ORDINANCE NO. 821

AN ORDINANCE RELATING TO LAND USE AND AMENDING THE SCAPPOOSE COMPREHENSIVE PLAN MAP AND ZONING MAP

WHEREAS, Rosedale Development, LLC filed an application to amend the Comprehensive Plan Map and Zoning Map; and

WHEREAS, the Planning Commission held a hearing on the application on April 12, 2012 and the City Council held a hearing on the application on May 7, 2012; now therefore,

THE CITY OF SCAPPOOSE ORDAINS AS FOLLOWS:

Section 1. The Scappoose Comprehensive Plan is hereby amended by re-designating Columbia County Tax Lot 3213-DB-00100, a portion of Columbia County Tax Lot 3213-DB-00203, and adjoining right-of-way from Manufactured Home (MH) to Commercial (C) as illustrated in Exhibit A, which is attached hereto and incorporated herein by reference.

Section 2. The Scappoose Zoning Map is hereby amended by re-zoning Columbia County Tax Lot 3213-DB-00100, a portion of Columbia County Tax Lot 3213-DB-00203, and adjoining right-of-way from Manufactured Housing Residential (MH) to Expanded Commercial (EC) as illustrated in Exhibit B, which is attached hereto and incorporated herein by reference.

Section 3. In support of the proposed Comprehensive Plan Map Amendment and Zone Change, the City Council hereby adopts the recommendations of the Scappoose Planning Commission and the findings included in the staff report dated May 3, 2012, attached hereto as Exhibit C and incorporated herein by reference.

Section 4. Based on the findings set forth in Exhibit C, the following limitation on the use of property on Tax Lot 3213-DB-00100 is hereby imposed:

> All combined uses on Parcel 1 of Partition Plat 2006-11 (currently identified as Columbia County Tax Lot 3213-DB-00100) shall not generate more than 1,311 total average daily trips unless the applicant applies for and receives land use approval for such an increase from the City. This "trip cap" shall be monitored through development review. Appropriate trip generation information, based on the Institute of Transportation Engineers Trip Generation Manual, will be required prior to City approval of any use of the property to ensure this cap is not exceeded. The applicant shall record a restrictive covenant applicable to the property, in a form acceptable to the City Attorney, in the Columbia County deed records detailing the limitations of the trip cap. The City Attorney's acceptance shall be evidenced by his or her signature on the face of the recorded restrictive covenant, and shall be a condition precedent to the validity of such instrument.

Section 5. This ordinance shall become effective on the date that the restrictive covenant required by Section 4 has been recorded in the Columbia County deed records. Rosedale Development, LLC shall provide to the City a copy of the recorded restrictive covenant within ten (10) days after the date it has been recorded.

PASSED AND ADOPTED by the City Council this 21st day of May, 2012, and signed by the Mayor and City Recorder in authentication of its passage.

CITY OF SCAPPOOSE, OREGON

Scott Burge

Scott Burge, Mayor

First Reading: May 7, 2012
Second Reading: May 21, 2012

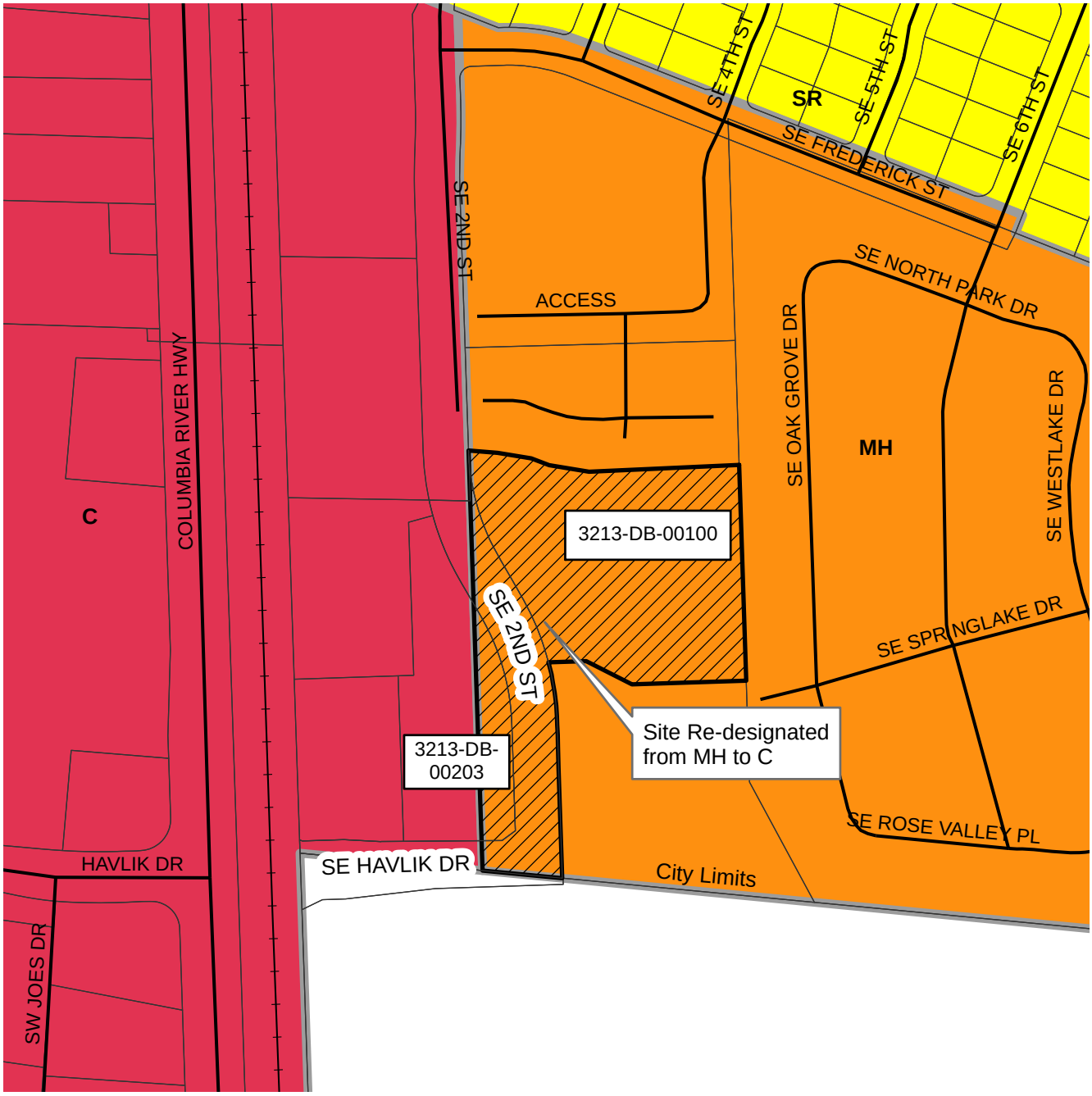
Attest: Susan M Reeves

Susan M. Reeves, MMC
City Recorder

Exhibit A - Comprehensive Plan Map Amendment

Comprehensive Plan Map Amendment CPA1-12 & Zone Change ZC1-12

Location: SE 2nd Street near SE Havlik Drive
Columbia County Assessor Map: 3213-DB-00100 & 3213-DB-00203



SCAPPOOSE GIS

Legend

- Streets
- Taxlots Boundary
- Site Re-designated from MH to C
- SR Suburban Residential
- MH Manufactured Home
- C Commercial

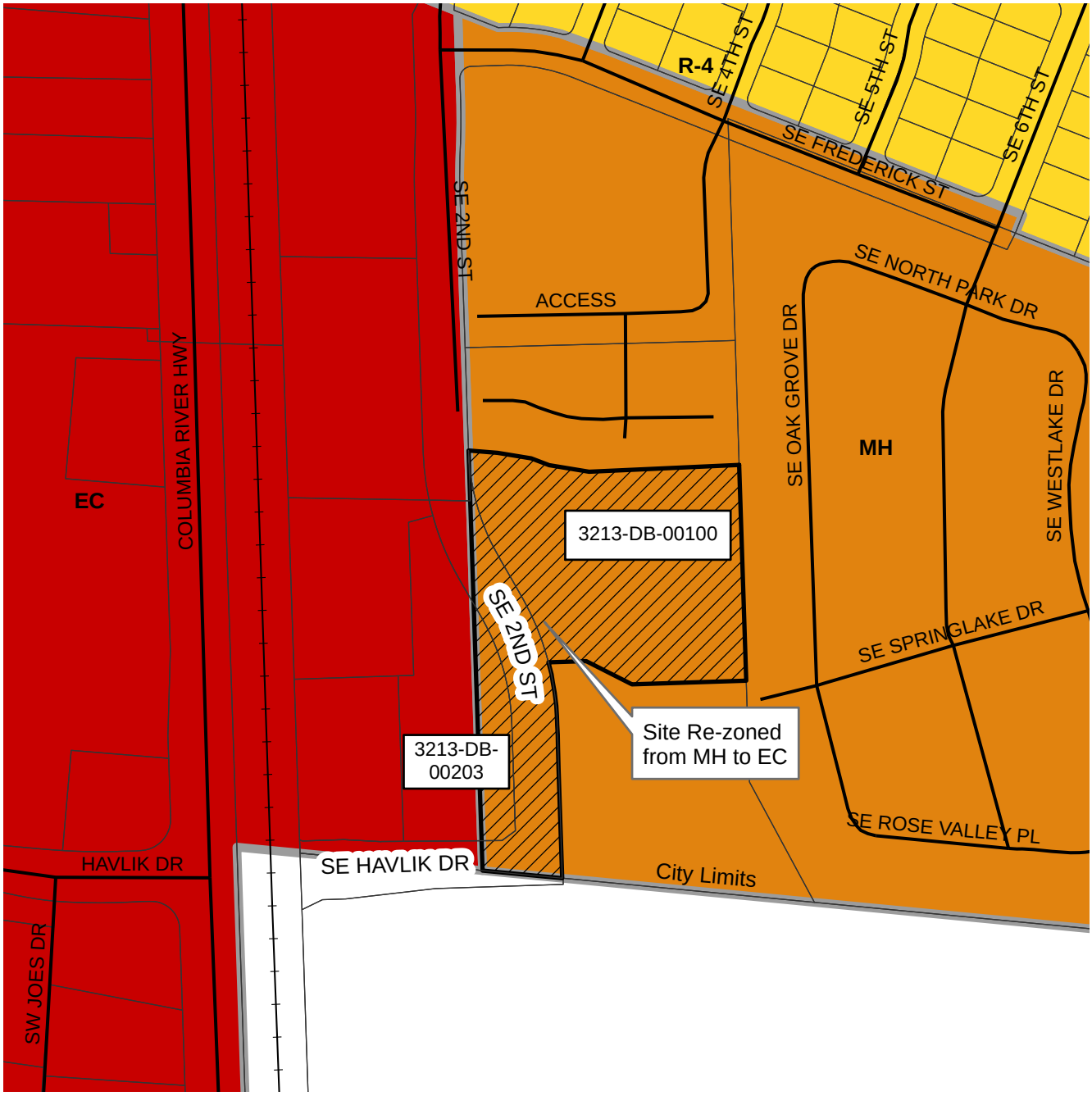
N

0 125 250 500 Feet

Exhibit B - Zoning Map Amendment

Comprehensive Plan Map Amendment CPA1-12 & Zone Change ZC1-12

Location: SE 2nd Street near SE Havlik Drive
Columbia County Assessor Map: 3213-DB-00100 & 3213-DB-00203



SCAPPOOSE GIS

Legend

- Streets
- Taxlots Boundary
- Site Re-zoned from MH to EC
- R-4 Moderate Density Residential
- MH Manufactured Housing Residential
- EC Expanded Commercial

N

0 125 250 500 Feet

CITY OF SCAPPOOSE
33568 EAST COLUMBIA AVENUE
SCAPPOOSE, OREGON 97056
(503) 543-7146
FAX: (503) 543-7182

Exhibit C

CPA1-12/ZC1-12 May 3, 2012
Rosedale Development SE 2nd Street Comprehensive Plan Map Amendment and Zone Change

CITY OF SCAPPOOSE STAFF REPORT

Request: Approval of an application for a Comprehensive Plan Map Amendment (CPA1-12) and a Zone Change (ZC1-12). The applicant requests a change from the Comprehensive Plan designation of Manufactured Home (MH) to Commercial (C) and a change from Manufactured Housing Residential (MH) zoning to Expanded Commercial (EC) zoning for three contiguous areas: (1) a 0.39-portion of a parcel west of SE 2nd Street which is currently split-zoned (portions EC & MH); (2) a 2.87-acre parcel east of SE 2nd Street; & (3) 0.96 acres of abutting right-of-way.

Location: The subject site is located on SE 2nd Street near SE Havlik Drive, and is further described as Columbia County Assessor Map No. 3213-DB-00100 & 3213-DB-00203. See attached Vicinity Map (**Exhibit 1**).

Applicant: Rosedale Development, LLC

Owner(s): Malen Investments II, LLC (3213-DB-00100)
Soltero Property Holdings, LLC (3213-DB-00203)

EXHIBITS

1. Vicinity Map
2. Report Submitted by the Applicant
   A. Narrative dated February 28, 2012
   B. Map A-1: Cover Sheet & Vicinity Map
   C. Map E-2: Existing Comprehensive Plan Map
   D. Map E-3: Proposed Comprehensive Plan Map
   E. Map E-4: Existing Zoning Map
   F. Map E-5: Proposed Zoning Map
   G. Rosedale Zone Change Traffic Impact Study, dated February 16, 2012
3. Existing Comprehensive Plan Map
4. Proposed Comprehensive Plan Map
5. Existing Zoning Map
6. Proposed Zoning Map
7. Letter from ODOT Region 2, dated April 5, 2012
8. Letter from ODOT Region 2, dated April 12, 2012
9. Technical memorandum from Lancaster Engineering, dated April 10, 2012
10. ODOT traffic study, dated April 11, 2012

SUBJECT SITE

- The subject site consists of two parcels: Tax Lot 3213-DB-00203, which is referred to as Parcel A in the applicant's narrative (**Exhibit 2A**), and Tax Lot 3213-DB-00100, which is referred to as Parcel B in the applicant's narrative. See **Exhibit 1**. Tax Lot 203, located at the northwest corner of the intersection of SE Havlik Drive and SE 2nd Street, has an area of 0.98 acres (41,750 square feet). Of this amount, approximately 0.39 acres (17,000 square feet) is the subject of this application. Tax Lot 203 is currently vacant and contains stockpiled soil and the driveway to the Les Schwab Tire Center and Fultano's Pizza. Tax Lot 100, located east of SE 2nd Street, has an area of 2.87 acres (125,000 square feet) and is also vacant and contains stockpiled soil. Tax Lots 100 and 203 are separated by the 2nd Street right-of-way.

- Tax Lot 203 is bordered to the north by an existing commercial site (the 2nd Street Studio at the former candle factory site); to the west by Les Schwab and Fultano's Pizza; to the south by Havlik Drive; and to the east by 2nd Street. Tax Lot 100 is bordered to the north by the Rose Valley Assisted Living and Senior Cottages; to the west by 2nd Street; to the south by the City's property purchased for the community pool; and to the east by the Springlake Manufactured Home park.

- Tax Lot 203 has dual Comprehensive Plan Map designations, with the western portion designated Commercial (C) and the eastern portion designated Manufactured Home (MH). See **Exhibit 3**. Similarly, Tax Lot 203 also has dual zoning designations, with the western portion zoned Expanded Commercial (EC) and the eastern portion zoned Manufactured Housing Residential (MH). See **Exhibit 5**. Tax Lot 100 has a Manufactured Home plan designation and MH zoning in its entirety.

- The boundary between the Comprehensive Plan Map designations (and their associated zones) is the eastern edge of the 2nd Street right-of-way for the straight portion of 2nd Street north of the site. Until 2006, the 2nd Street right-of-way was a straight line, but the right-of-way was realigned at that time to accommodate the future construction of SE Havlik Drive with proper slopes. When 2nd Street was realigned, the street location moved but the Comprehensive Plan and Zoning boundaries remained in their former locations.

OBSERVATIONS

CONCURRENT COMPREHENSIVE PLAN MAP AMENDMENT AND ZONE CHANGE APPLICATIONS

- The applicant has requested a comprehensive plan map amendment and zone change, which are Quasi-Judicial Decisions requiring the exercise of policy judgment with verbal and written testimony accepted from the public. The City needs to analyze the proposal based on all allowable uses under the zoning regulations since the specific land use is unknown at this time.

- The Development Code (Chapter 17.22) indicates that quasi-judicial amendments to the comprehensive plan and maps should be based on the following four considerations:

A. The applicable comprehensive plan policies and map designation;
B. The change will not adversely affect the health, safety and welfare of the community;
C. The applicable standards of this title or other applicable implementing ordinances; and
D. Evidence of change in the neighborhood or community or a mistake or inconsistency with the comprehensive plan or zoning map as it relates to the subject property.

- While these items will be discussed in more detail in the *Findings of Fact*, several pertinent issues are called out in these observations.

- As previously discussed, Tax Lot 203 currently has two Comprehensive Plan designations and two Zones. The applicant requests that the City shift the existing plan & zone boundaries eastward to result in a larger commercial building site and to eliminate a remnant of MH land. At the same time, the applicant also requests a change from MH to C for the entirety of Tax Lot 100. The proposed Comprehensive Plan designations are indicated on **Exhibit 4** and the proposed Zoning designations are indicated on **Exhibit 6**. The total area that would be affected by the proposed changes is approximately 4.22 acres, which includes 0.96 acres of right-of-way and 3.26 acres of buildable land.

- The main policy decision facing the City is whether to permit the re-designation of the proposed 3.26 acres from residential to commercial designations (not counting right-of-way). Given the site constraints for Tax Lot 203 discussed in the applicant's narrative (**Exhibit 2A**), the amendment would have a limited effect on the City's usable residential land but could potentially lead to commercial development by widening an existing commercial parcel. For Tax Lot 100, the decision hinges on whether the land is more suitable for residential use or commercial use.

COMMERCIAL AND RESIDENTIAL LAND ISSUES

- The applicant is proposing to convert 3.26 acres of buildable land from a residential plan designation (MH) to a commercial plan designation (C), together with 0.96 acres of adjoining right-of-way. Staff's analysis of the development potential for the areas proposed for the conversion indicates that the 0.39 acres on Tax Lot 203 could accommodate two single-family homes or one duplex and one triplex. The 2.87 acres on Tax Lot 100 could accommodate a manufactured home park with approximately 23 units or a 4-plex development with approximately 30 units. Combined, the two areas could support up to 35 dwelling units. In the context of the City's supply of vacant residential land, a reduction of 35 units may not be significant.

- If the application is approved, the site would be zoned Expanded Commercial, providing the opportunity for development of the site with commercial uses. In the case of Tax Lot 203, the zone change would ensure that the entire property had the same zone, increasing the likelihood of development since the building and parking lot sizes would not be constricted into the existing commercial area.

- The applicant correctly observes in the narrative (**Exhibit 2A**) that the Expanded Commercial zone allows multi-family housing, though the City could not rely on this possibility since the applicant would not be obligated to construct such residences.

TRANSPORTATION PLANNING RULE

- The Transportation Planning Rule stipulates that the City must demonstrate whether an amendment to the comprehensive plan and zoning map would have a significant effect on the transportation system. If the analysis demonstrates that a significant effect would occur, then the City must either deny the application or require mitigation to offset the traffic impact. For this application, the City has the authority to determine whether there is a significant effect on City streets (SE Havlik Drive and SE 2nd Street), while ODOT has the authority to determine whether there is a significant effect on Highway 30.

- Recent amendments to the Transportation Planning Rule and the Oregon Highway Plan have introduced complexities into the analysis and interpretation of transportation impacts. City staff coordinated with the applicant, the applicant's transportation engineer, and ODOT staff to resolve questions about the transportation impacts that could be expected if the City were to approve the application.

- According to the original calculations provided by the applicant's transportation engineer based on initial guidance from ODOT (**Exhibit 2G**), development of the site with a manufactured home park under the current comprehensive plan and zoning designations would generate on the order of 100 average daily trips, with 9 of them during the morning peak hour and 12 during the evening peak hour. If the site were instead developed with 30 multi-family housing units as allowed under current zoning, then the site would generate on the order of 200 average daily trips, with 15 of them during the morning peak hour and 19 during the evening peak hour (**Exhibit 9**). The worst case scenario is used for the purposes of the Transportation Planning Rule analysis.

- Under the proposed comprehensive plan and zoning designations, if the site were developed with a 30,000-square foot shopping center, it would generate on the order of 1,288 average daily trips, with 30 of them during the morning peak hour and 112 during the evening peak hour (**Exhibit 2G**). Since the net increase in evening peak hour trips is only about 100 trips, the impact on operations of SE 2nd Street and SE Havlik Drive would be negligible.

- ODOT performed a traffic study (**Exhibit 10**) to analyze the worst case scenario for traffic under the proposed zoning to supplement the applicant's original study. This study noted that allowing the zone change could potentially create a significant effect on the Havlik Drive/Highway 30 intersection. In order to avoid a significant effect, ODOT recommends that the City impose a "trip cap" (a limit on traffic from the site) to be consistent with the state Transportation Planning Rule and the Oregon Highway Plan (**Exhibit 8**). Traffic to and from the site would be limited to 1,311 daily trips, which is estimated to increase traffic through the Havlik Drive/Highway 30 intersection by no more than 1,000 trips per day. In order to develop the site, the property owner would need to select a mix of land uses that would not generate more trips than allowed by the trip cap.

PUBLIC UTILITY CONSIDERATIONS

- The site has public utilities available to serve the site. Twelve-inch water mains are located in SE 2nd Street and Havlik Drive, and both parcels have access to sewer stubs at the northern end of the properties. Storm drainage infrastructure is also available to the parcels, draining eventually to the wetlands east of SE 6th Street. The City's water and wastewater treatment plants have adequate capacity to serve the site, whether residential or commercial. The City Engineer has concluded that the proposed amendment should not affect the potable water, sanitary sewer, storm drainage or transportation system from the perspective of service provided by the City.

PUBLIC & PRIVATE AGENCIES AND PUBLIC NOTICE

- The City of Scappoose City Manager, Engineering, Building, and Police Departments; Scappoose Rural Fire Protection District; the Oregon Department of Transportation (Region 2); and Oregon Department of Land Conservation and Development have been provided an opportunity to review the proposal. Comments from these organizations have been incorporated into this staff report.

- Notice of this request was mailed to property owners located within 200 feet of the subject site on March 29, 2012. Notice was also posted on the property on March 29 and published in the local newspaper on March 28 and April 4, 2012. The City has received no written comments from the public regarding this application.

APPLICABILITY OF STATEWIDE PLANNING GOALS

A number of Oregon's 19 Statewide Planning Goals and Guidelines apply to this application, as discussed in the *Findings of Fact.*

FINDINGS OF FACT

1. The following Statewide Planning Goals have been considered by the City of Scappoose as they pertain to this request:

A. Citizen Involvement (Goal 1)

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

Finding:

The City's acknowledged Comprehensive Plan & Development Code includes citizen involvement procedures with which the review of this application complies. This process allows for citizens to communicate their input into the comprehensive plan map and zoning map amendment review conducted by the City at public hearings or by submitting written comments. The Planning Commission reviewed the proposed comprehensive plan and zoning map amendment and recommended that the City Council approve the application. Within the comprehensive plan map amendment and zone change process,

the Applicant is required to post site notices, the City mails notices to nearby property owners, notice is published in the newspaper, and public hearings are held. The City mailed notice in advance of the hearings. For this application, the Planning Commission held a hearing on April 12, 2012 and the City Council will hold a hearing on May 7, 2012. This process complies with the Goal.

