 17-05-31-23-00600
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- ☐ Our comments are attached.
- ☐ Our comments are:

_____
_____
_____
_____
_____
_____
_____

City of Veneta - P.O. Box 458 - Veneta, Oregon 97487
Phone (541) 935-2191 - Fax (541) 935-1838