B. Land Use Planning (Goal 2)

Objective: *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.*

Finding:
The procedural requirements for the proposed comprehensive plan map amendment and zone change involve assessment of the application's merits, notice to affected parties, and public hearings. The proposal is to change the planning and zoning designations of urban land within the Urban Growth Boundary in compliance with Goal 2. Notice of the proposed comprehensive plan and zoning map amendment has been provided to the Oregon Department of Land Conservation and Development (DLCD) as required. DLCD staff has not commented on the proposal. Oregon Department of Transportation staff has also been provided the opportunity to comment and have submitted the documents attached as **Exhibits 7, 8, and 10**. The City's decision is based on findings of fact.

C. Agricultural Lands (Goal 3)

Objective: *To preserve and maintain agricultural lands.*

Finding:
This Goal is not applicable because the site is within the City of Scappoose Urban Growth Boundary and no identified agricultural resources are located on site.

D. Forest Lands (Goal 4)

Objective: *To conserve forest lands by maintaining the forest land base and to protect the state's forest economy by making possible economically efficient forest practices that assure the continuous growing and harvesting of forest tree species as the leading use on forest land consistent with sound management of soil, air, water, and fish and wildlife resources and to provide for recreational opportunities and agriculture.*

Finding:
This Goal is not applicable because the site is within the City of Scappoose Urban Growth Boundary and City Limits and no identified forest resources are located on site.

E. Open Spaces, Scenic and Historic Areas and Natural Resources (Goal 5)

Objective: *To protect natural resources and conserve scenic and historic areas and open spaces.*

Finding:
There are no identified Goal 5 resources on or near the site. The subject site is not designated as open space, a scenic or historic area, or a natural resource area by the City and does not contain any known significant open space, scenic, historic, or natural resources. The proposed comprehensive plan amendment and zone change is not in conflict with this Goal.

F. Air, Water and Land Resources Quality (Goal 6)

Objective: *To maintain and improve the quality of the air, water and land resources of the state.*

Finding:
The site is currently designated for residential use and is subject to City regulations that do not allow off-site impacts from noise, vibration, odors, glare, or other "nuisance" effects. For this reason, the potential harmful effects on air, water and land resource quality is already limited. Generally, residential development and small-scale commercial development is considered to produce relatively small impacts on environmental quality factors. The proposal to amend the comprehensive plan and zoning boundary to increase the commercial area by 3.26 acres would therefore have no significant impact with respect to this Goal.

G. Areas Subject to Natural Disasters and Hazards (Goal 7)

Objective: *To protect people and property from natural hazards.*

Finding:
The site is not within a mapped flood hazard area, mapped potential landslide hazard, or earthquake hazard area. The proposed comprehensive plan amendment and zone change is not in conflict with this Goal.

H. Recreational Needs (Goal 8)

Objective: *To satisfy the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.*

Finding:
The parcels are presently designated for commercial and residential development on the Comprehensive Plan and has not been planned for recreational opportunities. Since the property is not identified for recreational use, the proposed comprehensive plan map

amendment and zone change would have no significant impact on the City's planning for recreational needs.

I. Economic Development (Goal 9)

Objective: *To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens.*

Finding:
As discussed in the applicant's narrative (**Exhibit 2A**), the proposed comprehensive plan map amendment and zone change would increase the amount of land available for economic development. Currently, commercial development on Tax Lot 203 is constrained due to the zoning boundary which leaves the eastern third residentially zoned and unavailable for commercial use. Tax Lot 100 is nearly three acres which could be put to productive economic use, and sits on a street that has seen considerable commercial development within the past year since SE Havlik Drive and SE 2nd Street were opened to traffic.

The proposal has the potential to convert vacant land into commercial usage, consistent with the existing zoning on the western portion of Tax Lot 203 and with the predominant development on SE 2nd Street. This development would increase the number of jobs available to the community. Therefore, the proposed amendment is supportive of this Goal.

J. Housing (Goal 10)

Objective: *To provide for the housing needs of citizens of the state.*

Finding:
Although the eastern portion of Tax Lot 203 is planned for residential use and zoned Manufactured Housing, the dimensions of the residential portion severely restrict its development potential for housing. Under the existing zoning, one duplex and one triplex could be constructed and meet the minimum lot sizes if that portion of the parcel were partitioned. However, this location is not ideal for quiet enjoyment of the property: the residences would be exposed to considerable traffic levels on Havlik Drive and 2nd Street. Tax Lot 100 could be developed with a manufactured home park that could accommodate 23 units (**Exhibit 2A**, page 9) based on an average density of 8 units per acre as stated in the Comprehensive Plan. Staff's computations revealed that the site could instead be developed with up to 30 multi-family units. Approval of the application would therefore lead to a combined reduction of up to 35 dwelling units and one of the only undeveloped manufactured home park sites within City Limits. The applicant argues that multi-family housing could be built in commercial zones, and there is the potential for second-floor dwelling units over a commercial development within the Expanded Commercial zone; however, the City may not rely on this possibility since the applicant could build

anything allowed under the zoning rules. Nevertheless, since there is undeveloped residential land within the City Limits and the urban growth boundary, the City concludes that the reduction of up to 35 dwelling units would not be a significant impact and the proposed amendment would not conflict with this Goal.

K. Public Facilities and Services (Goal 11)

Objective: *To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.*

Finding:
The subject property lies within City Limits and has public utilities available to serve the site. Twelve-inch water mains are located in SE 2nd Street and Havlik Drive, and both parcels have access to sewer stubs at the northern end of the properties. Storm drainage infrastructure is also available to the parcels, draining eventually to the wetlands east of SE 6th Street. The City's water and wastewater treatment plants have adequate capacity to serve the site, whether residential or commercial. The proposed amendment is consistent with this Goal.

L. Transportation (Goal 12)

Objective: *To provide and encourage a safe, convenient and economic transportation system.*

Finding:
This Goal requires the City to prepare and implement a Transportation System Plan (TSP). The Scappoose TSP assumed that the portions of parcels in question would be developed under the City's Manufactured Home Comprehensive Plan and Manufactured Housing Residential Zoning designations. Since the proposed application would change these assumptions, further transportation analysis is necessary. Multiple documents pertaining to transportation impact are attached as **Exhibits 2G and 7-10**.

The TSP classifies SE 2nd Street as a Minor Collector, while SE Havlik Drive is classified as a Major Collector. Both streets are fully improved with two travel lanes, turn lanes, bicycle lanes, and sidewalks, and were designed to accommodate the mix of commercial and residential uses envisioned in the Comprehensive Plan (**Exhibit 3**). Conversion of 3.26 acres from MH zoning to EC zoning would not impair the operation of 2nd Street or Havlik Drive due to their generous lane widths and accommodation of multiple modes of travel.

According to the original calculations provided by the applicant's transportation engineer (**Exhibit 2G**), development of the site with a manufactured home park under the current comprehensive plan and zoning designations would generate on the order of 100 average daily trips, with 9 of them during the morning peak hour and 12 during the evening peak

hour. If the site were instead developed with 30 multi-family housing units as allowed under current zoning, then the site would generate on the order of 200 average daily trips, with 15 of them during the morning peak hour and 19 during the evening peak hour (**Exhibit 9**). The worst case scenario is used for the purposes of the Transportation Planning Rule analysis.

Under the proposed comprehensive plan and zoning designations, if the site were developed with a 30,000-square foot shopping center, it would generate on the order of 1,288 average daily trips, with 30 of them during the morning peak hour and 112 during the evening peak hour (**Exhibit 2G**). Since the net increase in evening peak hour trips is only about 100 trips, the impact on operations of SE 2nd Street and SE Havlik Drive would be negligible.

ODOT performed a supplemental traffic study to analyze the worst case scenario for traffic under the proposed zoning in accordance with their standard methodologies (**Exhibit 10**). This study noted that allowing the zone change could potentially increase traffic through the Havlik Drive/Highway 30 intersection to such a point that it imposed a significant effect during the evening peak hour (particularly since the EC zone allows a variety of intensive uses) by further degrading the volume-to-capacity ratio from a value of 1.04 to 1.07. In order to avoid a significant effect, ODOT recommends that the City impose a "trip cap" (a limit on traffic from the site) to be consistent with the state Transportation Planning Rule and the Oregon Highway Plan (**Exhibit 8**). Traffic to and from the site would be limited to 1,311 daily trips, which is estimated to increase traffic through the Havlik Drive/Highway 30 intersection by no more than 1,000 trips per day. In order to develop the site, the property owner would need to select a mix of land uses that would not generate more trips than allowed by the trip cap.

If future development proposals deviated from the assumptions contained in the traffic study and were anticipated to generate higher traffic levels, then the City may require a new traffic study and further analysis of transportation impacts and to determine any improvements required to protect health and safety and ensure efficient traffic circulation.

The applicant's engineers also compared the projected traffic levels to the estimates contained in the 2004 study that was performed for the design of Havlik Drive, concluding that if this application were approved, the traffic levels would be on the same order of magnitude as those computed in 2004 (**Exhibit 2G**, page 15).

Additional findings are found in Findings of Fact #2, Transportation Planning Rule.

M. Energy Conservation (Goal 13)

Objective: *To conserve energy.*

1. Land use plans should be based on utilization of the following techniques and implementation devices which can have a material impact on energy efficiency:
a. Lot size, dimension, and siting controls;
b. Building height, bulk and surface area;
c. Density of uses, particularly those which relate to housing densities;
d. Availability of light, wind and air;
e. Compatibility of and competition between competing land use activities; and
f. Systems and incentives for the collection, reuse and recycling of metallic and nonmetallic waste.

Finding:
The subject property is at a desirable location for commercial or residential development because its location is close to the shopping and services available on SE 2nd Street and SW Havlik Drive. This reduces the need for automobile travel and supports alternative transportation modes (walking, cycling) that are more energy efficient. The applicant's proposal would increase the likelihood of commercial development in close proximity to other commercial sites, potentially leading to trip sharing and/or carpooling, thereby reducing the number of vehicles on the road and increasing energy efficiency. The proposed comprehensive plan map amendment and zone change would permit development with the potential to create an energy-efficient land use pattern within the City's Urban Growth Boundary.

N. Urbanization (Goal 14)

Objective: *To provide for an orderly and efficient transition from rural to urban land use.*

Finding:
The subject property is at a central location within the Urban Growth Boundary and no expansion of the Urban Growth Boundary is proposed. The proposed comprehensive plan map amendment and zone change would not affect the City's Goal 14 compliance.

O. Other Goals

Finding:
The following goals are not applicable to this application:

- Willamette River Greenway (Goal 15)
- Estuarine Resources (Goal 16)
- Coastal Shorelands (Goal 17)
- Beaches and Dunes (Goal 18)
- Ocean Resources (Goal 19)

2. The following Administrative Rule has been considered by the City of Scappoose as they pertain to this request:

TRANSPORTATION PLANNING RULE
OAR 660 Division 12 – Transportation Planning:

660-012-0060 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) Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to, transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.
(A) Types or levels of travel or access 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 such that it would not meet the performance standards identified in the TSP or comprehensive plan; or
(C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.

(2) If a local government determines that there would be a significant effect, then the local government must ensure that allowed land uses are consistent with the identified function, capacity, and performance standards of the facility measured at the end of the planning period identified in the adopted TSP through one or a combination of the remedies listed…below….

(a) Adopting measures that demonstrate allowed land uses are consistent with the planned function, capacity, and performance standards of the transportation facility.
[…]
(d) Providing other measures as a condition of development or through a development agreement or similar funding method, including, but not limited to, transportation system management measures or minor transportation improvements. Local governments shall, as part of the amendment, specify when measures or improvements provided pursuant to this subsection will be provided.

Finding:
Analysis of the transportation impacts from the proposed comprehensive plan map amendment and zone change can be divided into four subtopics:

1. Traffic likely to be generated from development;
2. Impact of development-generated traffic on local street segments;
3. Impact of development-generated traffic on affected intersections; and
4. Transportation impact conclusions.

It has been assumed by the City and by ODOT that since the majority of Tax Lot 203 is already zoned EC, the critical area to examine for traffic impacts is Tax Lot 100.

1. Traffic likely to be generated from development

The proposed comprehensive plan map amendment and zone change would result in a more intense development than the current plan and zone boundaries permit. The applicant's traffic analysis (**Exhibit 2G**) anticipated that the proposal could be anticipated to have an increase of approximately 100 evening peak hour trips if the site were developed with a 30,000 square foot shopping center. Correspondence from ODOT indicates their assumption that the actual development may be more intense (**Exhibits 7 and 8**). Based on provisions of the Transportation Planning Rule and the Oregon Highway Plan, a significant effect could be avoided by limiting traffic to an increase of no more than 1,000 trips through the Havlik Drive/Highway 30 intersection (**Exhibit 7**). Based on the working assumption that 90% of the trips to the site would pass through the intersection, plus the 200 trips anticipated from the existing MH zoning, then up to 1,311 trips would be allowed from the site without significantly affecting the Havlik Drive/Highway 30 intersection (**Exhibit 9**).

2. Impact of development-generated traffic on local street segments

Traffic to and from the site will utilize SE 2nd Street, connecting either northward or southward to adjoining streets. Connections to Highway 30 would be made at SE Havlik Drive. Both SE 2nd Street and SE Havlik Drive were recently fully improved to collector standards to accommodate growth in the southeast area of the City. Assuming that the site were developed to the maximum extent under the limit of 1,311 allowable daily trips, this traffic could be absorbed on 2nd Street and Havlik Drive due to their lane widths, center turn lane on 2nd Street, dedicated turn lanes on Havlik Drive, and bicycle lanes on both streets.

This proposal does not "significantly affect" the impacted street segments (as defined by the Transportation Planning Rule) because the functional classification of SE 2nd Street and SE Havlik Drive as a Minor Collector and Major Collector, respectively, would not be changed as a result of the proposed comprehensive plan map amendment and zone change. The affected street segments appear to have adequate capacity to accommodate large volumes of traffic.

3. Impact of development-generated traffic on affected intersections

Traffic from development would utilize the intersection of SE 2nd Street and SE Frederick Street and the intersection of SE 2nd Street and SE Havlik Drive. The intersection of SE 2nd Street and SE Frederick Street is stop-controlled and the intersection of SE 2nd Street and SE Havlik Drive is a 90-degree turn with no controls. It is not anticipated that additional traffic from development of the site would cause these intersections to fall below the City's standards requiring a Level of Service "E" or better for the minor approach at unsignalized intersections. The proposed application does not "significantly affect" these intersections as defined by the Transportation Planning Rule.

Traffic from development would also use the intersection of Havlik Drive and Highway 30, which is the primary focus of the traffic analysis (**Exhibits 2G and 7-10**). ODOT's computations focused on the morning peak hour and evening peak hour traffic data for this location and projected the traffic levels for the year 2026, comparing the results attributable to the proposed zone change to the results that could be expected by general increases in traffic due to population growth (**Exhibit 10**). If no trip cap were imposed, this analysis indicated that the volume-to-capacity (v/c) ratio would be 0.90 in the morning peak hour in the year 2026 under either the existing MH zoning or the proposed EC zoning, and that the v/c ratio would increase from 1.04 to 1.07 in the evening peak hour if the zone change were approved. The Oregon Highway Plan allows an increase in traffic of up to 1,000 daily trips through the Highway 30/Havlik Drive intersection without leading to a determination of a significant effect.

4. Transportation impact conclusions

ODOT has assigned the intersection of Highway 30 and Havlik Drive a mobility target of a volume-to-capacity ratio of 0.80. The intersection is projected to exceed this threshold by the year 2026 (**Exhibit 10**). If the application were approved with no limitations, the development would degrade the operation of the intersection, leading to a significant effect requiring mitigation (**Exhibit 7**). In light of the intersection constraints, mitigation would be difficult to achieve so ODOT staff has indicated that a significant effect could be avoided by limiting development of the property such that the number of average daily trips would not increase by more than 1,000. This limit would be consistent with Oregon Highway Plan Policy 1F.5, which indicates that small increases in traffic are acceptable and defines a small increase on a 5-lane highway (such as Highway 30) as fewer than 1,001 additional trips. Further analysis indicates that allowing up to 1,311 trips from the site (**Exhibit 9**) would not increase traffic through the Havlik Drive/Highway 30 intersection by more than 1,000 trips. ODOT found this approach acceptable (**Exhibits 8 and 10**).

As spelled out by Section 5.0013 of the Scappoose Public Works Design Standards, specific development proposals may trigger the requirement for traffic analysis reports identifying projected trip generation levels, recommendations for public improvements, and access management. Any mitigation strategies prompted by the results of the traffic analysis reports would be installed as conditions of development.

3. The following Goals and Policies from the Scappoose Comprehensive Plan are applicable to this request:

GOAL FOR ECONOMICS
It is the goal of the City of Scappoose to:

1) Maintain conditions favorable for a growing, healthy, stable, and diversified business and industrial climate.

2) Establish greater local control over the density of local economic development.

POLICIES FOR ECONOMICS
It is the policy of the City of Scappoose to:

1) Make sufficient land available for the anticipated expansion of commercial and industrial activities.

Finding:
Tax Lot 203 has been designated for Commercial and Manufactured Home development and Tax Lot 100 has been designated for Manufactured Home development. The development potential of Tax Lot 203 is constrained by its dual zoning designations and would be more likely to see commercial development if it were uniformly zoned. Given the nearby commercial development, Tax Lot 100 may be more appropriate for a commercial project than as a manufactured home park. The supporting evidence contained in the narrative (**Exhibit 2A**) suggests that enlarging the commercial area would lead to additional development on 2nd Street. Recent development on SE 2nd Street indicates a market demand for larger commercial sites not available elsewhere in the City.

2) Encourage the preservation, improvement and renewal of the existing business district of the City so that it will be allowed to play a role as a center of economic and civic activity for the entire community.

Finding:
The subject site is located on SE 2nd Street adjacent to existing commercial development. The applicant's proposal could lead to commercial development of the site to complement the existing businesses and further the implementation of the City's vision for economic development.

3) Encourage the filling of vacancies in the present commercial strips.

Finding:
The applicant's proposal would result in an enlarged commercially-zoned portion of Tax Lot 203 which would then provide sufficient land for development. Currently, the existing vacant land on Tax Lot 203 has insufficient depth zoned for efficient commercial

uses and as a result sits vacant. Tax Lot 100 is across the street from commercial uses and also sits vacant.

4) Encourage the expansion of employment opportunities within the urban area, so residents can work within their community as well as commute to jobs outside the County.

Finding:
The proposal would increase the supply of developable area, leading to commercial development that would provide additional jobs for members of the community. The site is currently partially zoned for commercial use and the applicant requests redesignating the entire site as commercial.

GENERAL GOALS OF THE CITY OF SCAPPOOSE FOR LAND USES

1) The growth of the City should be orderly and in accordance with the public health, safety and welfare, while preserving individual choice and recognizing existing patterns of development.

Finding:
A current assessment of the area indicates that the existing Comprehensive Plan boundary between the Commercial and Manufactured Home districts follows a straight line that coincides with the eastern edge of the 2nd Street right-of-way north of the site (see **Exhibit 3**). This boundary was selected prior to the final design and development of SE 2nd Street, which now has a curved alignment. The split zoning on Tax Lot 203 does not reflect the changed conditions. The application also requests a Commercial designation on Tax Lot 100, which would be complementary to the assisted living center/senior cottages, the City's pool property, and nearby commercial development. The applicant's narrative (**Exhibit 2A**) observes that the Expanded Commercial zone provides flexibility by allowing both commercial and multi-family residential uses. The proposed amendment is supportive of this Goal.

3) A suitable balance between competing land use should be established so that, insofar as possible, the complete range of social, economic, cultural, and aesthetic needs of the community are met.

Finding:
The applicant proposes that a more suitable land use balance on this street would enlarge the commercial component of the site and reduce the residential component. There are multiple residential areas in the City, though only two other general areas in the urban growth boundary with sites large enough to accommodate a manufactured home park (see **Exhibit 2A**, pp. 13-14).

6) Residential living areas should be safe, attractive, and convenient, and should make a positive contribution to the quality of life and personal satisfaction of the

residents; additionally, there should be sufficient areas for a wide range of housing choices.

Finding:
The existing residentially-designated portion of Tax Lot 203 would support two single-family residences or one triplex and one duplex, though they would be wedged between two collector streets and commercial uses (a tire store and a restaurant). Eliminating residential development on Tax Lot 203 is consistent with the Goal to provide attractive living areas. Tax Lot 100 is one of the last vacant sites zoned for manufactured home parks within the City; however, it is questionable whether SE 2nd Street is the best environment for a manufactured home park due to the traffic levels, the small site size, and the shape of the parcel which may not be conducive to efficient development. The proposed comprehensive plan and zoning map amendment is supportive of this Goal.

7) Commercial areas should provide maximum service to the public and should be safely integrated into the physical pattern of the street.

Finding:
The existing commercial plan designation on Tax Lot 203 anticipates commercial development of the site, yet there may be inadequate land area designated for commercial use due to the split zoning. The proposed application would enlarge the commercial area to allow development on the site. Tax Lot 100 abuts commercial type uses such as the assisted living facility/senior cottages and the City's pool property.

13) A safe and convenient transportation system should be developed to meet future needs.

Finding:
SE 2nd Street and SE Havlik Drive were both recently fully improved with turn lanes, bicycle lanes, and sidewalks to accommodate buildout of the abutting properties, including this site. The proposed amendment is consistent with this Goal.

15) Housing that meets the local residents' basic needs should be promoted.

Finding:
As previously discussed, the requested plan amendment would result in a potential reduction of up to 35 dwelling units. Limiting residential development in this location is consistent with the Goal to meet residents' needs due to the traffic levels and commercial uses on 2nd Street. The proposed comprehensive plan and zoning map amendment is supportive of this Goal.

GOAL FOR THE COMMERCIAL LAND USE DESIGNATION

It is the goal of the City of Scappoose to:

1) Establish commercial areas which provide maximum service to the public and which are safely integrated into the physical pattern of the City.

POLICIES FOR THE COMMERCIAL LAND USE DESIGNATION

1) Make sufficient land available for the anticipated expansion of commercial and industrial activities.

4) Locate business activities in clusters for the convenience of the public to be served rather than scattered or mixed with non-commercial land uses.

Finding:
Tax Lot 203 is constrained by its dual Comprehensive Plan and Zoning designations. Amending the maps to allow full commercial development would remedy a mapping discrepancy and allow for commercial development on the full parcel. As evidenced by recent construction of the Goodwill, Les Schwab, and Fultano's Pizza in the last year since SE Havlik Drive and SE 2nd Street opened, this area is attractive and appropriate for commercial development. Converting Tax Lot 100 from the MH zone to the EC zone would allow continued economic development on a fully-improved street. The applicant's proposal would further the goals and policies listed above by expanding an existing commercial area and leading to future building on vacant land.

GOAL FOR TRANSPORTATION
[…]
8) To assure that roads have the capacity for expansion and extension to meet future demands.

Finding:
According to calculations provided by the applicant (**Exhibit 2G**), the current plan designation would generate up to 12 total PM peak hour trips, while the proposed plan designation would generate up to 112 total PM peak hour trips. In the AM peak hour, 9 trips would be generated for the current scenario and 30 trips would be generated for the proposed scenario. On a daily count, the current plan would generate up to 100 daily trips and the proposed plan would generate up to 1,288 daily trips. Some of these trips would be locally generated and would not result in further traffic on Highway 30. The traffic study demonstrated that re-designating the land would result in traffic levels that would have a limited overall impact on the surrounding roadways, leaving both the Level of Service and the volume-to-capacity ratio unchanged for the intersection of Highway 30 and Havlik Drive. ODOT staff has submitted a letter indicating that they do not agree with the original traffic report (**Exhibit 7**). Further analysis (**Exhibits 8-10**) demonstrates than an increase in fewer than 1,000 trips per day through the Havlik Drive/Highway 30 intersection would not cause a significant effect.

GOAL FOR PUBLIC FACILITIES AND SERVICES

1) Provide the public facilities and services which are necessary for the well being of the community and which help guide development into conformance with the Comprehensive Plan.

2) Direct public facilities and services, particularly water and sewer systems, into the urban growth area.

POLICIES FOR PUBLIC FACILITIES AND SERVICES

1) Design urban facilities and services, particularly water and sewer systems, to eventually serve the designated urban growth area; also, ensure that services are provided to sufficient vacant property to meet anticipated growth needs; also, develop a design review process to insure that public services and facilities do not unreasonably degrade significant fish and wildlife habitats.

Finding:
The public facility requirements of future development of the site would not be appreciably impacted by the proposed comprehensive plan amendment. The existing public infrastructure on adjoining streets have been sized to accommodate development of this site and surrounding properties. Any upgrades necessitated by development would be installed at the developer's expense. The City Engineer stated that the proposed amendment should not affect the potable water, sanitary sewer, storm drainage or transportation system from the perspective of service provided by the City. The applicable goals and policies for public facilities are satisfied.

GOAL FOR HOUSING

1) Increase the quantity and quality of housing for all citizens.

2) Locate housing so that it is fully integrated with land use, transportation and public facilities.

4) Protect residential areas from conflicting land uses, unnecessary through traffic, or other undesirable influences.

POLICIES FOR HOUSING

It is the policy of the City of Scappoose to:

6) Permit Manufactured Homes only in Manufactured Home parks and subdivisions within the City limits; they shall be developed so that they conform to the following general conditions:
A. They should not unduly interfere with an established well maintained single family neighborhood.

B. They should include ample open space or recreational facilities for their residents as well as ample off-street parking and adequate access.
C. They should not adversely affect the design capacities of the sewer, water, drainage or street systems as determined by the City Engineer.

Finding:
The applicant proposes to decrease the amount of land zoned MH by approximately 3.26 acres, which would have the net effect of decreasing by 35 the total number of dwelling units that could be constructed. However, it is questionable whether the site is sufficiently large to provide adequate open space or recreational facilities, and the shape of Tax Lot 100 may restrict the ability to efficiently design a manufactured home park. Allowing for uses other than housing on 2nd Street furthers the City's goals of providing safe housing locations for its residents and limiting undesirable influences such as the traffic levels on 2nd Street. It should be noted that the Expanded Commercial zone does allow high-density residential uses, so there is the possibility that the net reduction in dwelling units would be less than 35. The applicant's narrative (**Exhibit 2A**) suggests there could be a net increase in housing if multi-family units were constructed; however, the City may not rely on these statements since any of the allowable uses in the EC zone could be built. The Development Code would require appropriate screening between any future commercial parking lots on site and adjoining residential development. The applicable goals and policies for housing are satisfied.

GOAL FOR THE MANUFACTURED HOME RESIDENTIAL LAND USE DESIGNATION

It is the goal of the City of Scappoose to:

1) Provide conditions suitable for concentrations of people living in Manufactured Homes, multi-family dwellings, or subdivisions, and in areas which have a wide range of public services or where they can be made easily available.

POLICIES FOR THE MANUFACTURED HOME RESIDENTIAL LAND USE DESIGNATION

4) Ensure that Manufactured Home park developments allot open space or recreation opportunities for the residents.

5) Encourage the siting of Manufactured Homes in planned environments.

Finding:
The entire area south of Frederick Drive and east of SE 2nd Street has been designated Manufactured Home (MH) on the Comprehensive Plan map (**Exhibit 3**). Most of this area was developed with the Springlake Manufactured Home park. The parcels abutting the east side of 2nd Street have been developed with the assisted living facility/senior cottages and the City has purchased one parcel south of this site for future construction of a pool. The applicant has proposed eliminating the MH portion of Tax Lot 203 to rectify

a mapping discrepancy left over from the realignment of 2nd Street and to reclassify all of Tax Lot 100 as commercial to encourage economic development. Tax Lot 100 may be too small to construct a manufactured home park with adequate open space.

4. The following sections of Title 17 of the Scappoose Municipal Code (Scappoose Development Code) are applicable to this request:

Chapter 17.22 AMENDMENTS TO THE TITLE, COMPREHENSIVE PLAN, AND MAPS
17.22.010 Purpose. The purpose of this chapter is to set forth the standards and purposes governing legislative and quasi-judicial amendments to this title, the acknowledged comprehensive plan, and the related maps.

17.22.030 Quasi--judicial amendments. Quasi-judicial amendments shall be in accordance with the procedures set forth in Chapter 17.162 and the following:
A. The commission shall make a recommendation to the Council to approve, approve with conditions or deny an application for a quasi-judicial comprehensive plan map amendment or zone changes based on the following:
1. The applicable comprehensive plan policies and map designation;
2. The change will not adversely affect the health, safety and welfare of the community;
3. The applicable standards of this title or other applicable implementing ordinances; and
4. Evidence of change in the neighborhood or community or a mistake or inconsistency with the comprehensive plan or zoning map as it relates to the subject property.
B. The council shall decide the applications on the record.
C. A quasi-judicial application may be approved, approved with conditions or denied.

Finding:
1. THE APPLICABLE COMPREHENSIVE PLAN POLICIES AND MAP DESIGNATION

The proposed comprehensive plan map amendment and zone change would shift the existing plan and zone boundary eastward, increasing the size of developable commercial land on one parcel that is currently split-zoned (Tax Lot 203) and converting one parcel from residential to commercial (Tax Lot 100). The request is consistent with applicable Comprehensive Plan polices and zoning map designations as previously discussed. The change would permit compatible commercial development near existing commercial and residential uses.

2. THE CHANGE WILL NOT ADVERSELY AFFECT THE HEALTH, SAFETY AND WELFARE OF THE COMMUNITY

For Tax Lot 203, the applicant's proposal would eliminate the current ambiguity of the boundary between two abutting comprehensive plan designations. In its current form, this specific site is not conducive to commercial use due to the limited portion of the site that is planned and zoned for commercial development. The sliver of MH land is not well suited for residential development due to its narrow shape and adjoining collector streets.

The proposed realignment of the boundary would foster economic development consistent with the City's overall plan for SE 2nd Street. For Tax Lot 100, the amendment would convert the property from manufactured home to commercial zoning, which is complementary to nearby properties. The standards of the Development Code ensure that future commercial development does not have negative off-site impacts.

Based on the evidence provided by the applicant and the findings outlined above, the City can conclude that the proposal would not adversely affect health, safety, and welfare.

3. THE APPLICABLE STANDARDS OF THIS TITLE OR OTHER APPLICABLE IMPLEMENTING ORDINANCES

The proposed map amendment and zone change are policy decisions subject to guidance by the full policy framework established by the Oregon Statewide Land Use Planning Goals and associated Oregon Administrative Rules (OAR), and by the Scappoose Comprehensive Plan and Development Code. Full discussion of the applicable standards is found in this staff report. The analysis demonstrates consistency and compliance with all applicable approval standards.

4. EVIDENCE OF CHANGE IN THE NEIGHBORHOOD OR COMMUNITY OR A MISTAKE OR INCONSISTENCY WITH THE COMPREHENSIVE PLAN OR ZONING MAP AS IT RELATES TO THE SUBJECT PROPERTY

This approval standard is perhaps the most relevant consideration in regards to the application. The rationale for the amendment differs for each of the two parcels.

As illustrated on **Exhibits 3 and 5**, Tax Lot 203 currently has two zoning designations and two plan designations. This parcel is the only place on the Comprehensive Plan map that is partially designated Commercial and partially designated Manufactured Home, and this designation occurs not so much through a deliberative policy choice but rather due to the realignment of SE 2nd Street to accommodate proper slopes on Havlik Drive. Prior to 2006, the right-of-way for SE 2nd Street was a straight line, with a Commercial designation to its west and a Manufactured Home designation to its east. When the roadway was realigned for traffic engineering reasons, the need arose to adjust the plan and zone boundaries. This arbitrary plan boundary was an inconsistency and mistake that has been in place since the roadway was realigned but which has not been addressed until this time. This inconsistency can be redressed by amending the maps to eliminate the dual designations.

In the case of Tax Lot 100, the justification rests more on the changing landscape of economic development within the City. SE 2nd Street has developed rapidly within the last year, and increasing the amount of land available for commercial development yields a corresponding increase in economic development opportunity. The applicant's narrative (**Exhibit 2A**) notes that the MH area between Springlake Manufactured Home park and

2nd Street has been underutilized for additional manufactured home parks. Rather, these parcels have developed or been planned for commercial type uses (assisted living center/senior cottages and the City pool) that are conditional uses in the MH zone and outright permitted uses in the EC zone. The applicant's narrative states the following:

> The applicant proposes that the subject property be developed with a use more in line with that of the surrounding properties and feels that the design of the southern portion of 2nd Street, on which the property is located, lends itself to commercial development much more than residential. The applicant respectively suggests that this presents adequate evidence of a change in the neighborhood or community and therefore is consistent with this section of the Scappoose Municipal Code.

The City Council is strongly in support of economic development and the increase in available land for commercial uses is viewed as a positive change for the community.

Chapter 17.68 EC EXPANDED COMMERCIAL

17.68.030 Permitted uses. In the expanded commercial zone, except as specifically stated, activities shall be conducted within an enclosed building or structure and are subject to site development review, Chapter 17.120, Site Development Review. Only the following uses and their accessory uses are permitted outright:

A. Agricultural sales;

B. Automotive and equipment:

1. Repairs provided that a five-foot landscaped perimeter setback surround all outdoor parking and storage areas and all repair work is performed indoors;

2. Sales/rental/storage of farm equipment, automobiles, recreational vehicles, boats or light equipment, provided that a five-foot landscaped perimeter setback surrounds all outdoor parking and all storage areas are buffered and screened in accordance with Chapter 17.100, Landscaping, Screening and Fencing.

C. Building materials sales and storage;

D. Building maintenance services;

E. Business equipment sales and services;

F. Church;

G. Commercial amusement facilities including bowling alleys, video arcades, and movie theaters other than adult motion picture theaters;

H. Communication services;

I. Construction sales and services;

J. Day care facility;

K. Dwelling units located on the second floor of a commercial structure;

L. Eating and drinking establishments;

M. Equipment rental and sales;

N. Financial, insurance and real estate services;

O. General retail sales;

P. Home occupation (Type I) subject to Chapter 17.142, Home Occupations;

Q. Laundry services;

R. Medical and dental services;

S. Mini-storage with or without caretaker dwelling;

T. Multifamily dwelling units per A-1 requirements when located at least two hundred feet from Highway 30 and outside of the Scappoose Creek Flood Plain;
U. Packaging and production of finished products from previously prepared materials;
V. Parking facilities:
W. Participation sports and recreation, indoor;
X. Postal services;
Y. Professional and administrative offices;
Z. Public safety services;
AA. Public support facilities;
BB. Recreational vehicle parks subject to Chapter 17.94, Manufactured Home Regulations;
CC. Research services;
DD. Residential care facilities when located at least two hundred feet from Highway 30 and outside of the Scappoose Creek Flood Plain;
EE. Small animal sales and services including veterinary;
FF. Vehicle fuel sales, retail;
GG. Wholesale, storage and distribution;
HH. Hotel/motel;
II. Any permitted use on a temporary basis subject to Scappoose Municipal Code 17.128, Temporary Commercial and Industrial Uses;
JJ. Wireless communications facilities, not to include antenna support structures, subject to the provisions of Chapter 17.93.
KK. Public and private schools including but not limited to charter schools and career schools as defined and regulated by the State of Oregon.

Finding:
As listed above, a variety of uses is permitted in the Expanded Commercial zoning district. The applicant's narrative (**Exhibit 2A**) does not specify a particular use, although multi-family housing or shopping centers are among the possible uses discussed in the narrative and in the traffic study (**Exhibit 2G**). Section 17.68.030 is satisfied.

Chapter 17.54 MH MANUFACTURED HOUSING

17.54.030 Permitted uses.
A. In the MH zone outside of the Scappoose Creek Flood Plain, only the following uses and their accessory uses are permitted outright:
1. Day care home;
2. Duplex;
3. Home occupation (Type I) subject to Chapter 17.142;
4. Manufactured homes on individual lots subject to Section 17.94.030;
5. Manufactured home parks subject to Section 17.94.050;
6. Multifamily up to four units per lot;
7. Public support facilities;
8. Residential care home;
9. Single-family detached residential dwelling units;
10. Sewage pump station;

11. Public park and recreation areas, provided that all building setbacks shall be a minimum of thirty feet from any property line;
12. Accessory Dwelling Units (ADU's) subject to the provisions of Chapter 17.92;
13. A single-family dwelling having a common wall with one other single-family dwelling…

17.54.050 Dimensional requirements. A. The minimum lot area shall be:
1. Six thousand (6,000) square feet for a single-family detached dwelling unit when located outside of the Scappoose Creek Flood Plain;
2. Seven thousand square feet for the first two attached units plus an additional two thousand five hundred square feet for each additional dwelling unit for triplex or fourplex when located outside of the Scappoose Creek Flood Plain;
[…]

Finding:
Under the current zoning, Tax Lot 203 could accommodate two residential parcels that would allow either two single-family residences or one duplex and one triplex. Tax Lot 100 would accommodate a manufactured home park or multifamily housing under current zoning. Approval of the application would eliminate the MH zoning at this site.

Chapter 17.162 PROCEDURES FOR DECISION MAKING--QUASI-JUDICIAL

17.162.090 Approval authority responsibilities. […]
C. The planning commission shall conduct a public hearing in the manner prescribed by this chapter and shall have the authority to approve, approve with conditions, approve with modifications or deny the following development applications:
[…]
2. A quasi-judicial comprehensive plan map amendment except the planning commission's function shall be limited to a recommendation to the council. The commission may transmit their recommendation in any form and a final order need not be formally adopted;
3. A quasi-judicial zoning map amendment shall be decided in the same manner as a quasi-judicial plan amendment; […]

Finding:
The applicant has requested the concurrent review of a comprehensive plan map amendment and a zone change. The Planning Commission recommended that the City Council approve the applicant's request as noted below. Section 17.162.090(C) is satisfied.

RECOMMENDATION
The applicant has proposed to adjust the plan boundary on one parcel (Tax Lot 203) and to change the plan designation on a second parcel (Tax Lot 100). Approval of the amendment would address a unique dual-zoned property by realigning an existing arbitrary boundary between commercial and residential plan districts and would increase the overall amount of land on 2nd Street that could develop with commercial uses. The proposal would have limited

negative effects on the neighborhood and would further the City's goal of economic development.

ODOT staff has stated that transportation analysis indicates there could be a significant effect on the state highway in violation of the Transportation Planning Rule (TPR) if a trip cap were not imposed to limit traffic from the development. As a result, the City should either impose the trip cap or adopt findings to deny the application. In this instance, to further the goal of economic development, staff and the Planning Commission recommend following ODOT's guidance to institute a trip cap to limit the increase in traffic that could occur from the site. This mitigation would satisfy the TPR.

For these reasons, and based on the Findings of Fact and the materials submitted by the applicant, staff and the Planning Commission recommend that the City Council **APPROVE** CPA1-12/ZC1-12, subject to the following conditions:

1. All combined uses on Parcel 1 of Partition Plat 2006-11 (currently identified as Columbia County Tax Lot 3213-DB-00100) shall not generate more than 1,311 total average daily trips unless the applicant applies for and receives land use approval for such an increase from the City. This "trip cap" shall be monitored through development review. Appropriate trip generation information, based on the Institute of Transportation Engineers Trip Generation Manual, will be required prior to City approval of any use of the property to ensure this cap is not exceeded.
2. The applicant shall record a restrictive covenant applicable to the property, in a form acceptable to the City Attorney, in the Columbia County deed records detailing the limitations of the trip cap. The City Attorney's acceptance shall be evidenced by his or her signature on the face of the recorded restrictive covenant, and shall be a condition precedent to the validity of such instrument.
3. The Comprehensive Plan Map Amendment and Zone Change shall become effective on the date that the restrictive covenant has been recorded in the Columbia County deed records. Rosedale Development, LLC shall provide to the City a copy of the recorded restrictive covenant within ten (10) days after the date it has been recorded.

Vicinity Map

Comprehensive Plan Map Amendment CPA1-12 & Zone Change ZC1-12

Location: SE 2nd Street near SE Havlik Drive
Columbia County Assessor Map: 3213-DB-00100 & 3213-DB-00203

SCAPPOOSE GIS

Legend

- Streets
- Taxlots Boundary
- City Limits
- Urban Growth Boundary

N

0 125 250 500 Feet

Exhibit 2A

ROSEDALE PROPERTY

Scappoose, Oregon

Request for

Comprehensive Plan Map Amendment
&
Zoning Map Amendment

Prepared by

Rosedale Development LLC
February 28, 2012

APPLICATION SUMMARY

APPLICANT:	Joseph Scharf Rosedale Development LLC 50776 Dike Rd. – 21A Scappoose, OR 97056 503.319.0119
PROPERTY OWNERS:	Parcel A: Soltero Property Holdings, LLC 33715 SE Barbara Court Scappoose OR 97056 Parcel B: Malen Investments II, LLC 1912 NW 24th Place Portland, OR 97210
SUBJECT PROPERTY:	The subject property is located on Columbia County Assessors Map 3-2-13 DB. A portion of Tax Lot 203 measuring approximately 12,000 square feet of MH zoned land at the NW corner of SE Havlik Drive and SE 2nd Street (Parcel "A"); and all of Tax Lot 100 consisting of 2.89 acres fronting SE 2nd Street (Parcel "B"). These parcels are separated by the SE 2nd Street Right-of-Way. This ROW is included and combined the subject site amounts to approximately 4.2 acres.
LEGAL DESCRIPTION:	All of PARCEL 1 of PARTITION PLAT NO. 2006-11 And Part of PARCEL 3 of PARTITION PLAT NO. 2011-3
REQUESTED APPROVALS:	The requested approvals include: · Comprehensive Plan Amendment from existing MH (Manufactured Housing) to C (Commercial) · Zoning Map Amendment from Manufactured Housing (MH) to Expanded Commercial (EC)

ACKNOWLEDGEMENT:

Applicant acknowledges that a Comprehensive Plan Amendment must precede a zone change. As a Comprehensive Plan Amendment is not subject to the 120 day decision making period required by state law for zone change and permit applications (Section 17.162.021.C.2), the consolidation of proceedings may impact the schedule of the Zoning Map Amendment request.

Per Section 17.162.021 of the Scappoose Municipal Code applicant requests to consolidate its application of Comprehensive Plan Amendment and Zoning Map Amendment and hereby waives its rights to the required 120 day decision making period.

TABLE OF CONTENTS

EXHIBITS

I. Request

Plan Amendment & Zone Change

This is a consolidated request proposing changes to both the City of Scappoose Comprehensive Plan Map as well as the City of Scappoose Zoning Map.

The application will affect two separate parcels of land along SE Second Street located at NW ¼ SE ¼, Section 13, T.3N, R.2W, W.M., City of Scappoose and all of the contiguous right-of-way fronting the subject property not currently commercially zoned.

II. Project Description

Both subject properties are located in SE Scappoose at the intersection of SE Havlik Drive and SE 2nd Streets adjacent to the property purchased and proposed as the City Aquatics center.

Subject Property "A" is located at the NW corner of SE Havlik Drive and SE 2nd Street. The applicant proposes to change all of that property contained within Parcel 3 of Partition Plat 2011-3 currently designated Manufactured housing (MH) to Commercial (C) on the City of Scappoose Comprehensive Plan Map and from Manufactured Housing (MH) to Expanded Commercial (EC) on the City of Scappoose Zoning Map.

Subject Property "A" amounts to approximately 12,000 square feet and is currently split zoned due to a realignment of the now constructed 2nd Street public road. The proposed change effectively realigns the eastern boundary of the commercial zones of both maps back to 2nd Street as was originally planned prior to the realignment of the now constructed street.

Subject property "B" is also located within the 2nd Street corridor and is known as Parcel 1 of Partition Plat 2006-11 consisting of 2.89 acres. The proposal is to include the entire parcel and will amend the City of Scappoose Comprehensive Plan Map from Manufactured housing (MH) to Commercial (C) and amend the City of Scappoose Zoning Map from Manufactured Housing (MH) to Expanded Commercial (EC).

The remainder of the subject area is within the 2nd Street public right-of-way. The portion of property contained within the ROW amounts to approximately 45,064 square feet.

The proposed changes will allow the development of the subject parcels to match that of the existing and in-progress developments that surround the properties.

Site Design Review

The applicant intends to submit for Site Development Approval under a separate application once the zone change has been approved. The applicant intends to develop a mixed use project containing commercial, restaurant, office and mid to high density residential components.

Partition

The applicant intends to submit for a minor partition or subdivision of Subject Property B under a separate application once the zone change has been approved. Subject property "A" is likely to be developed in its entirety without subdivision.

III. Compliance with City of Scappoose Municipal Code

A. Comprehensive Plan Amendment and Zoning Map Amendment

The Standards for a Quasi-Judicial Comprehensive Plan and Zoning Amendment are found in Section 17.22.030 of the Scappoose Land Use and Development Code. Each standard is cited below, followed by findings.

1. The applicable comprehensive plan policies and map designation;

Findings (Parcel "A"): The proposed Comprehensive Plan Map and Zoning Map change is from Manufactured Home (MH) to Expanded Commercial (EC).

The purpose of the proposed change is to realign the zone boundaries to allow the entire parcel to be developed with a commercial use. The request is consistent with applicable zoning map designations because it realigns the zoning lines to a more natural and consistent boundary (SE 2nd Street). The existing land uses and zoning designations of surrounding properties is entirely commercial.

Findings (Parcel "B"): The proposed Comprehensive Plan Map and Zoning Map change is from Manufactured Home (MH) to Expanded Commercial (EC).

The purpose of the proposed change is to merge the development of the subject parcel into a use more consistent with the as-built and proposed uses of the surrounding properties along SE 2nd Street.

To the property's north is the existing Rose Valley Assisted Living Facility. The Rose Valley ALF, though technically a residence for its 120+/- residents, is in actuality a commercial health care development with residential density's far above what would be outright allowed within the underlying zoning. Rose Valley was developed by utilizing the zone's conditional use of Residential Care Facility. Most recently the subject site was planned as an extension to the Rose Valley Assisted Living Cottages. After development of the first (existing) phase of cottages the developers/operators deemed the construction of a 2nd phase as not commercially feasible. As such the property was unneeded by the current owners and sold to the applicant. Should the property owner choose so, the proposed zone change would allow the subject property to be developed as a high density residential project to match the residential densities of the Rose Valley Assisted Living Facility.

To the south of the subject parcel is the proposed Scappoose Aquatic Center. To the applicant's knowledge the center does not yet have any preliminary site designs or proposed construction schedule though the purchase of the property utilized money earmarked solely

for use as a community pool effectively cementing its future use as such. In accordance with the city's planning principles the aquatic center, should the site be developed as planned, will essentially be a commercial facility developed as an outright use within the underlying MH zoning's allowance of a "Public park and recreation area."

To the subject property's east is the existing Springlake Manufactured Home Community. The residential community is fully developed and is currently owned by its residents. Though the 30+/- acre Springlake Community does adjoin the subject property the properties are not situated in any way that could allow the subject property to join the existing development.

The requests are consistent with applicable Comprehensive Plan policies because this proposal will re-designate one area (parcel "A") to realign land use designations consistent with the commercial subdivision currently under construction while allowing another area (Parcel "B") flexibility to be developed more in line with existing high density residential and commercial uses. The requests are consistent with applicable zoning map designations because it will allow both properties to be developed in line with the surrounding commercial uses built or proposed under conditional approvals.

2. The change will not adversely affect the health, safety, and welfare of the community;

Findings (Parcel "A"): The applicant feels that developing the subject site under current residential comprehensive plan designation and zoning would result in adverse conditions for the community. The subject site is surrounded by commercial uses currently under construction to the North, South, and West. To the east is SE Second Street, a major collector not suitable for providing access to individual single family residential structures. The configuration of the subject site, location, and surrounding conditions create the adverse conditions. Developing the site as a residential use would be in direct conflict with the use of 100 percent of the surrounding property. A residential use of this property would be extremely impactful to both neighbors and to the resulting development/tenants.

Section 17.68.010, Purpose of the Existing Commercial (EC) zone states: *The purpose of the EC zone is to provide areas:*

E. Which provide for a circulation system that provides direct access to arterials or collectors that will not channel traffic through residential areas. (Ord. 634 §1 Exh. A (part), 1995). As required by the City of Scappoose and Oregon Department of Transportation standards the entrances to the surrounding approved commercial projects placed the primary access within the subject property's MH zoning. Per the City of Scappoose and ODOT additional entrances to the subject property between the existing entrance and Havlik Drive will not be allowed. This will greatly impact the surrounding commercial developments as they would be forced to interact with residential traffic and potential residential uses would be impacted by truck and high traffic commercial uses.

Findings (Parcel "B"): The applicant does not feel that the proposed comprehensive plan amendment and zoning map amendment will adversely affect the health, safety, and welfare of the community.

The subject parcel is located on the newly constructed SE 2nd Street which is served by the federally funded Havlik Drive Intersection at Highway 30. Therefore all commercial or

potential high density development will be accessed primarily by these routes and traffic will be diverted away from the residential districts of SE Scappoose. Excerpted from the City of Scappoose's 2004 Havlik Drive Traffic Study completed by Kittleson & Associates: *"Upon completion of the improvement project, Havlik Drive will enhance east-west connectivity within southern Scappoose and will improve safety and operations along High School Way. This project is funded through the combination of contributions from the City of Scappoose and local land developers."* According to Scappoose Resolution 11-08 the subject property, upon issuance of building permits, will pay $152,926.78 towards the construction of SE 2nd Street/Havlik Drive project.

Subject Property "B" is bordered by a residential district/manufactured home park on its eastern boundary. Scappoose Ordinance 17.68.050 Dimensional requirements states: *3. No side or rear yard setback shall be required except thirty feet shall be required where abutting a residential zoning district and the planning commission may reduce the required yard setback by fifty percent pursuant to Chapter 17.100, Landscaping, Screening and Fencing.* The applicant feels that this additional setback requirement and the lack of any shared access or pedestrian areas effectively limit any significant detrimental effects on the health, safety, or welfare to neighboring residents.

3. The applicable standards of this title or other applicable implementing ordinances; and

Findings (Parcel "A"): Applicable standards of this title are discussed throughout the proposal. The subject property is a small part of a much larger parcel of land and the applicant does not propose any subdivision of the lot. Additionally, the subject parcel is entirely vacant of structures. Therefore the applicant feels that there are no conflicts with the implementing ordinances. Applicant, or its successors, will be required to show its conformance with the proposed zone's standards at such time that a development is proposed.

Findings (Parcel "B"): Applicable standards of this title are discussed throughout the proposal. Applicable standards of the implementing ordinances are as follows:
17.68.050 Dimensional requirements. A. The minimum lot size shall be ten thousand square feet with a minimum lot width of one hundred feet.
The subject property is 2.89 acres in size and the applicant proposes no partitions or subdivisions at this time. Additionally, the subject parcel is entirely vacant of structures or improvements. Therefore the applicant feels that there are no conflicts with the implementing ordinances. Applicant, or its successors, will be required to show its conformance with the proposed zone's standards at such time that a development is proposed.

4. Evidence of change in the neighborhood or community or a mistake or inconsistency with the comprehensive plan or zoning map as it relates to the subject property.

Findings (Parcel "A"): Applicant feels that there was a mistake/inconsistency in the current zoning and comprehensive plan maps resulting from the realignment of the 2nd Street Right-of-Way that affects Parcel "A". As originally planned the eastern boundary of the proposed SE 2nd Street was consistent with the east/west boundary between the areas EC and MH zoning districts. In subsequent discussions between the Oregon Department of Transportation and the projects engineer's it was required that 2nd Street, just prior to its southern terminus and intersection with SE Havlik Drive should be realigned to allow more preferable staging of traffic at the Havlik Intersection. The severity of the realignment of SE 2nd Street caused the right-of-way to jump from its location within the EC zoning district into

the MH zoning area. A portion of the property that had originally been east of 2nd Street and part of the much larger MH/Residential zoning district was effectively pushed into the EC/Commercial district west of 2nd. The proposed Comprehensive Plan Map and Zoning Map changes will correct the issue with the subject property's re-zoning as EC allowing the all of the property west of 2nd Street to be developed as intended.

Findings (Parcel "B"): Applicant does not feel that there is any mistake in or inconsistency with the comprehensive plan or zoning maps as they relate to the subject property though does suggest significant evidence of a change in the neighborhood and surrounding community.

The applicant and its related entities had also previously been the applicant for the original 1985/86 designations of Manufactured Housing (MH) and Expanded Commercial (EC) on what was then a large tract of undeveloped property of which the subject parcel was a part. It had been intended to develop what is now the Springlake Manufactured Home Community within the resulting MH zoning district and the EC zoned land would be developed as highway commercial property. The Springlake Community accessed Highway 30 from an extension of High school Way and the construction of SE 6th Street to the north entrance of the community. The first phases of the community went only as far west as the eastern boundary of the subject parcel. The natural pattern of subsequent growth for the community took the development further south and east resulting in an underutilized section of MH zoned land between the EC zoning district and the manufactured home community.

As South Scappoose developed and the surrounding area developed into the residential/commercial area that has resulted it became apparent that there was significantly higher and better uses for the MH zoned land than additional manufactured home communities.

Entities related to the applicant then developed the Rose Valley Assisted Living Facility and the Rose Valley Cottages on MH designated land bordering the right-of-way that was by then planned as a major arterial collector street now known as 2nd Street. As discussed prior, the Rose Valley developments are commercial uses developed in accordance with a conditional use allowed within the City's MH zoning standards for residential care facilities. Current owners of the Rose Valley complex did not intend to expand the Rose Valley Cottages as planned onto the subject property and have sold the property to the applicants.

To the south of the property the City of Scappoose also proposes the eventual development of another use more commercial in nature than what the underlying MH zoning would suggest. The City has purchased this property for use as a community aquatic facility and would assumedly be developing that project as an outright use allowing public parks and recreational facilities in the Manufactured Home zoning. This leaves the subject property, though backing up to a residential district, surrounded on the north and south with uses much more commercial in nature than residential. The applicant proposes that the subject property be developed with a use more in line with that of the surrounding properties and feels that the design of the southern portion of 2nd Street, on which the property is located, lends itself to commercial development much more than residential. The applicant respectively suggests that this presents adequate evidence of a change in the neighborhood or community and therefore is consistent with this section of the Scappoose Municipal Code

IV. Compliance with Applicable Sections of the City of Scappoose Comprehensive Plan

Economic Goals

1) Maintain conditions favorable for a growing, healthy, stable, and diversified business and industrial climate.

2) Establish greater local control over the density of local economic development.

3) Allow the free market economy to operate with an absolute minimum of restrictions.

Findings: The proposed comprehensive plan and zoning amendment is supportive of the Economic Goals by supporting the Policies for Economics. Under the Economic Goals and Policies of the City of Scappoose Comprehensive Plan, Policies for economics Goal 1 states "Make sufficient land available for the anticipated expansion of commercial and industrial activities." It should be noted that with the development of SE 2nd Street and the associated Havlik Intersection there were a total of approximately 6.25 acres of vacant land zoned Expanded Commercial (excluding the candle property) and additional 2.52 acres has been proposed as community use. Of this available land all has either been sold to end commercial users for immediate construction, is under construction, or is currently in design review at the City of Scappoose Planning Department. The applicant suggests that this has proven a pent up demand for larger 1+ acre commercial sites with the flexibility to accommodate clustered commercial developments and larger commercial users. These users are not typically able to assemble suitable sites within the current commercial corridors in the City of Scappoose. The proposed application helps the city to meet its goal of making sufficient land available for the anticipated expansion of commercial and industrial activities.

Housing

According to its Comprehensive Plan it is the goal of the City of Scappoose to:

1) Increase the quantity and quality of housing for all citizens.

Findings: The comprehensive plan amendment and zone change proposes a re-zone of the subject properties from Manufactured housing (MH) to Expanded Commercial (EC). According to City ordinance 17.68.030 Permitted uses (T) Multifamily dwelling units per A-1 requirements are allowed within the proposed EC zone when located at least two hundred feet from Highway 30 and outside of the Scappoose Creek Flood Plain. Using the Density Assumptions presented within the City of Scappoose Comprehensive Plan the average residential density attained within Manufactured Home Parks is 8 units per acre.

At 2.89 acres in size, Subject Parcel "B" would accommodate approximately 23 dwelling units as zoned. Per A-1 density assumptions presented within the comprehensive plan (20 average units per acre) the proposed zoning would increase the potential dwelling units of the site by 34 units to total 57. Of course the applicant acknowledges that there is always the chance that the property develops primarily or wholly as commercial. Though the applicants have yet to determine end uses for the entirety of Subject parcel "B" we would respectfully propose that in the chance that the primary use of the property in the end is commercial, that the job and

economic growth made possible by development is more beneficial in this instance. We will speak to the loss of specific Manufactured Home zoned land later in this narrative; however the applicant, being active in the real estate markets locally is aware of numerous constructed residential lots and acres of available residentially zoned land available for purchase and development.

With that said, the applicant would encourage the discussion on whether the city's council and planning commissions desire mixed use or high density development of the subject property. As is evident nationwide currently, the real estate market is quite fragile and developments are not as easy to complete as they once were or may once again be. With that in mind the applicant suggests that the proposed zoning for the subject properties will allow the owners the best chance of creating and completing the best development possible in today's times.

At 12,000 square feet Subject Parcel "A" would not meet the minimum site size for a Manufactured Home Park. Therefore Parcel "A" with the required lot size of 6,000 square feet per lot could accommodate two dwelling units as zoned. As the location of Subject Parcel "B" is outside of 200 feet from Highway 30 the property would accommodate 3 additional dwelling units under the proposed zoning for a total of 5 units. The applicant feels that an increase in potential dwelling units from 25 as currently zoned to 62 as proposed meets the goal of the City of Scappoose's Comprehensive Plan.

2) *Locate housing so that it is fully integrated with land use, transportation and public facilities.*

Findings: The proposed comprehensive plan amendment and zone change substantially conform to the public facility plans adopted by the City of Scappoose with regards to facilities necessary to serve any potential residential development allowed within the proposed zoning; adequate access to public services are provided by water lines, sanitary sewer, storm sewer, and streets to meet the needs of an increase in density allowance. Any potential development proposal will be required to verify adequacy of existing infrastructure or improve existing as needed. Therefore, the proposed comprehensive plan and zoning map amendment is supportive of this goal.

3) Concentrate high-density multi-family dwellings in a few areas of the City and distribute low density multi-family dwellings throughout the City.

Findings: There is currently no site design available for the applicant properties. The proposed zoning would allow either high-density or low density multi-family dwelling units per A-1 requirements. Therefore the proposed application neither impacts nor supports this goal. Any proposed development of the subject parcels will again be required to substantially conform to the comprehensive plan goals of the City of Scappoose.

4) Protect residential areas from conflicting land uses, unnecessary through traffic, or other undesirable influences.

Findings: No residential areas are directly accessible to or from the applicant properties. Any potential residential development within the proposed zone would address this goal accordingly. Therefore the proposed comprehensive plan amendment and zone change supports this goal.

General Goals for the City of Scappoose for Land use

1) The growth of the City should be orderly and in accordance with the public health, safety, and welfare, while preserving individual choice and recognizing existing patterns of development.

Findings: The proposed comprehensive plan amendment and zone change is supportive of the City's goals as it will allow the subject properties to be developed more in-line with the patterns of development within the neighboring area. While the proposed zoning will not necessarily restrict the subject properties from being developed with manufactured housing/residential as currently zoned it will allow the properties the flexibility to be developed with uses complimentary to the surrounding properties. Therefore, the proposed comprehensive plan amendment and zone change are supportive of this goal.

2) *Physical characteristics of the area, such as its geographic assets and limitations, its topographic and geologic features, etc., should be recognized where they may represent important land use determinations.*

Findings: Physical characteristics of the subject sites limit the development of the site for manufactured housing uses. Though, at 2.89 acres, the site does meet the minimum site size for a manufactured home park the applicant suggests that the site would be too small to accommodate a manufactured housing project. As discussed prior, the subject properties are surrounded on all sides by existing uses. If developed as manufactured housing the project would be restricted from expansion as there is no similarly zoned vacant or underutilized property contiguous to the subject sites. The site size would present challenges to a developer to provide adequate community facilities and open space for tenants of a manufactured home community such as those provided in the neighboring Springlake Park development which is located on 30+ acres and provides many acres of common area.

The proposed zoning of the parcels would allow for either commercial or high density residential uses that would allow any development to cluster the tenant spaces more densely and make use of the small sites to their fullest extent. Therefore, the proposed comprehensive plan amendment and zone change are supportive of this goal.

3) A suitable balance between competing land use should be established so that, insofar as possible, the complete ranges of social, economic, cultural, and aesthetic needs of the community are met.

Findings: The applicant suggests that the residential areas of southeast Scappoose dominate the land usage of the area. The proposed zone change and comprehensive plan amendment will help to provide a balance between land uses and provide a more complete range of social, economic, cultural, and aesthetic assets to the community. Therefore, the proposed comprehensive plan amendment and zone change are supportive of this goal.

4) Where certain types of uses have been found to be incompatible with other types of land use, there should be a buffer area to lessen the degree of incompatibility.

Findings: (Parcel "A") Section 17.68.050 Dimensional requirements of the Expanded Commercial zone states that: *No side or rear yard setback shall be required except thirty feet shall be required where abutting a residential zoning district and the planning commission may*

reduce the required yard setback by fifty percent pursuant to Chapter 17.100, Landscaping, Screening and Fencing.

C. No building shall exceed fifty feet in height. Within one hundred feet of a residential zone, no building shall exceed thirty-five feet in height.

The additional restrictions imposed upon the neighboring commercially zoned properties currently under development due to the subject parcel's strip of MH zoning significantly limits their ability to be developed efficiently. Additionally, due to its small size, the subject property is only buildable with 1-2 units of low density residential housing. While the additional setbacks do help to minimize the impact of neighboring commercial uses on the subject parcel the applicant proposes that the impact of the low density residential uses will have far more great an impact upon the surrounding commercially zoned properties. The applicant suggests that the proposed comprehensive plan amendment and zone change supports this goal.

Findings: (Parcel "B") Section 17.68.050 Dimensional requirements of the Expanded Commercial zone states that: *No side or rear yard setback shall be required except thirty feet shall be required where abutting a residential zoning district and the planning commission may reduce the required yard setback by fifty percent pursuant to Chapter 17.100, Landscaping, Screening and Fencing.*

C. No building shall exceed fifty feet in height. Within one hundred feet of a residential zone, no building shall exceed thirty-five feet in height.

The applicant feels that the required additional setbacks and the stated purpose of the Expanded Commercial zone (17.68.010): *B. For combining uses which have no off-site impacts in terms of noise, odor, glare, lights, vibration, smoke, dust or other types of off-site impacts;* effectively eliminate any degree of incompatibility with neighboring residential uses. Therefore the proposed comprehensive plan amendment and zone change are supportive of this goal.

5) Sufficient area for the expansion of all major land uses for the next twenty years should be provided.

Findings: The comprehensive plan amendment and zone change proposes a re-zone of the subject properties from Manufactured housing (MH) to Expanded Commercial (EC). According to City ordinance 17.68.030 Permitted uses (T) Multifamily dwelling units per A-1 requirements are allowed within the proposed EC zone when located at least two hundred feet from Highway 30 and outside of the Scappoose Creek Flood Plain. Using the Density Assumptions presented within the City of Scappoose Comprehensive Plan the average residential density attained within Manufactured Home Parks is 8 units per acre.

At 2.89 acres in size, Subject Parcel "B" would accommodate approximately 23 dwelling units as zoned. Per A-1 density assumptions presented within the comprehensive plan (20 average units per acre) the proposed zoning would increase the potential dwelling units of the site by 34 units to total 57.

At 12,000 square feet Subject Parcel "A" would not meet the minimum site size for a Manufactured Home Park. Therefore Parcel "A" with the required lot size of 6,000 square feet per lot could accommodate two dwelling units as zoned. As the location of Subject Parcel "A" is outside of 200 feet from Highway 30 the property would accommodate 3 additional dwelling

units under the proposed zoning for a total of 5 units. The applicant feels that an increase in potential dwelling units from 25 as currently zoned to 62 potential residential units as proposed helps the City of Scappoose meet its goal of accommodating residential growth over the next twenty years.

In addition to allowing for greatly increased future dwelling units, the proposed comprehensive plan map amendment and zone change would greatly increase the City's desire to allow for *"the expansion of all major land uses for the next twenty years"* by introducing the potential for commercial and mixed-use development on the subject site. There are currently no uses allowed within the existing MH zoning ordinance that would not be allowed outright within the proposed EC zone with the exception of single-family residential *not* having a common wall with another single-family residence, though this use could potentially be accomplished by utilizing the conditional use of "residential districts" with a site design approval.

Even with the fact that a manufactured home park could still be developed, if approved, within the Expanded Commercial (EC) guidelines the applicants do respect the fact that a successful zoning and comprehensive plan amendment would lessen the available Manufactured Home zoned lands.

There are currently four general area's within the limits of the City of Scappoose that contain MH zoning as shown in orange on the Scappoose Zoning Map: Area #1 we'll call the Manor Drive acreage located just south of Vernonia Highway, Area #2 we'll name the Crown Court Acreage located east of Highway 30 along Crown Zellerbach Road, Area #3 we've labeled the Erin Drive Acreage located in the vicinity of NE West Lane Rd, and Area #4 we've labeled the Springlake Park Acreage in SE Scappoose of which the subject parcels are a part.

The manor Drive acreage consists of approximately 14.25 acres after removing public right-of-ways. Of this approximately 8.5 acres (60%) remains free of significant development and of that at least 5.5 acres of available lands are contiguous and the remaining 3 acres stands alone. It is the applicant's opinion that either would make suitable Manufactured Home developments. It should be noted that none of the developed properties within this area have utilized the MH zoning for manufactured home parks and have been divided as single-family residences.

The Crown Court acreage totals approximately 9.8 acres net of right-of-ways and city owned property for future ROW's with approximately 1.24 acres free of significant development. This 1.24 acres is contiguous to an existing 3.28 acres manufactured home park just off NE 2nd Street and the applicant feels that this remaining acreage is quite suitable for additional manufactured home development.

The Erin Drive acreage consists of approximately 11.75 acres currently developed with primarily single-family stand-alone and common wall residences. However there is approximately 4 acres free of development with 3 acres contiguous at the eastern terminus of NE Kale Street extending to North Road. The applicants feel that this property would be quite suitable to Manufactured Home development.

The subject property is located within the area we've labeled as the Springlake Park acreage. The Springlake area is by far the largest area of MH zoned land within the City of Scappoose limits and contains approximately 44 total acres outside of public right-of-ways. Of that 44 acres 32.28 (73%) is contained within Springlake Park a 130+ space manufactured home park 13% has been developed as the Rose Valley Assisted Living Facility, 2% has been

developed with single-family residences, and the remaining 5.42 acres remains vacant and developable. Of this remaining land 2.52 +/- has been purchased by the City of Scappoose for a future aquatics facility and the remaining vacant land is the subject property.

It is noted elsewhere within this narrative that although the subject property is contiguous to the Springlake Park manufacture home development, the Springlake property is not orientated so as to allow for the park's further expansion onto the subject. The applicant does not feel that a stand-alone manufactured home park on the subject 2.89 acres would accomplish the type of MH development that dominates the area and therefore would be severely out of place in the immediate vicinity, and respectfully proposes that the other area's contain much more suitable sites for small scale manufactured home developments.

Furthermore, as evidenced by the City's intention of locating a community center on the neighboring MH zoned land, there are many higher and better uses for the MH zoned land located along SE 2nd Street, a corridor that is rapidly developing as a successful commercial corridor.

Therefore the proposed application is supportive of this goal by allowing for a much broader and more productive range of major land uses while leaving sufficient areas for expansion at a number of suitable properties elsewhere within the community available for small site manufactured home development.

6.) *Residential living area should be safe, attractive, and convenient, and should make a positive contribution to the quality of life and personal satisfaction of residents; additionally, there should be sufficient areas for a wide range of housing choices.*

Findings: As discussed in #2 above the applicant feels that the subject sites are too small to effectively provide a manufactured housing development with adequate community facilities and open space. Therefore any development under the current zoning would either reduce the tenant spaces to unsupportable numbers (unlikely to be built) or restrict the common areas that otherwise would help to contribute to the quality of life and satisfaction of its resident (more likely). The applicant respectively suggests that the development of the subject parcels under the current zoning would be against the principles of this goal. Additionally the proposed zoning would allow a much wider range of housing choices. Therefore the proposed zone change and comprehensive plan amendment are in support of the City's goal.

7.) *Commercial areas should provide maximum service to the public and should be safely integrated into the physical pattern of the community.*

Findings: The proposed comprehensive plan amendment and zone change is supportive of this goal as it allows the subject properties to be developed as commercial or higher density residential more in-line with the physical pattern of development in the immediate area.

8.) *Industrial area should be suitable for their purpose, properly located, and adequate for future needs.*

Findings: No industrial uses are proposed for the subject sites. Therefore, the proposed comprehensive plan amendment and zone changes are not in conflict with this goal.

9.) *Open spaces should be protected for future generations.*

Findings: The subject parcels are not designated as open space. Therefore, the proposed comprehensive plan amendment and zone changes are not in conflict with this goal.

10.) *Public and semi-public developments should be located to encourage a pattern of land development that benefits the whole community.*

Findings: No public uses are proposed for the subject sites. Therefore, the proposed comprehensive plan amendment and zone changes are not in conflict with this goal.

11.) *Life and property should be protected from natural disasters and hazards.*

Findings: The subject site is not located within a mapped flood plain, potential flood hazard, potential landslide hazard, or earthquake area. Therefore, the proposed comprehensive plan amendment and zone changes are not in conflict with this goal.

12.) *Adequate public services and facilities should be provided to encourage an orderly and efficient growth pattern.*

Findings: The subject comprehensive plan amendment and zone change proposes no construction of public or private services within this application. At such time that a development is proposed the applicant will prove the adequacy of the services currently available to the subject properties. Therefore, the proposed comprehensive plan amendment and zone changes are not in conflict with this goal.

13.) *A safe and convenient transportation system should be developed to meet future needs.*

Findings: The subject parcels are located along and serviced by the newly constructed SE 2nd Street and Havlik Drive Intersection. No new streets are proposed at this time.

Analyses of the traffic infrastructure serving the subject sites were completed in 2004 and 2007 examining the long-term (year 2025) operation of SE 2nd Street, SE Havlik Drive, and the signalized four-way intersection of Havlik Drive with Highway 30. Using the findings of those prior analyses, SE 2nd Street was designed and recently constructed, as has the connection of Havlik Drive to Columbia River Highway, which forms the east leg of the signalized intersection.

The 2004 and 2007 traffic analyses were conservative and made development assumptions for the subject site and surrounding properties that were more traffic intensive than current development activities. As a result, the 2025 traffic volumes derived in the prior analysis are slightly higher than what current development patterns will generate, even with the proposed zone change in place.

Westbound queue lengths on Havlik Drive from the intersection with US30 will be accommodated by the existing turn lane and block length between the highway and SE 2nd Street, even with the proposed zone change. No mitigations have been recommended.

Our traffic engineers at Lancaster Engineering have prepared a transportation analysis assuming that 23 manufactured homes could be developed on the subject property. Under the proposed zoning, it was assumed that 30,000 square feet of commercial building floor area could be developed. With these reasonable worst-case assumptions for both the existing and proposed zoning designations, there would be an increase of 10 trips during morning peak hour and 56 trips during the evening peak hour.

Our transportation analysis has concluded that the intersection of Havlik Drive and Columbia River Highway is currently operating with a v/c (volume-to-capacity) ratio of 0.58 during both morning and evening peak hours. By the year 2026, the v/c ratio will degrade to 0.81 during morning peak hour and 0.91 during evening peak hour. Addition of trips from the proposed zone change will not worsen the v/c ratio of the study intersection.

Current ODOT policy states that impacts to an intersection are not significant if the v/c ratio worsens by 0.03 or less. As such, there is no significant affect from the proposed zone change and the transportation Planning Rule is satisfied. No mitigations have been deemed necessary or recommended.

The proposed zone change is consistent with the traffic analysis and design conducted for the recently-constructed transportation infrastructure serving the site. It will not result in 2026 traffic volumes in excess of the designed capacity of the intersection of Highway 30 and Havlik Drive.

Therefore, the proposed comprehensive plan amendment and zone changes are not in conflict with this goal.

*Supporting transportation study attached

14.) *The local economy should be strengthened and diversified.*

Findings: The proposed comprehensive plan and zoning map amendments should result in development that contributes to the local economy by providing location opportunity to local and prospective employers. Therefore, the proposed zone change and comprehensive plan amendments are supportive of this goal.

15.) *Housing that meets the local residents' basic needs should be promoted.*

Findings: Though no housing developments are currently proposed within this application the proposed comprehensive plan amendment and zone change to Expanded Commercial would allow the subject properties to be developed as high density residential. Should the site be utilized as such it would be the only unimproved high density land zoned and readily developable in SE Scappoose. Most housing uses allowed within the current Manufactured Housing zoning will still be allowed as outright uses under the proposed Expanded Commercial zoning. Therefore the proposed application for comprehensive plan amendment and zone change would potentially provide the community with a more flexible and ability to meet the housing needs of the citizens. Therefore, the proposed comprehensive plan amendment and zone changes are not in conflict with this goal.

16.) *The natural and man-made resources of the community should be effectively utilized.*

Findings: The subject sites are not designated as a natural resource nor are any man-made resources located on the properties. Therefore, the proposed comprehensive plan amendment and zone changes are not in conflict with this goal.

17.) *Land uses should be arranged to maximize the conservation of energy.*

To date, all of the development along SE 2nd Street, on which the subject properties front has been commercial. However, single family residential uses dominate the SE Scappoose area. As of the 2000 census there were 3,801 residents within walking distance (1 mile or less) of the subject property. The proposed comprehensive plan amendment and zone change should help to maximize the conservation of energy by providing commercial or high density residential uses within walking distance of a large portion of the City's residents and major retail areas. Therefore, the proposed comprehensive plan amendment and zone changes are supportive of this goal.

18.) *A quality of life reflecting the wants of the citizenry should be articulated and strived for.*

19.) *Citizen participation will continue to be an important element of the City's land use planning process. Besides public hearings held by the Planning commission and City Council, the City shall utilized the local newspaper and radio station to keep populace informed of land use issues. The City shall also publish quarterly a summary of past and future activities.*

Findings: The City of Scappoose has established a public hearing process which specifies specific notice requirements for advertising a land use change in a general circulation newspaper and mailing notices to adjacent property owners within 200 feet of the subject property. These notices will be provided prior to the City Council hearing on this application, thereby providing an opportunity for citizens of the surrounding and general area to comment on the proposal either in writing in advance of the hearing or orally at the public hearing. This process allows for citizens to communicate their input into the comprehensive plan and zoning map amendment review conducted by the City. This public input will reflect the wants of the citizenry. In addition, the City of Scappoose Planning Commission will also have an opportunity to review and comment on the proposed comprehensive plan and zoning map amendment.

Therefore the proposed comprehensive plan and zoning map amendment is not in conflict with these Goals.

V. Compliance with Statewide Planning Goals

Goal 1 - Citizen Involvement

The City of Scappoose has established a public hearing process which specifies notice requirements for advertising a land use change in a general circulation newspaper and mailing notices to adjacent property owners within 200 feet of the subject property. These notices will be provided by the City prior to the City Council hearing on this application, thereby providing an opportunity for citizens of the surrounding and general area to comment on the proposal either in writing in advance of the hearing or orally at the public hearing. This process allows for citizens to communicate their input into the comprehensive plan map and zoning map amendment review conducted by the City. In addition, the City of Scappoose Planning Commission will also have an opportunity to review and comment on the proposed comprehensive plan and zoning map amendment. Therefore, the proposed comprehensive plan and zoning map amendment is not in conflict with this Goal.

Goal 2 - Land Use Planning

Notice of the proposed comprehensive plan and zoning map amendment will be provided by the City of Scappoose to the Oregon Department of Land Conservation and Development (DLCD) as required. DLCD and other state agencies will have the opportunity to review and comment on the proposal. Therefore, the proposed amendment is not in conflict with this Goal.

Goal 3 - Agricultural Land

The subject site is not appropriate for agricultural uses due to its urban classification by the City of Scappoose Comprehensive Plan and its location within the Urban Growth Boundary. The subject site does not contain prime agricultural soils. The subject site is not currently in agricultural use. Therefore, the proposed comprehensive plan and zoning map amendment is not in conflict with this Goal.

Goal 4 - Forest Lands

The subject site is not acknowledged as forest land within the Oregon Department of Land Conservation and Development definition or guidelines. Therefore, the proposed comprehensive plan and zoning map amendment is not in conflict with this Goal.

Goal 5 - Open Spaces, Scenic and Historic Areas and Natural Resources

The subject site is not designated as open space, a scenic or historic area, or a natural resource area by the City of Scappoose and does not contain any known significant open space, scenic, historic, or natural resources. Therefore, the proposed comprehensive plan and zoning map amendment is not in conflict with this Goal.

Goal 6 - Air, Water, and Land Resources Quality

The proposed comprehensive plan and zoning map amendment change will not contribute materially towards pollution of the air, water, or land resources. Future expanded commercial use of the property, under the EC zoning designation, will likely have no more

significant effects upon air, water, and land resources than would manufactured housing or residential development under the existing Manufactured Housing (MH) zoning designation.

Any future development proposals for the subject site will be reviewed by the City of Scappoose with respect to the adequacy of sanitary sewer, storm sewer, and public water supply to serve the proposed development. In addition, future development proposals will be subject to Section 17.68.010 Purpose of the Expanded Commercial (EC) zone: *B. For combining uses which have no off-site impacts in terms of noise, odor, glare, lights, vibration, smoke, dust or other types of off-site impacts;* This will occur with any future development, whether the comprehensive plan and zoning map designations are changed or not. Therefore, the proposed amendment is not in conflict with this Goal.

Goal 7 - Areas Subject to Natural Disasters and Hazards

The subject site is not located within a mapped flood plain, potential flood hazard, potential landslide hazard, or earthquake hazard area. Therefore, the proposed comprehensive plan and zoning map amendment is not in conflict with this Goal.

Goal 8 - Recreational Needs

The entirety of the subject property is presently designated for manufactured housing development and has not been planned for recreational opportunities. The requested re-designation of the subject site to Expanded Commercial (EC) will therefore not result in a reduction in land planned or reserved for recreational use. Therefore, the proposed comprehensive plan and zoning map amendment is not in conflict with this Goal.

Goal 9 - Economic Development

The proposed comprehensive plan and zoning map amendment should result in development that contributes to the state and local economy by providing employment opportunities for City and area residents or increased housing for possible employees of nearby commercial and industrial uses. Therefore, the proposed amendment is supportive of this Goal.

Goal 10 - Housing

The proposed comprehensive plan and zoning map amendment will assist the City of Scappoose in maintaining its regional housing density standard and could potentially also provide a variety of housing to meet the housing needs of local citizens.

The applicants acknowledge and appreciate the fact that the proposed zone change and comprehensive plan amendment could potentially decrease the actual housing supply within the City of Scappoose if developed entirely as commercial and feel that the issue has been addressed thoroughly throughout the application narrative. The applicant also proposes that a very fundamentally essential aspect of local housing is the availability and accessibility of amenities and jobs necessary for the local population. The applicants propose that the subject properties are, due to their location and surroundings, better suited to development more in line with their highest and best uses that will provide amenities to the current and future residents. These amenities will prove to provide increased livability for the current and future city residents and positively affect the desirability of the current and future housing supply of the City of Scappoose. Therefore, the proposed amendment is supportive of this Goal.

Goal 11 - Public Facilities and Services

The intent of this Goal is to provide for the necessary public facilities and services for accommodating urban development. The necessary public facilities and services are currently available or will be provided by the applicant at the time that a development is proposed; these include sanitary sewer, water service, storm drainage, and streets. In preliminary discussions regarding future development of the subject site, there have been no concerns raised regarding the ability of the City to provide the needed public facilities to the subject site.

Therefore, the proposed comprehensive plan and zoning map amendment is consistent with this Goal.

Goal 12 - Transportation

The intent of Goal 12 is "To provide and encourage a safe, convenient, and economic transportation system." Per City of Scappoose request the applicant has initiated a traffic study assessing the impacts of the proposed zone change and comprehensive plan amendment. The study, completed by Lancaster Engineering, confirms that the proposed zone change will not cause traffic volumes on streets and intersections serving the subject sites in excess of their designed capacities. The completed traffic study supports the proposed zone change and is attached. Therefore, the proposed comprehensive plan amendment and zone changes are supportive of this goal.

Goal 13 - Energy Conservation

To date, all of the development along SE 2nd Street, on which the subject properties front has been commercial. However, single family residential uses dominate the SE Scappoose area. As of the 2000 census there were 3,801 residents within walking distance (1 mile or less) of the subject property. This amounts to well over half of the current 6,665 city population estimate by Portland State University. The proposed comprehensive plan amendment and zone change should help to maximize the conservation of energy by providing commercial or high density residential uses within walking distance of a majority of the City's residents and major retail areas. Therefore, the proposed comprehensive plan amendment and zone changes are supportive of this goal.

Goal 14 - Urbanization

The proposed development will occur within the urban growth boundary and complies with the objective of encouraging growth within established communities where public services are available. Therefore, the proposed comprehensive plan and zoning map amendment is supportive of this goal.

Goal 15 - Willamette River Greenway

The subject site is not located along the Willamette River. Therefore, the proposed comprehensive plan and zoning map amendment is not in conflict with this Goal.

Goal 16 - Estuarine Resources

The subject site is not acknowledged as an estuarine resource within the Oregon Department of Land Conservation and Development definition or guidelines. Therefore, the proposed comprehensive plan and zoning map amendment is not in conflict with this Goal.

Goal 17 - Coastal Shorelands

The subject site is not acknowledged as coastal shoreland within the Oregon Department of Land Conservation and Development definition or guidelines. Therefore, the proposed comprehensive plan and zoning map amendment is not in conflict with this Goal.

Goal 18 - Beaches and Dunes

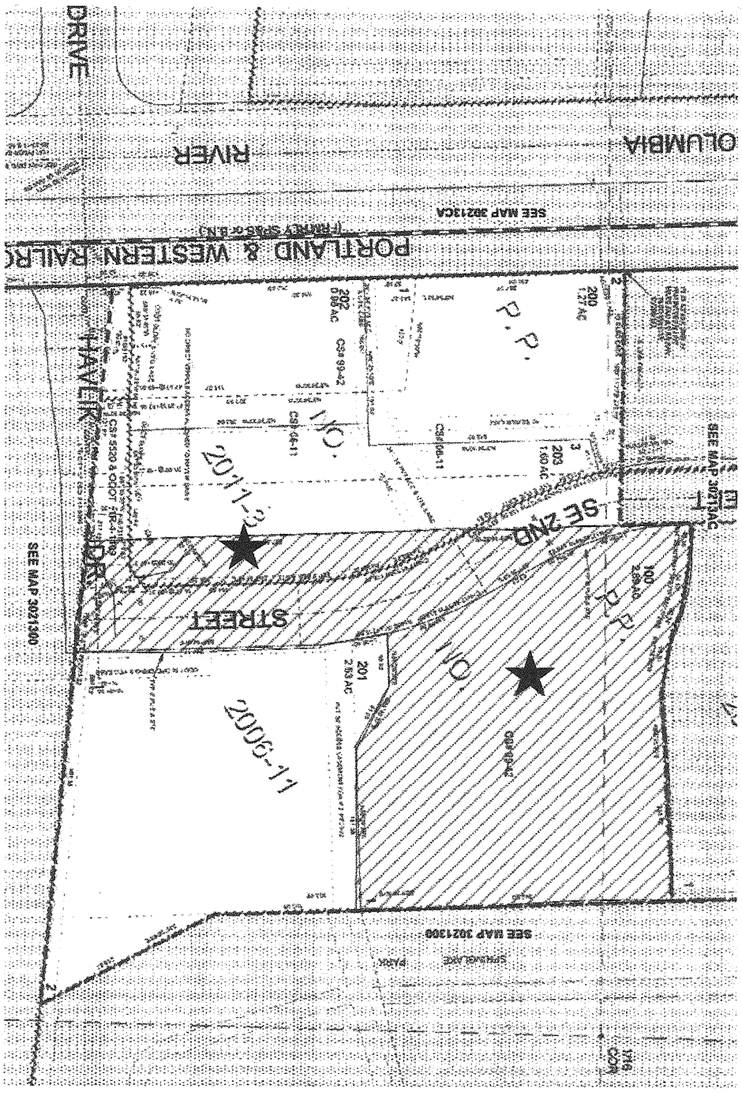
The subject site is not acknowledged as beaches and dunes within the Oregon Department of Land Conservation and Development definition or guidelines. Therefore, the proposed comprehensive plan and zoning map amendment is not in conflict with this Goal.

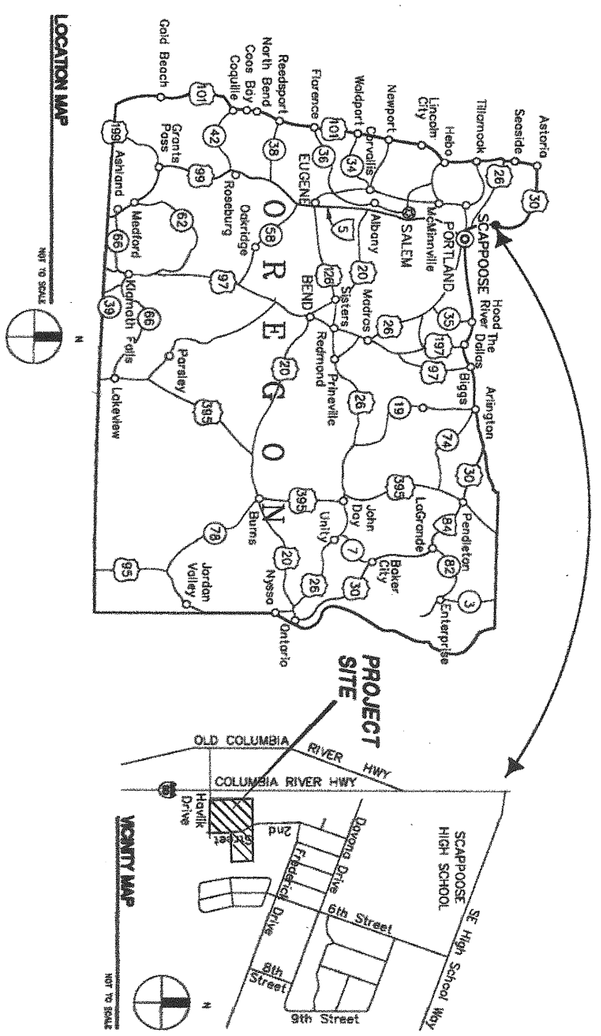
Goal 19 - Ocean Resources

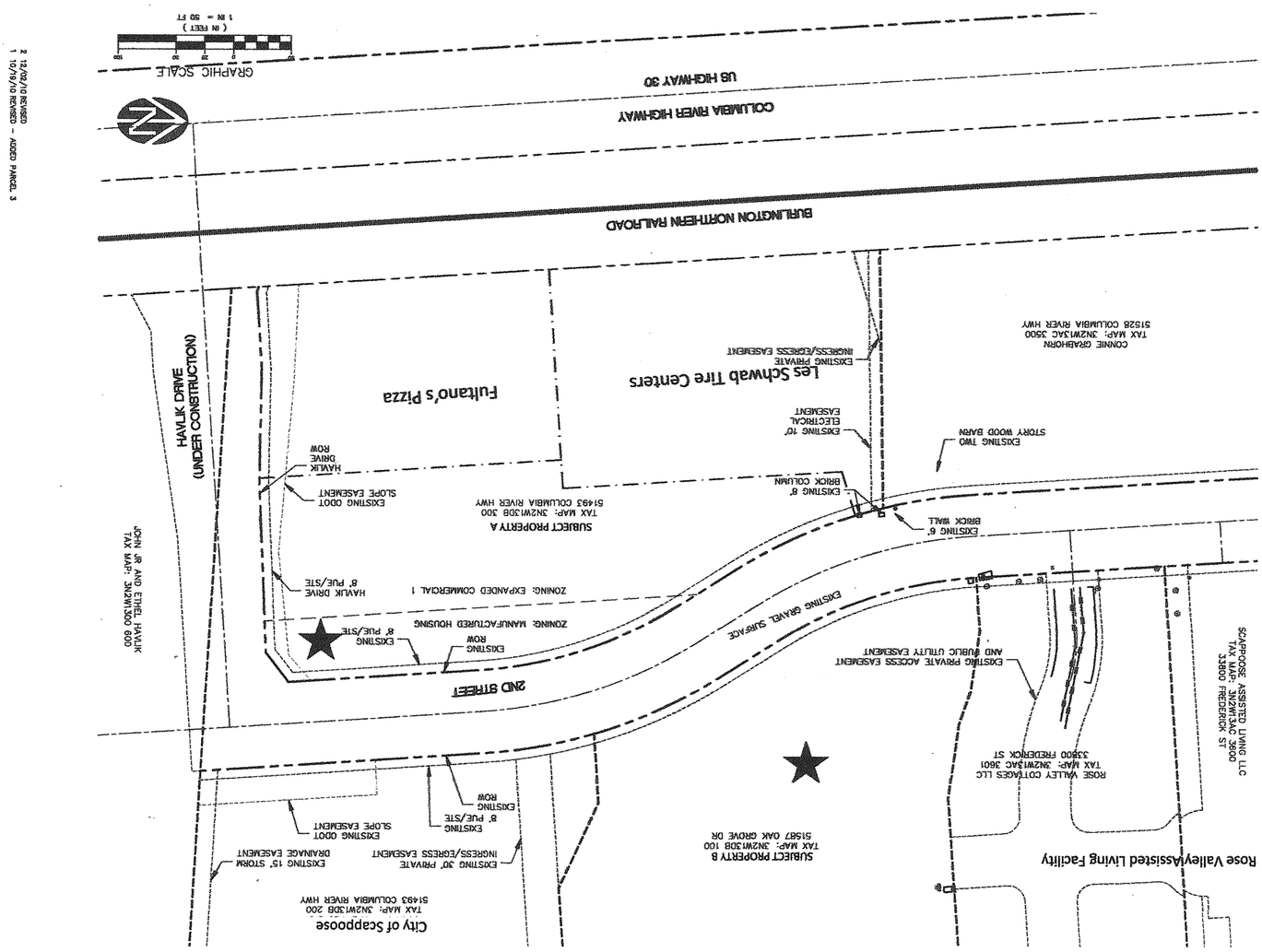
The subject site is not acknowledged as an ocean resource within the Oregon Department of Land Conservation and Development definition or guidelines. Therefore, the proposed comprehensive plan and zoning map amendment is not in conflict with this Goal.

VI. Conclusion

This application narrative demonstrates that all Statewide Planning Goals and applicable sections of the City of Scappoose Comprehensive Plan for approval of a comprehensive plan and zoning map amendment are satisfied by the proposed plans for the Rosedale Properties project. The applicant therefore respectfully requests approval of this application.



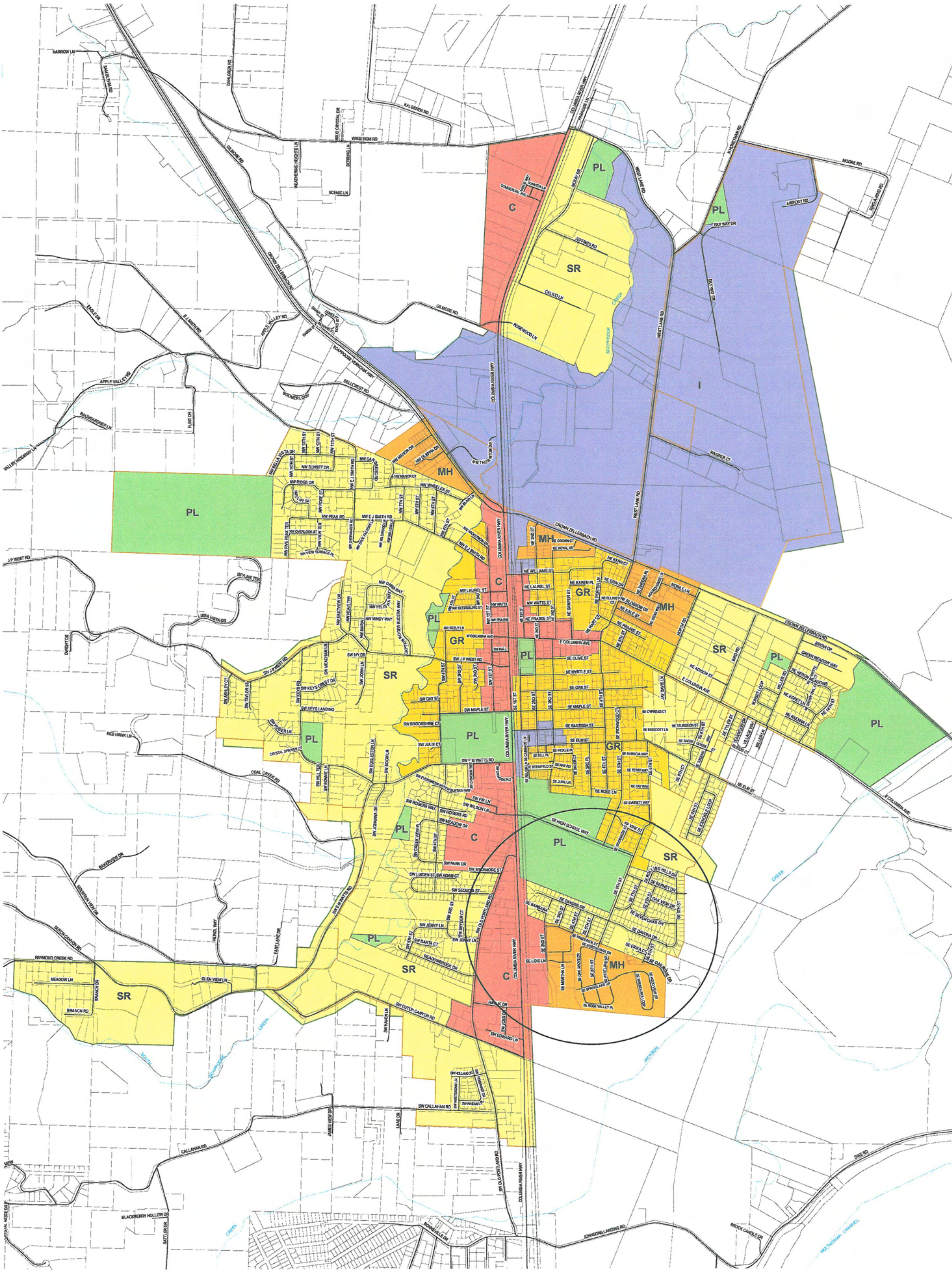




A– 1	Notes: Exhibit 1 to proposed comprehensive plan and zoning map amendment	MALEN PROPERTY ZONING & COMPREHENSIVE PLAN AMENDMENTS ROSEDALE DEVELOPMENT LLC SCAPPOOSE, OREGON	**Rosedale Development LLC** **50776 Dike Rd.—21A** **Scappoose, Oregon 97056** **Ph: 503.319.0119**	APPLICATION SUBMITTAL PREPARED 2/28/2011

Exhibit 2B

Exhibit 2C



City of Scappoose

Comprehensive Plan Map

Scappoose GIS

Legend

- Streets
- Rivers
- Railroads
- Taxlots
- City Limits
- Urban Growth Boundary

Comprehensive Plan Designation

- SR - Suburban Residential
- GR - General Residential
- MH - Manufactured Home
- C - Commercial
- I - Industrial
- PL - Public Lands

1" = 1500'

0 500 1,000 2,000 Feet

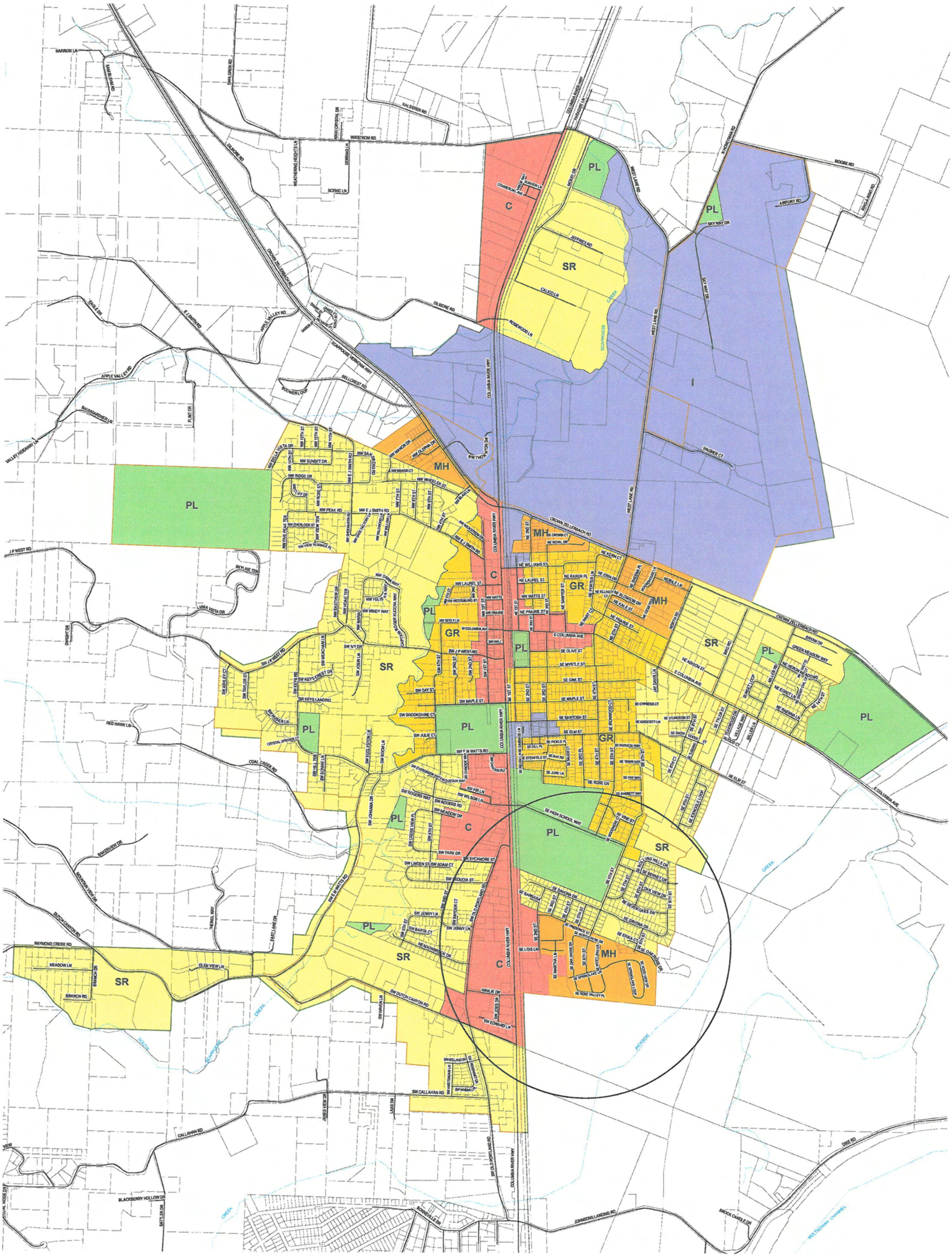
Taxlot Revision: 1/26/2009

Compilation Date: 4/27/2010

\GIS_Workstation\Maps\PDF\11x17_CompPlan.pdf

E-2	Notes: EXHIBIT 2 to proposed comprehensive plan and zoning map amendment	CITY OF SCAPPOOSE COMPREHENSIVE PLAN EXISTING SCAPPOOSE, OREGON	Rosedale Development LLC 50776 Dike Rd.—21A Scappoose, Oregon 97056 Ph: 503.319.0119	APPLICATION SUBMITTAL PREPARED 12/5/2011

Exhibit 2D



City of Scappoose

Comprehensive Plan Map

Scappoose GIS

Legend

- Streets
- Rivers
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1" = 1500'

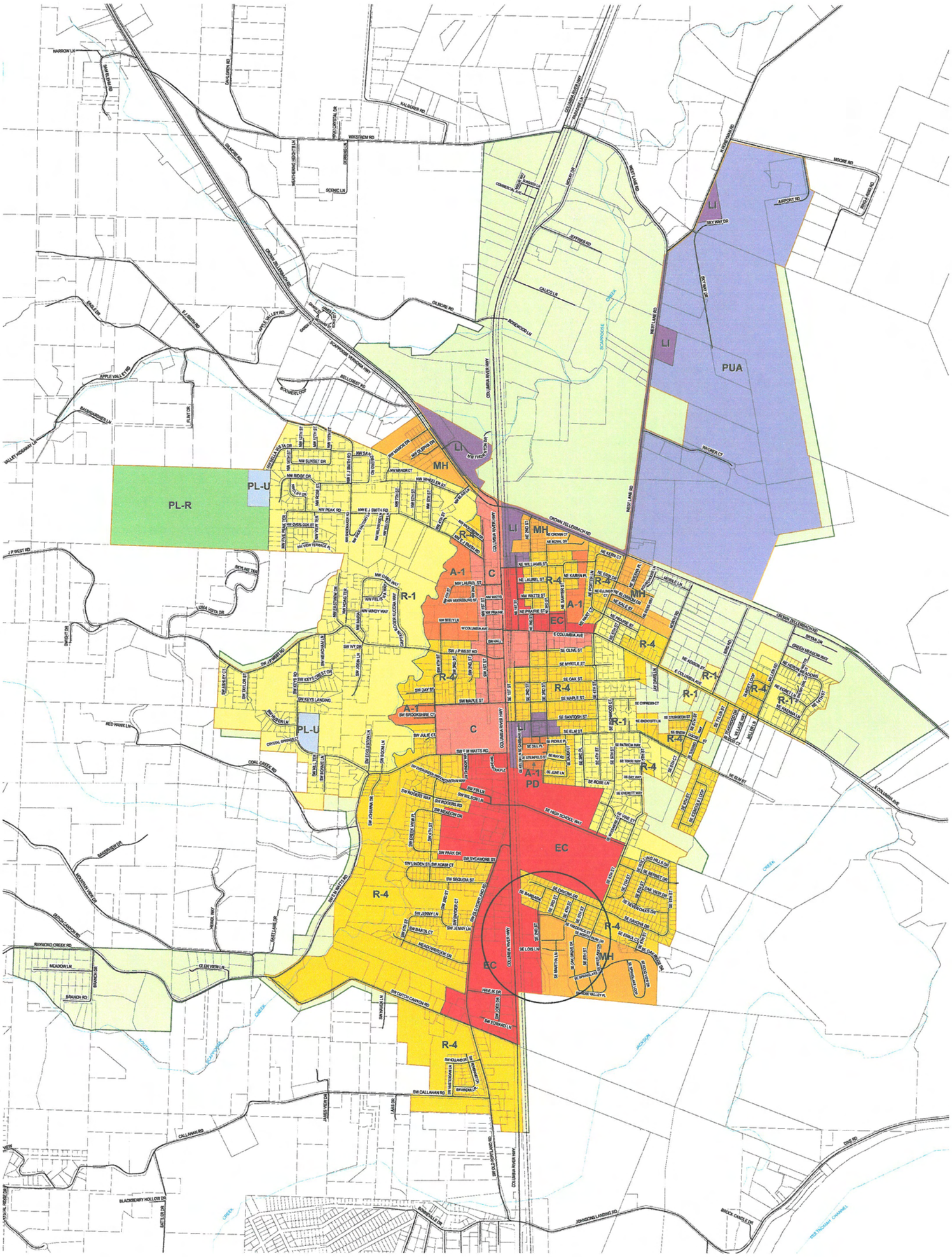
0 500 1,000 2,000 Feet

Taxlot Revision: 1/26/2009

Compilation Date: 4/27/2010

\GIS_Workstation\Maps\PDF\11x17_CompPlan.pdf

E-3	Notes: EXHIBIT 3 to proposed comprehensive plan and zoning map amendment	CITY OF SCAPPOOSE COMPREHENSIVE PLAN AS PROPOSED BY ROSEDALE DEVELOPMENT LLC SCAPPOOSE, OREGON	Rosedale Development LLC 50776 Dike Rd.—21A Scappoose, Oregon 97056 Ph: 503.319.0119	APPLICATION SUBMITTAL PREPARED 12/5/2011



City of Scappoose

Zoning Map

Scappoose GIS

Legend

- Streets
- Rivers
- Railroads
- Taxlots
- City Limits
- Urban Growth Boundary

Zoning

- R-1 - Low Density Residential
- R-4 - Moderate Density Residential
- MH - Manufactured Housing Residential
- A-1 - High Density Residential
- C - General Commercial
- EC - Expanded Commercial
- LI - Light Industrial
- PUA - Public Use Airport
- PL-R - Public Lands-Recreation
- PL-U - Public Lands-Utility

0 500 1,000 2,000 Feet

1" = 1500'

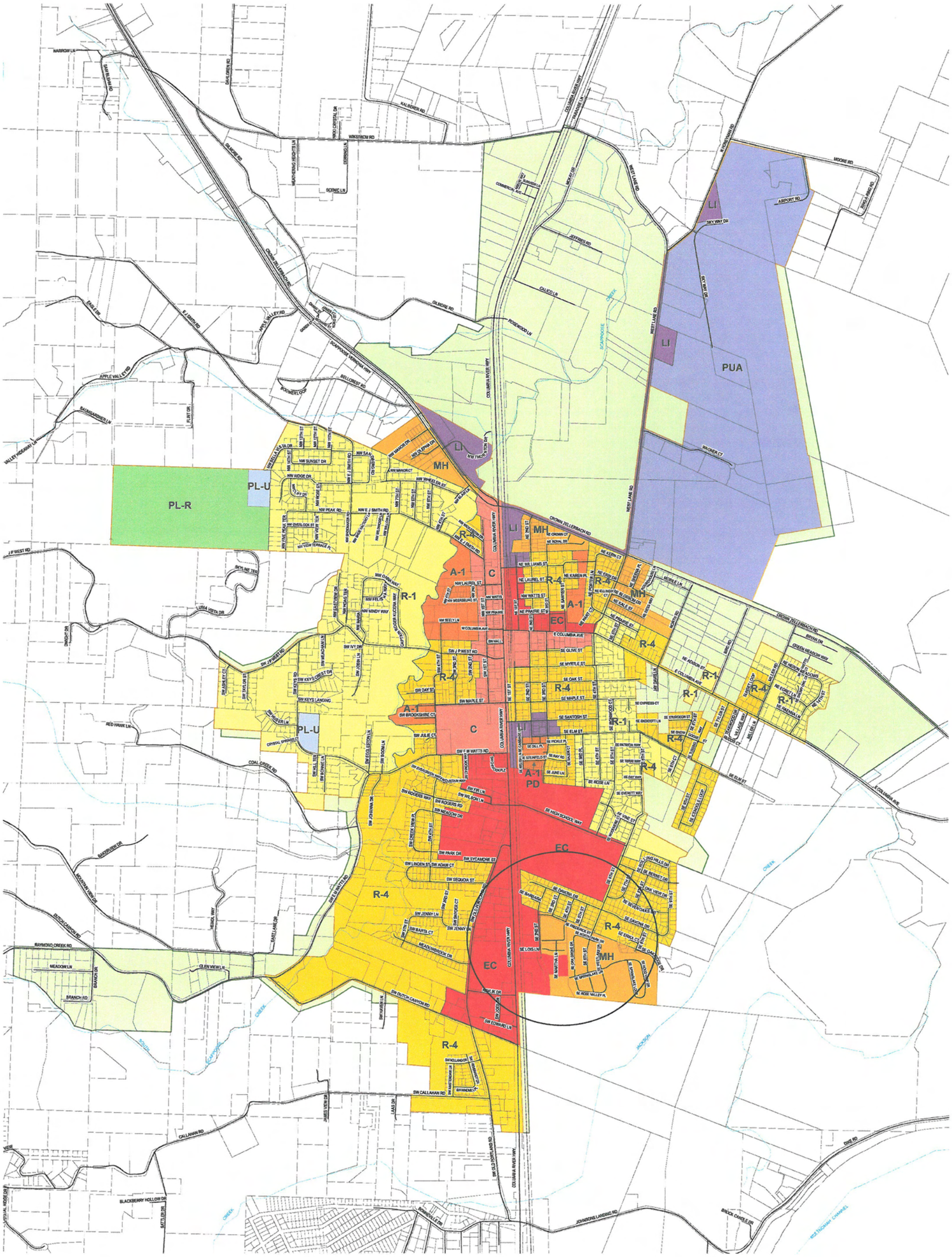
Taxlot Revision: 1/26/2009

Compilation Date: 4/27/2010

\GIS_Workstation\Maps\PDF\11x17_Zoning.pdf

E-4	Notes: EXHIBIT 4 to proposed comprehensive plan and zoning map amendment	CITY OF SCAPPOOSE ZONING MAP AS EXISTING SCAPPOOSE, OREGON	**Rosedale Development LLC** **50776 Dike Rd.—21A** **Scappoose, Oregon 97056** **Ph: 503.319.0119**	APPLICATION SUBMITTAL PREPARED 12/5/2011

Exhibit 2E



City of Scappoose

Zoning Map

Scappoose GIS

Legend

- Streets
- Rivers
- Railroads
- Taxlots
- City Limits
- Urban Growth Boundary

Zoning

- R-1 - Low Density Residential
- R-4 - Moderate Density Residential
- MH - Manufactured Housing Residential
- A-1 - High Density Residential
- C - General Commercial
- EC - Expanded Commercial
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0 500 1,000 2,000 Feet

1" = 1500'

Taxlot Revision: 1/26/2009

Compilation Date: 4/27/2010

\GIS_\Workstation\Maps\PDF\11x17_Zoning.pdf

E-5	Notes: EXHIBIT 5 to proposed comprehensive plan and zoning map amendment	CITY OF SCAPPOOSE ZONIING MAP AS PROPOSED BY ROSEDALE DEVELOPMENT LLC SCAPPOOSE, OREGON	**Rosedale Development LLC** **50776 Dike Rd.—21A** **Scappoose, Oregon 97056** **Ph: 503.319.0119**	APPLICATION SUBMITTAL PREPARED 12/5/2011

Exhibit 2F

Exhibit 26

ROSEDALE ZONE CHANGE
TRAFFIC IMPACT STUDY

SCAPPOOSE, OREGON

DATE:
February 16, 2012

PREPARED FOR:
Joe Scharf
Rosedale Development, LLC

PREPARED BY:
Justin Cole
Todd E. Mobley, PE, PTOE

LANCASTER
ENGINEERING

321 SW 4th Ave., Suite 400 | Portland, OR 97204 | 503.248.0313 | lancasterengineering.com

TABLE OF CONTENTS

EXECUTIVE SUMMARY

1. A parcel located in the northeast corner of the intersection of SE Havlik Drive and SE 2nd Street in Scappoose, Oregon is proposed for zone change from MH - Manufactured Home to EC - Expanded Commercial.

2. Under the existing zoning it was assumed that 23 mobile or manufactured homes could be developed on the subject property. Under the proposed zoning, it was assumed that 30,000 square feet of commercial building floor area could be developed. With these reasonable worst-case assumptions for both the existing and proposed zoning designations, there would be an increase of 10 trips during the morning peak hour and 56 trips during the evening peak hour.

3. The intersection of Havlik Drive and Columbia River Highway is currently operating with a v/c ratio of 0.58 during both the morning and evening peak hours. By the year 2026, the v/c will degrade to 0.81 during the morning peak hour and 0.91 during the evening peak hour. Addition of trips from the proposed zone change will not worsen the v/c ratio of the study intersection.

4. Current ODOT policy states that impacts to an intersection are not significant if the v/c ratio worsens by 0.03 or less. As such, there is no significant affect from the proposed zone change at the Transportation Planning Rule is satisfied. No mitigations are necessary or recommended.

PROJECT DESCRIPTION

INTRODUCTION

This report analyzes and addresses the potential traffic impact on the existing infrastructure of the proposed zone change and comprehensive plan amendment from MH - Manufactured Home to EC - Expanded Commercial. The analysis includes intersection capacity calculations and an evaluation of queuing and will recommend any necessary mitigative measures.

The subject property is located in the southeast corner of the intersection of SE 2nd Street at SE Havlik Drive in Scappoose, Oregon. It is assumed that eventual development under the proposed zoning will consist of 30,000 square feet of general retail space in a combination of one or more buildings. The assumption is based on site area and general development standards.

Detailed information on traffic counts, trip generation calculations, and intersection capacity calculations are included in the appendix to this report.

LOCATION DESCRIPTION

The area proposed for zone change straddles the recent extension of SE 2nd Street. The areas west of and traversed by SE 2nd Street are not evaluated in this analysis as they are either right-of-way, or not of sufficient size to consider potential development separate from the adjoining commercial property. Instead, the parcel to east of SE 2nd Street is the focus of this analysis for the purpose of determining developable area and estimating trips generated by potential development.

The City of Scappoose and the Oregon Department of Transportation (ODOT) requires a study of the following intersections:

- SE Havlik Drive at Columbia River Highway (OR30)

Figure 1 on page six is a vicinity map showing the existing lane configurations and traffic control devices at the study intersection. Figure 1 also shows the area of the site that is the subject of the proposed zone change and the general boundary of the area near the site that is currently under development or vacant property that is expected to be developed within the planning horizon.

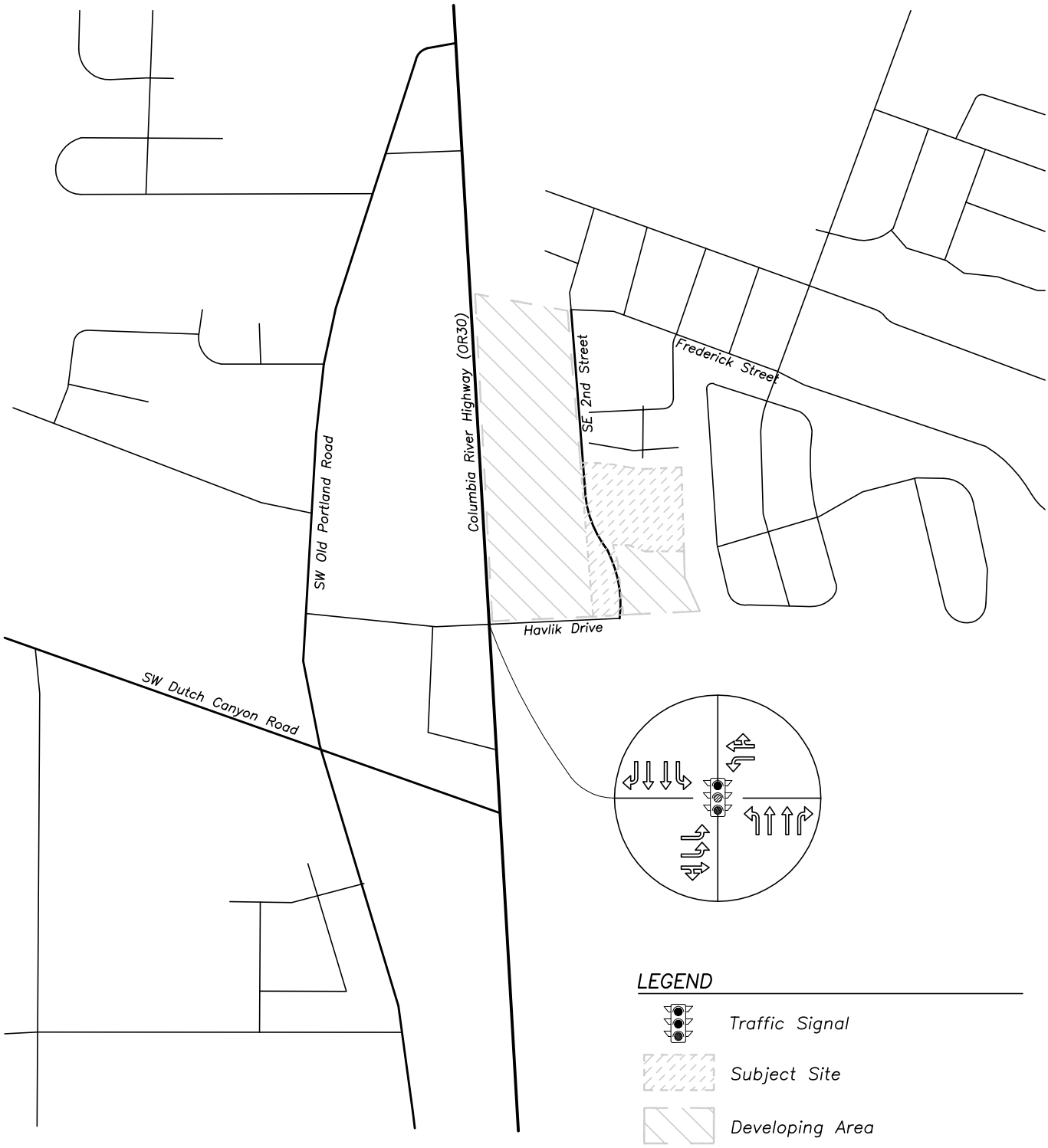
Columbia River Highway (OR30) is under the jurisdiction of the Oregon Department of Transportation and is classified as a Regional Highway. This portion of OR30 is a five lane section with northbound and southbound bicycle lanes and center turn lanes. As it approaches SE Havlik Drive, OR30 expands to six lanes to include northbound and southbound right-turn lanes to SE Havlik Drive. The posted speed is 45 mph. Curb and sidewalk exist along the southbound frontage of OR30. The northbound frontage of OR30 consists of edge of paving and a gravel shoulder and low vegetation providing separation from the existing railroad. The railroad runs north and south parallel to OR30 crossing the east leg of SE Havlik Drive.

SE Havlik Drive is under the jurisdiction of City of Scappoose and is classified as a Major Collector. West of OR30, SE Havlik Drive has a four lane section with one westbound lane, two left turn lanes and a shared through and right turn lane. East of OR30, SE Havlik Drive has a three lane section with one eastbound through lane joining traffic crossing OR30 with vehicles turning right from OR30 northbound. A concrete island separates eastbound through traffic from vehicles turning right from northbound OR30 at the intersection. Right turns from northbound OR30 to SE Havlik Drive are regulated by a yield sign at the intersection. SE Havlik Drive westbound is allotted a dedicated left turn lane as well as a shared through and right turn lane. Each of the westbound lanes of SE Havlik drive approaching OR30 is separated by raised concrete medians. Curb, gutter, sidewalk and bicycle lanes exist along both frontages of SE Havlik Drive.

The intersection is controlled by a fully-actuated traffic signal with protected left turn movements from OR30 to SE Havlik Drive and from SE Havlik Drive to OR30. Movement to and from the east leg of SE Havlik Drive is also controlled by the gated rail crossing. Crossing gates are situated to prevent all movement to and from the east leg of SE Havlik Drive in the event of a rail crossing.

Public transportation is available in the general vicinity through the Columbia County Transit Division, though no stops have been identified in the immediate area.

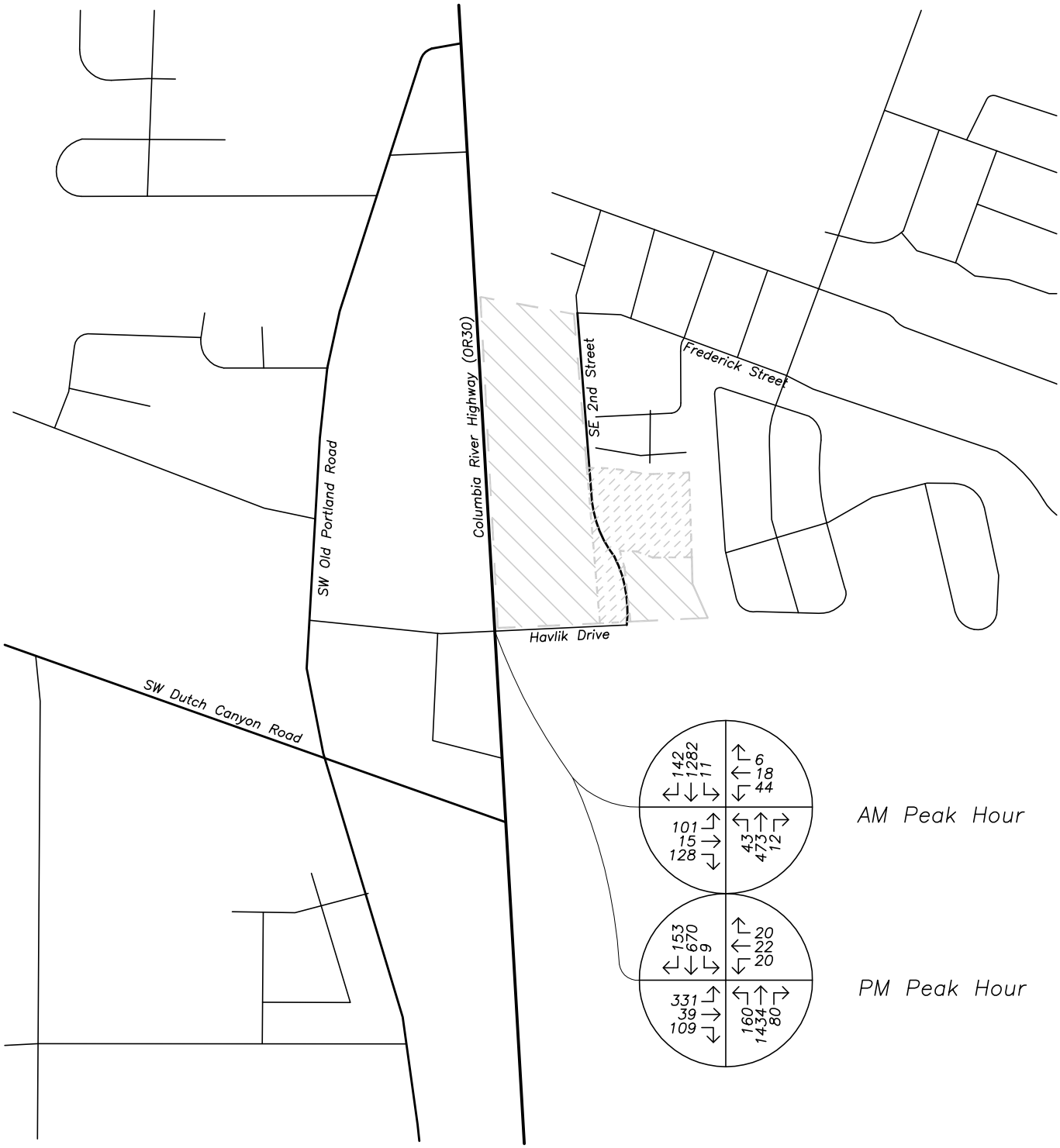
Manual turning movement counts were made at the study intersection Tuesday August 30, 2011 from 3:00 PM to 6:00 PM and August 31, 2011 from 6:00 AM to 9:00 AM. The peak hours typically occur from about 7:15 AM to 8:15 AM and from about 5:00 PM to 6:00 PM. The traffic volumes for the morning and evening peak hours are shown in Figure 2 on page seven. If should be noted that these traffic counts and the analysis in this report are the first to be conducted since the SE 2nd Street connection and Havlik Drive have been constructed and open to public use.



VICINITY MAP
Existing Intersection Configurations
and Traffic Control Devices

no scale

FIGURE 1



TRAFFIC VOLUMES
Existing Conditions
AM & PM Peak Hours

no scale

FIGURE 2

TRIP GENERATION AND DISTRIBUTION

TRIP GENERATION

When a comprehensive plan map amendment and zone change is proposed, a reasonable worst-case development from a trip generation standpoint under the current zoning is compared to a reasonable worst-case development under the proposed zoning. The current comprehensive plan map predicts transportation needs based on current designations. It is assumed that the sites are allowed to develop under the current designation to a worst-case development. Therefore, the analysis is made only for the change in trips associated with the comprehensive plan map amendment and zone change.

The existing zone, MH Manufactured Housing, allows for a variety of residential development types including single family detached and multifamily common wall dwellings, and mobile home parks. For the purpose of calculating trip generation and creating a comparison of the number of trips generated by allowable uses under the existing and proposed zones, it has been assumed that the subject property would be developed as mobile home sites under the current designation. Under the proposed zoning designation it has been assumed that the property would be developed for commercial use.

To the west and south of the subject site are properties that either recently developed, are currently developed, or are expected to develop within the planning horizon. To most accurately derive year 2026 conditions, trip generation was examined for these properties, in addition to the subject site. Derivation of 2026 traffic volumes is discussed in more detail later in this report, beginning on page 15. There are a total of five properties surrounding the site that are accounted for individually. They are as follows:

1. *Free Standing Discount Store* – This site is located west of the proposed zone change site and north of the recently-constructed Les Schwab tire store. A 19,514 square foot Goodwill store is under construction.
2. *High Turnover Restaurant* – In the northeast corner of the intersection of Highway 30 and Havlik Drive, a 5,320 square foot pizza restaurant is under construction.
3. *Aquatic Center (Recreational Community Center)* – The property immediately south of the subject site is vacant and also has the MH zoning designation. This site has been assumed to be developed as an auquatics recreation center as planned by the city.
4. *Tire Super Store* – West of 2nd Street and north of the restaurant mentioned in item 2 above, a Les Schwab store was recently constructed. At the time of the traffic counts, the store was not open for business, and as such, the trips are accounted for here.
5. *Specialty Retail* – A general retail building is planned in the northwest corner of the intersection of 2nd Street and Havlik Drive. The building is expected to be 12,000 square feet in size.

To estimate the trip generation from the subject site as well as the surrounding area described above, trip rates from the manual *TRIP GENERATION*, Eighth Edition, published by the Institute of Transportation Engineers (ITE), were used. The results of the trip generation calculations for buildout of these areas, including the subject site under the existing MH zoning, are shown in the table below. Detailed trip generation calculations are included in the appendix.

Existing Zoning Estimated Trip Generation

In-Process and Future Development

Land Use		Size	Daily Trips	Weekday AM Peak Hour Trips			Weekday PM Peak Hour Trips		
				TOTAL	IN	OUT	TOTAL	IN	OUT
Free Standing Discount			1116	21	14	7	98	49	49
Store	Internal 10 %	19,514 sq ft	112	2	1	1	10	5	5
	Pass By 23 %		231	4	2	2	20	10	10
High Turnover			676	61	29	32	59	32	29
Restaurant	*Internal 10 %*	*5,320 sq ft*	68	6	3	3	6	3	3
	Pass By 43 %		262	24	12	12	22	11	11
Aquatice Center			344	24	15	9	22	8	14
(Recreational	Internal 10 %	15,000 sq ft	34	2	2	1	2	1	1
Community Center)	Pass By 0 %		0	0	0	0	0	0	0
Tire Super Store			214	14	9	5	22	10	12
	Internal 10 %	*10,511 sq ft*	21	1	1	1	2	1	1
	Pass By 28 %		54	4	2	2	6	3	3
Speacialty Retail			552	60	34	26	50	22	28
	Internal 10 %	*12,000 sq ft*	55	6	3	3	5	2	3
	Pass By 34 %		169	18	9	9	16	8	8
Mobile Home			100	9	2	7	12	7	5
	Internal 10 %	20 Units	10	1	0	1	1	1	1
	Pass By 0 %		0	0	0	0	0	0	0
Gross New Trips			3002	189	103	86	263	128	137
Reductions			1016	69	35	34	90	45	46
Pass By				50	25	25	64	32	32
Net New Trips			**1986**	**120**	**68**	**52**	**173**	**83**	**91**

ITE Trip Generation Eighth Edition

To account for the increase in trips associated with the proposed change in zoning, the same trip generation exercise was repeated, but with development of 30,000 square feet of retail space on the subject site. The results of the trip generation calculations with the proposed zoning in place are shown in the following table.

Proposed Zoning Estimated Trip Generation

In-Process and Future Development

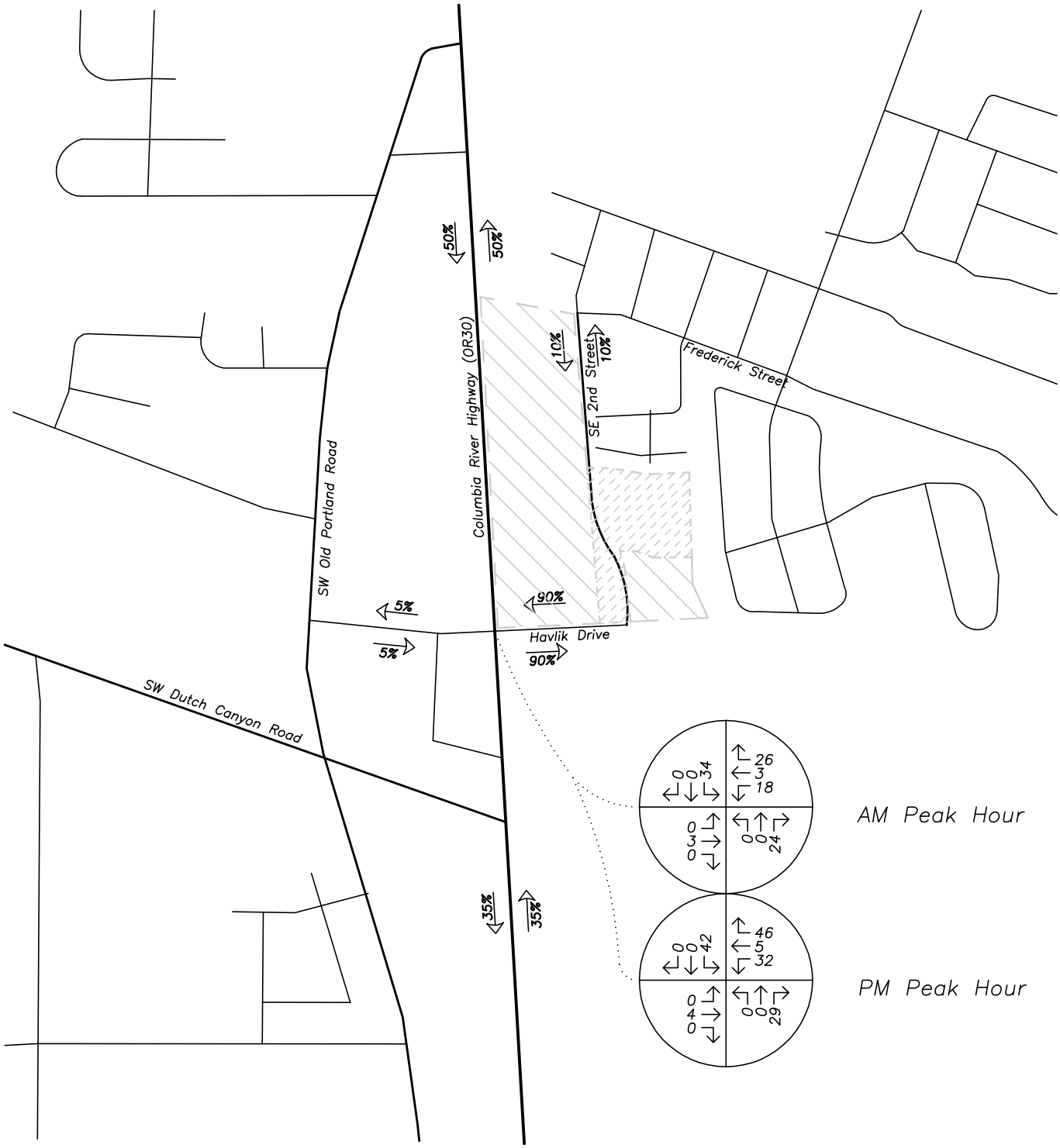
Land Use		Size	Daily Trips	Weekday AM Peak Hour Trips			Weekday PM Peak Hour Trips		
			2011	TOTAL	IN	OUT	TOTAL	IN	OUT
Free Standing Discount			1116	21	14	7	98	49	49
Store	Internal 10 %	19,514 sq ft	112	2	1	1	10	5	5
	Pass By 23 %		231	4	2	2	20	10	10
High Turnover			676	61	29	32	59	32	29
Restaurant	*Internal 10 %*	*5,320 sq ft*	68	6	3	3	6	3	3
	Pass By 43 %		262	24	12	12	22	11	11
Aquatice Center			344	24	15	9	22	8	14
(Recreational	Internal 10 %	15,000 sq ft	34	2	2	1	2	1	1
Community Center)	Pass By 0 %		0	0	0	0	0	0	0
Tire Super Store			214	14	9	5	22	10	12
	Internal 10 %	*10,511 sq ft*	21	1	1	1	2	1	1
	Pass By 28 %		54	4	2	2	6	3	3
Speacialty Retail			552	60	34	26	50	22	28
	Internal 10 %	*12,000 sq ft*	55	6	3	3	5	2	3
	Pass By 34 %		169	18	9	9	16	8	8
Shopping Center			1288	30	18	12	112	55	57
	Internal 10 %	30,000sq ft	129	3	2	1	11	6	6
	Pass By 34 %		394	9	5	5	34	17	17
Gross New Trips			4190	210	119	91	363	176	189
Reductions			1529	80	41	39	134	67	68
Pass By				59	30	30	98	49	49
Net New Trips			**2661**	**130**	**78**	**52**	**229**	**109**	**121**

ITE Trip Generation Eighth Edition

TRIP DISTRIBUTION

For primary trips generated by development of the site and the surrounding area, the trip distribution was derived based on the location of surrounding trip attractors and the street system surrounding the site. In general, the majority of the trips were assumed to be to and from the greater Scappoose area to the north of the site. Only 10 percent of the trips were assumed to use 2nd Street to the north, as the connection to other higher-classification east/west streets is rather circuitous. Pass-by trips were assumed to be to and from Highway 30 and were assigned based on the directional split of traffic on the highway.

Figures 3 and 4 on pages 11 and 12 show the assignment of primary and pass-by trips with development under the existing zoning. Figures 5 and 6 on pages 13 and 14 show the assignment of primary and pass-by trips with development under the proposed zoning.



Trip Generation		
	IN	OUT
AM Peak Hour	68	52
PM Peak Hour	83	91

LEGEND

Subject Site

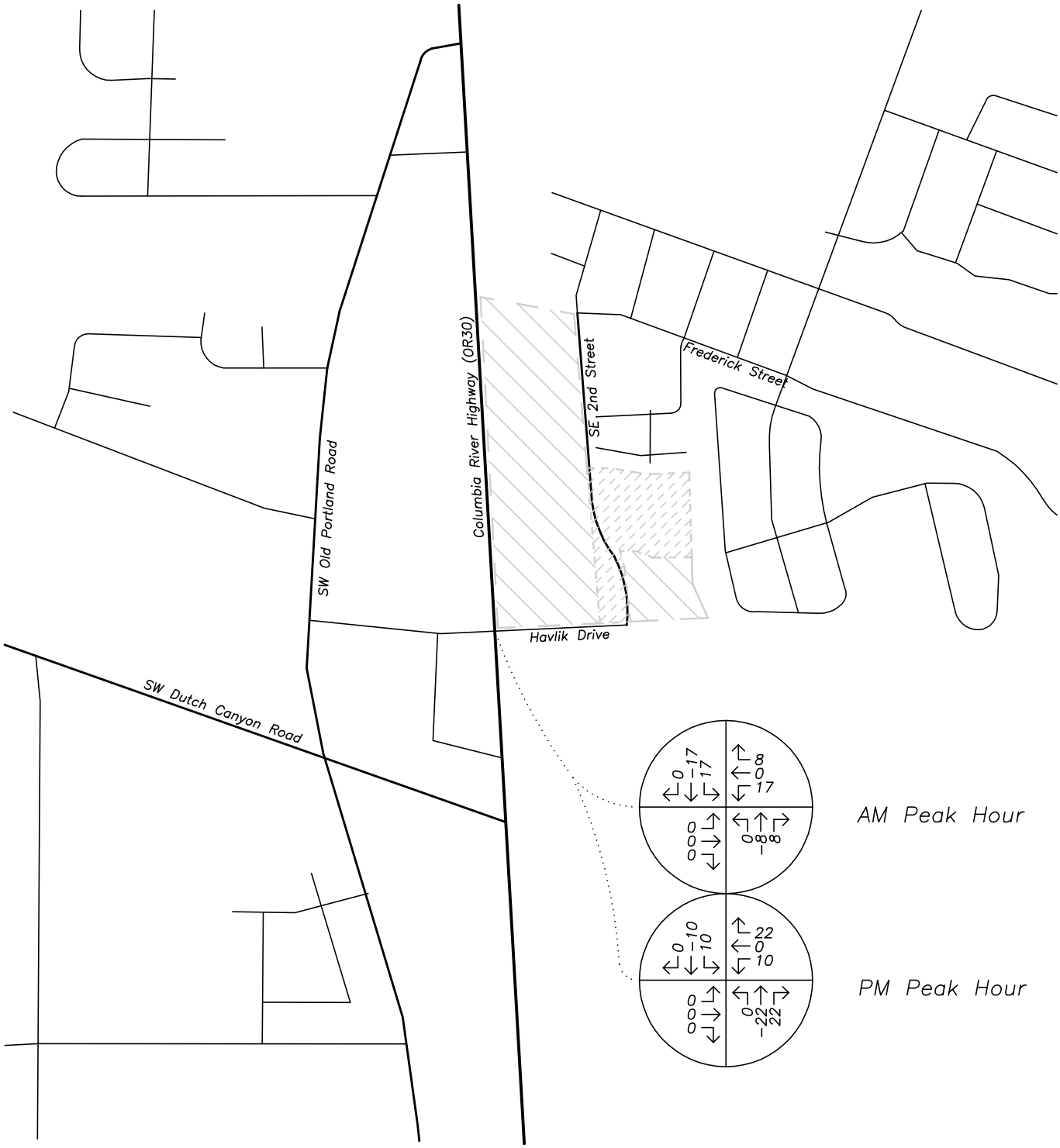
Developing Area

PRIMARY TRIPS
Developing Area & Subject Site – Existing Zoning
AM & PM Peak Hours

no scale

FIGURE 3

PAGE 11



Trip Generation		
	IN	OUT
AM Peak Hour	25	25
PM Peak Hour	32	32

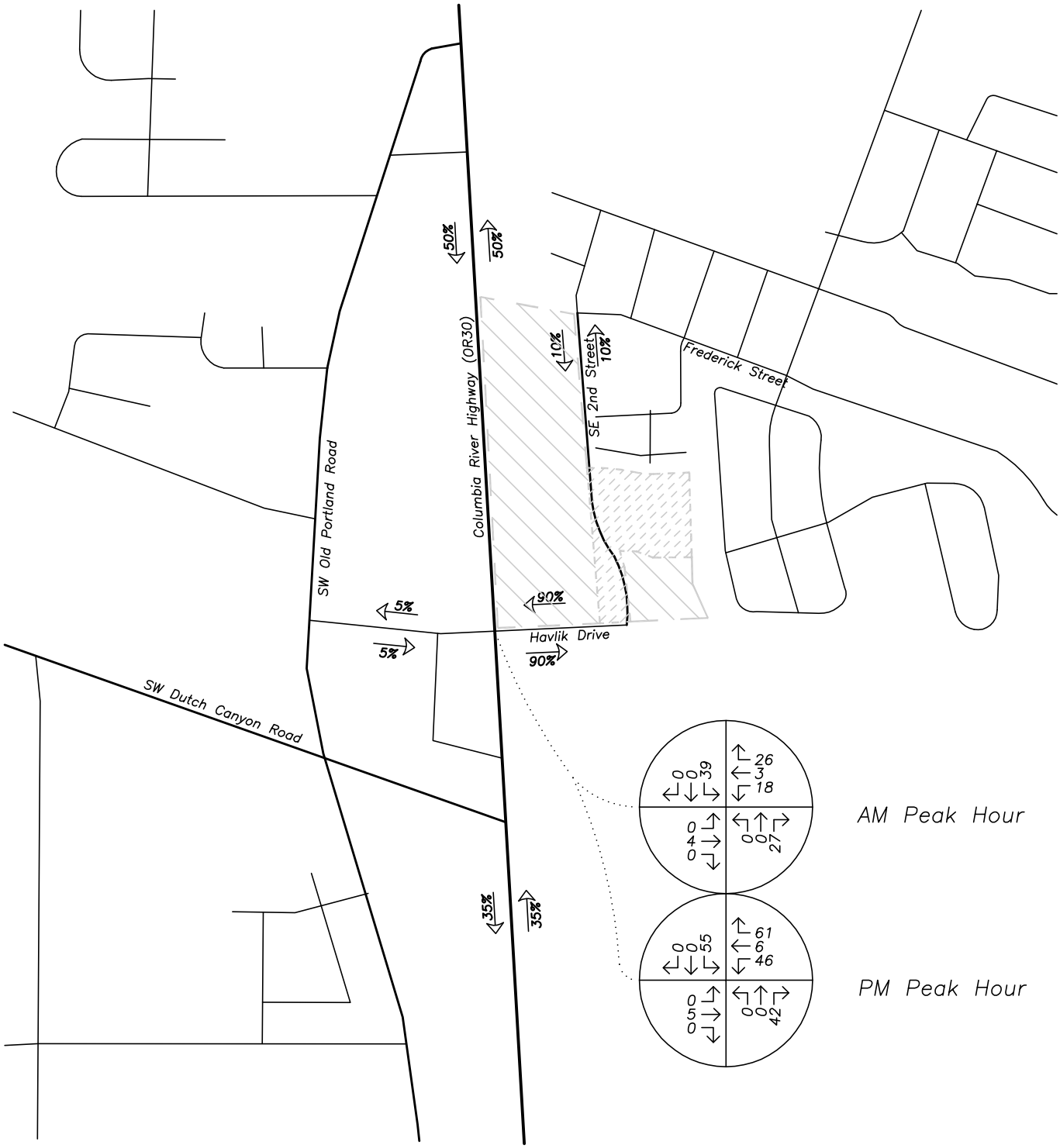
LEGEND

- Subject Site
- Developing Area

PASS-BY TRIPS
Developing Area & Subject Site – Existing Zoning
AM & PM Peak Hours

no scale

FIGURE 4



Trip Generation		
	IN	OUT
AM Peak Hour	78	52
PM Peak Hour	109	121

LEGEND

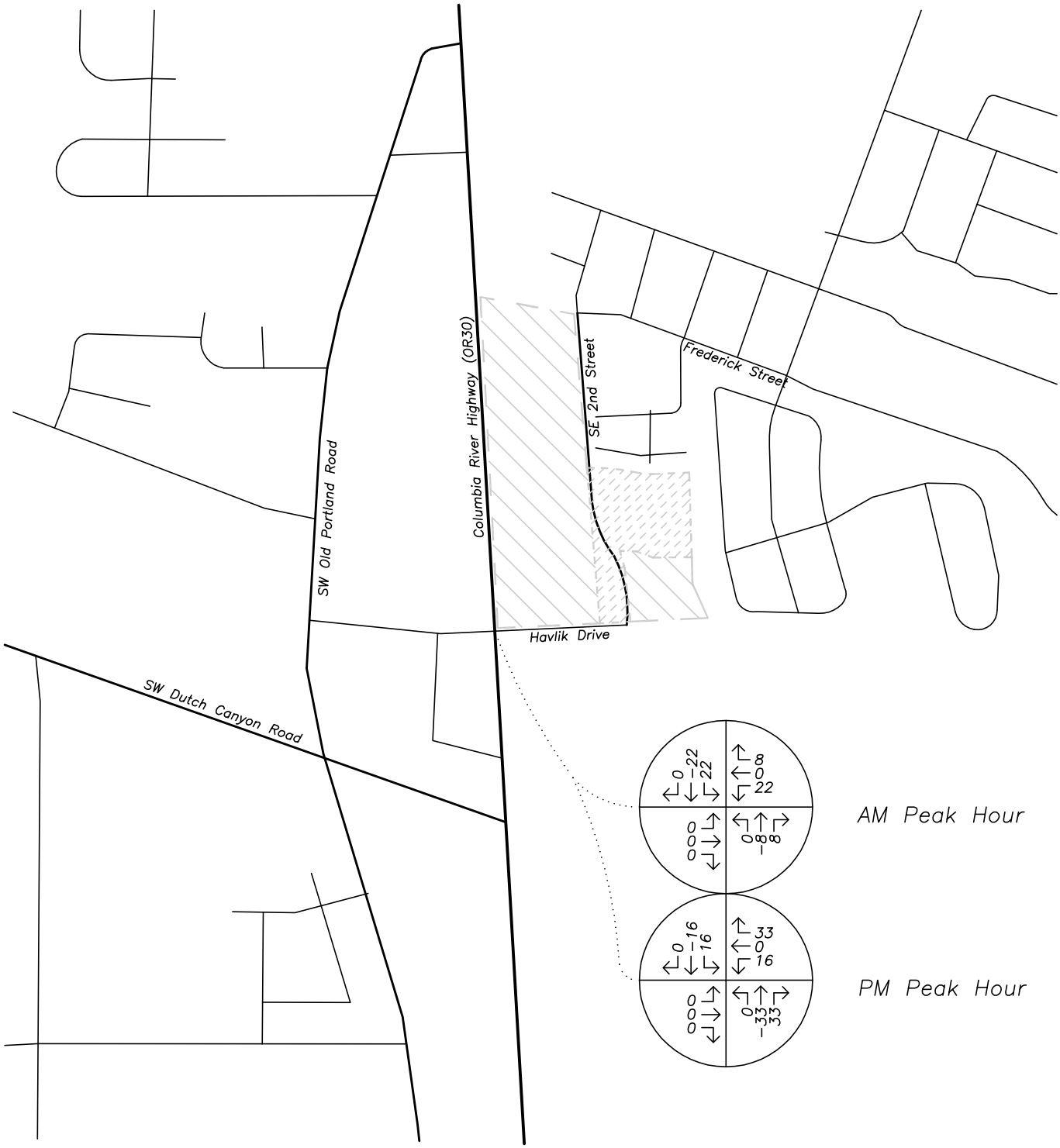
Subject Site

Developing Area

PRIMARY TRIPS
Developing Area & Subject Site – Proposed Zoning
AM & PM Peak Hours

no scale

FIGURE 5



Trip Generation		
	IN	OUT
AM Peak Hour	30	30
PM Peak Hour	49	49

LEGEND

Subject Site

Developing Area

PASS-BY TRIPS
Developing Area & Subject Site – Proposed Zoning
AM & PM Peak Hours

no scale

FIGURE 6

OPERATIONAL ANALYSIS

2026 CONDITIONS

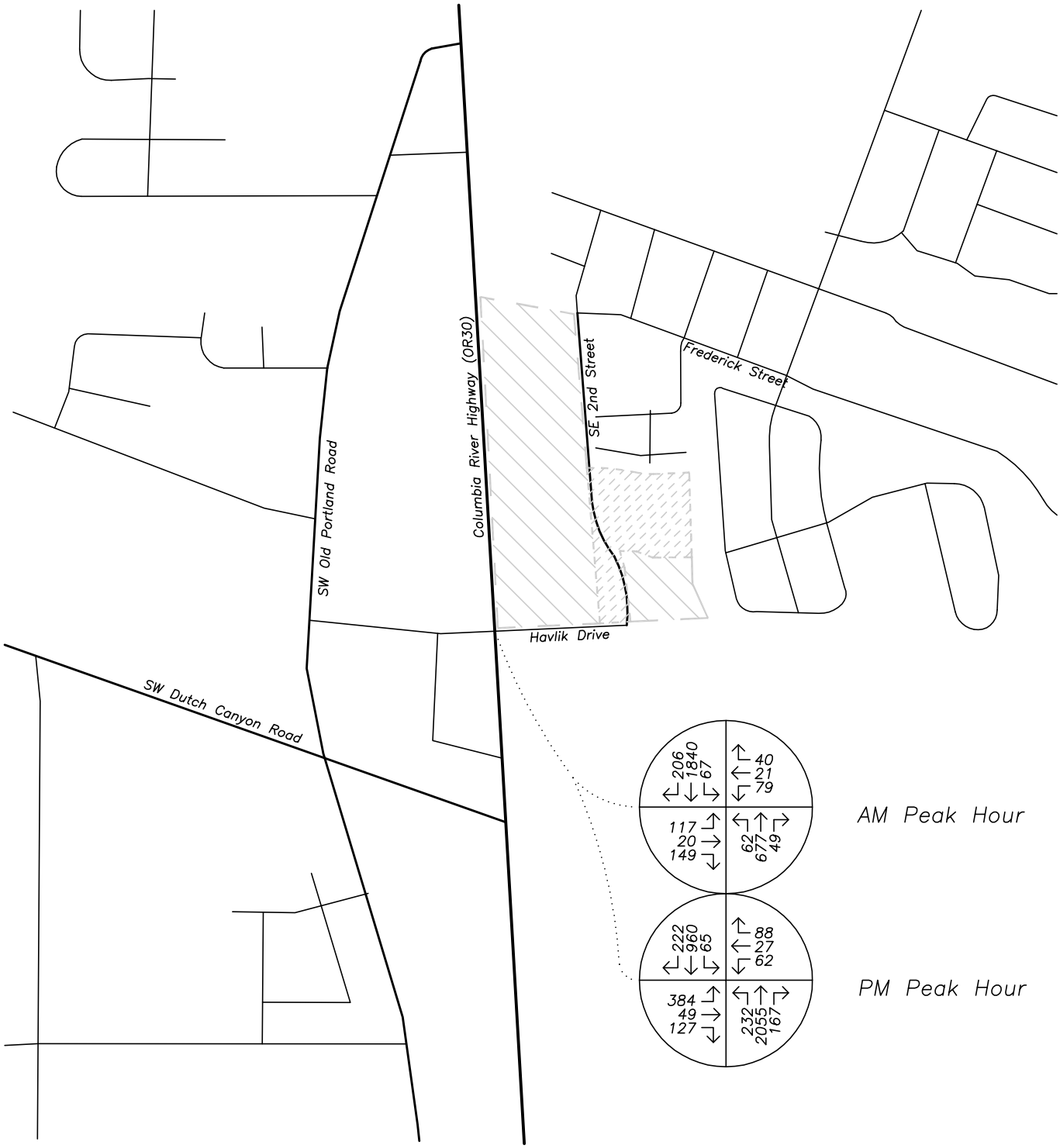
Because a change in zoning is proposed, a long-range analysis is necessary in order to satisfy the Transportation Planning Rule (TPR) and to ensure that the transportation system is capable of accommodating the potential increase in trips resulting from the proposed zone change. ODOT requires a 15 year horizon analysis. In order to estimate trips for 2026 conditions at the study area intersection, the following assumptions were made:

- Traffic on Highway 30 was increased by an annual growth rate of 2.5 percent. This growth rate was derived by ODOT traffic engineering staff at a meeting with Lancaster Engineering and the applicant on November 4, 2011.
- Traffic on the west leg of the intersection was increased by a lesser rate of 1.0 percent annually. A lower growth rate was used on this approach as the area west of the highway is largely built out. There are some vacant properties to develop, although they are residentially zoned.
- Traffic on the east leg of the intersection was accounted for by the trip generation analysis for both the existing and proposed zoning designation, as described in detail in the Trip Generation section of this report, beginning on page eight.

Figure 7 on page 16 shows the 2026 background traffic volumes with development of the site under the existing zoning. Figure 8 on page 17 shows the 2026 traffic volumes with development of the site under the proposed zoning.

PRIOR ANALYSIS

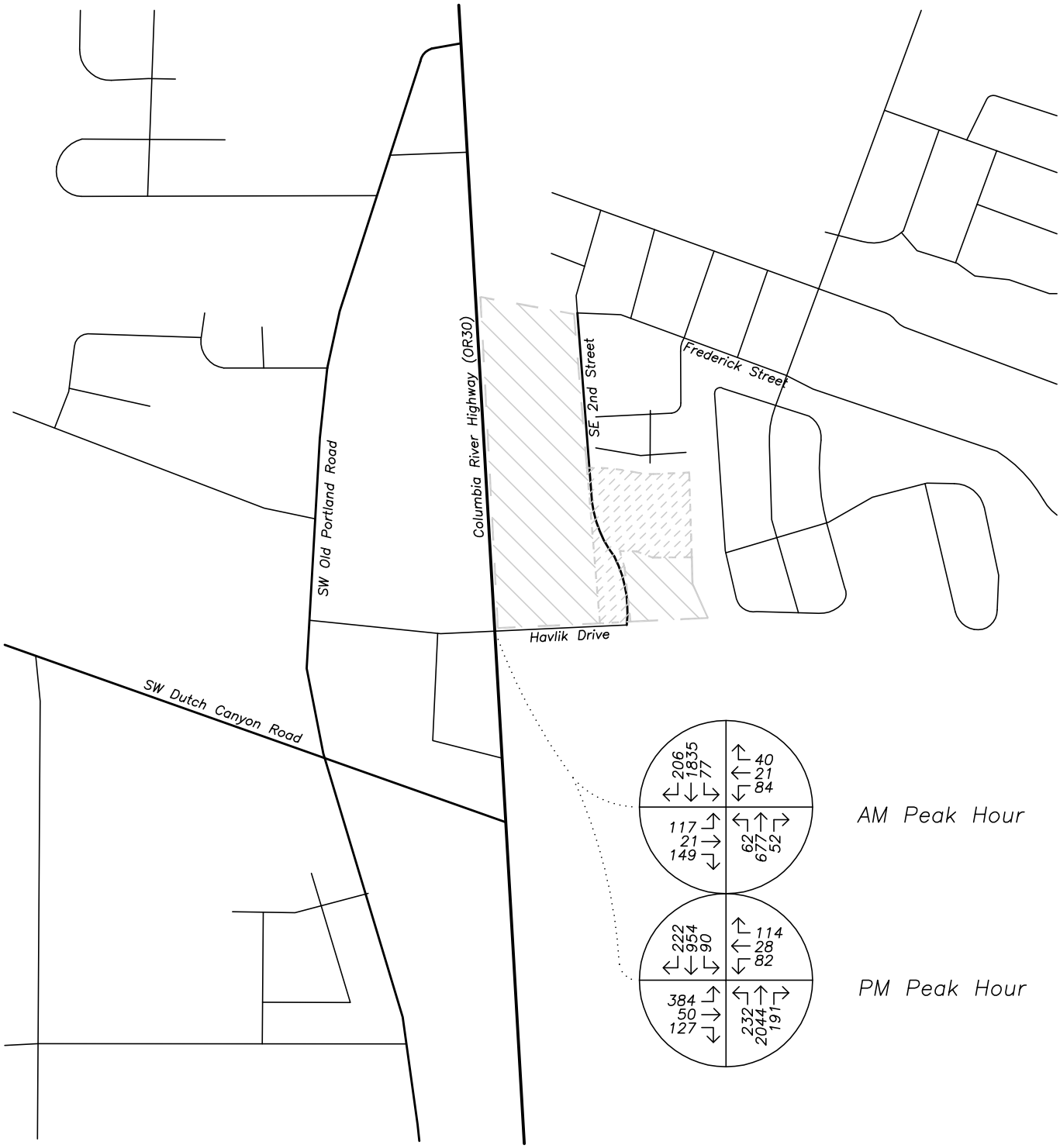
In 2004, Kittelson and Associates completed a Transportation Operations Analysis for the subject area, in order to identify the necessary configuration of the intersection of Highway 30 at SE Havlik Drive. That study identified approximately 3400 vehicles entering the intersection of Highway 30 at Havlik Drive during the morning peak hour and approximately 4500 vehicles entering the intersection during the evening peak hour. Our analysis indicates that with the development allowed by the proposed zone change, morning peak hour volumes will be slightly less than the prior estimates, with approximately 3300 vehicles entering the intersection. During the evening peak hour the volumes are very comparable to the prior analysis, with approximately 4500 vehicles entering the intersection. It should be noted that the 2004 analysis examined 2025 conditions, and this analysis examines 2026 conditions, so an additional year of growth is included.



TRAFFIC VOLUMES
2026 Background Conditions (Existing Zoning)
AM & PM Peak Hours

no scale

FIGURE 7



TRAFFIC VOLUMES
2026 Background with Proposed Zoning
AM & PM Peak Hours

no scale

FIGURE 8

CAPACITY AND LEVEL OF SERVICE ANALYSIS

To determine the capacity and level of service at the study intersection, a capacity analysis was conducted. The analysis was conducted according to the signalized intersection analysis methodology in the *HIGHWAY CAPACITY MANUAL* (HCM) published by the Transportation Research Board. Level of service can range from A, which indicates little or no delay, to F, which indicates a significant amount of congestion and delay. ODOT operational standards are based on volume-to-capacity (v/c) ratio. A v/c ratio less than 1.0 indicates that the intersection is operating within capacity. ODOT's standard for the intersection of Highway 30 and Havlik Drive is 0.70 or better. That is, no more than 70 percent of the intersection's capacity should be utilized in order to satisfy the standard. Level of service and average delay per vehicle are reported here for informational purposes only.

The results of the capacity analysis show that the intersection is currently operating at level of service C with a v/c ratio of 0.58 during both the morning and evening peak hours. By 2026 the operation will degrade somewhat, and the v/c ratio will exceed ODOT's standard. The capacity analysis shows v/c ratios of 0.81 and 0.91 during the morning and evening peak hours, respectively, under the current zoning. The proposed zone change will account for only a slight increase in trips over the existing zoning and will not impact the v/c ratios of the intersection during wither the morning or evening peak hours.

The results of the capacity analysis are summarized in the following table. Detailed capacity analysis output is included in the appendix.

Capacity & Level of Service Summary

	AM Peak Hour			PM Peak Hour		
	LOS	Delay	v/c	LOS	Delay	v/c
SE Havlik Drive at Highway 30						
Existing Conditions	C	26	0.58	C	26	0.58
2026 Background Conditions	C	35	0.81	D	40	0.91
2026 Background + Net Increase	D	35	0.81	D	41	0.91

LOS = Level of service
Delay = Average delay per vehicle in seconds
v/c = volume-to-capacity ratio

TRANSPORTATION PLANNING RULE

The TPR is in place to ensure that the transportation system is capable of supporting possible increases in traffic intensity that could result from changes to adopted plans and land use regulations. The applicable elements of the TPR are each quoted directly in *italics* below, with a response directly following.

660-012-0060

(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) Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to, transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.

(A) Types or levels of travel or access 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 such that it would not meet the performance standards identified in the TSP or comprehensive plan; or

(C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.

In this case, subsections (a) and (b) do not apply, the proposed zone change and subsequent development is not expected to impact the nor alter the functional classification of any existing or planned facility and the proposal does not include a change to any functional classification standards.

Subsection (C) does apply, as the intersection is expected to perform below the operational standard. ODOT has indicated that it is the policy of the agency to define a significant impact to an intersec-

tion as a decrease in v/c ratio of more than 0.03. That is, with the proposed zone change in place, if the v/c ratio of the intersection degrades by 0.03 or less, then the impact is considered to be insignificant. In this case, the v/c degrades by 0.02 in the morning peak hour and 0.03 during the evening peak hour. As such, there is not considered to be a "significant affect" and the TPR is satisfied.

CONCLUSIONS & RECOMMENDATIONS

The intersection of OR30 at SE Havlik Drive currently operates at an acceptable v/c ratio. The intersection operation is expected to worsen by 2026 and the v/c ratio will exceed ODOT's operational standard of 0.70, although the intersection will be operating within its capacity and will not be failing. The addition of trips resulting from the proposed change in zoning will not have a significant impact on the intersection operation and the TPR is satisfied. No mitigations are necessary or recommended to accommodate the proposed zone change.

LEVEL OF SERVICE

Level of service is used to describe the quality of traffic flow. Levels of service A to C are considered good, and rural roads are usually designed for level of service C. Urban streets and signalized intersections are typically designed for level of service D. Level of service E is considered to be the limit of acceptable delay. For unsignalized intersections, level of service E is generally considered acceptable. Here is a more complete description of levels of service:

Level of service A: Very low delay at intersections, with all traffic signal cycles clearing and no vehicles waiting through more than one signal cycle. On highways, low volume and high speeds, with speeds not restricted by other vehicles.

Level of service B: Operating speeds beginning to be affected by other traffic; short traffic delays at intersections. Higher average intersection delay than for level of service A resulting from more vehicles stopping.

Level of service C: Operating speeds and maneuverability closely controlled by other traffic; higher delays at intersections than for level of service B due to a significant number of vehicles stopping. Not all signal cycles clear the waiting vehicles. This is the recommended design standard for rural highways.

Level of service D: Tolerable operating speeds; long traffic delays occur at intersections. The influence of congestion is noticeable. At traffic signals many vehicles stop, and the proportion of vehicles not stopping declines. The number of signal cycle failures, for which vehicles must wait through more than one signal cycle, are noticeable. This is typically the design level for urban signalized intersections.

Level of service E: Restricted speeds, very long traffic delays at traffic signals, and traffic volumes near capacity. Flow is unstable so that any interruption, no matter how minor, will cause queues to form and service to deteriorate to level of service F. Traffic signal cycle failures are frequent occurrences. For unsignalized intersections, level of service E or better is generally considered acceptable.

Level of service F: Extreme delays, resulting in long queues which may interfere with other traffic movements. There may be stoppages of long duration, and speeds may drop to zero. There may be frequent signal cycle failures. Level of service F will typically result when vehicle arrival rates are greater than capacity. It is considered unacceptable by most drivers.

LEVEL OF SERVICE CRITERIA
FOR SIGNALIZED INTERSECTIONS

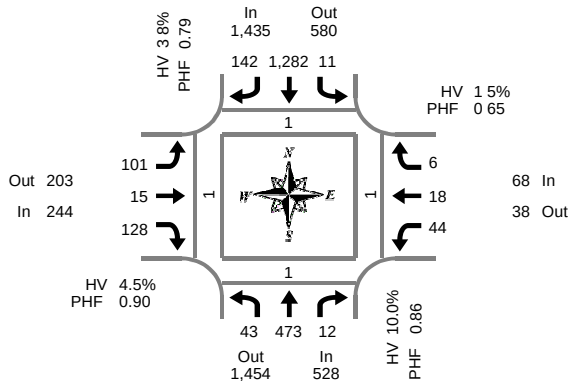
LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (Seconds)
A	<10
B	10-20
C	20-35
D	35-55
E	55-80
F	>80

LEVEL OF SERVICE CRITERIA
FOR UNSIGNALIZED INTERSECTIONS

LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (Seconds)
A	<10
B	10-15
C	15-25
D	25-35
E	35-50
F	>50

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
7:15 AM to 8:15 AM

Hwy 30 & SW Havlik Rd

Wednesday, August 31, 2011
6:00 AM to 9:00 AM

15-Minute Interval Summary
6:00 AM to 9:00 AM

Interval Start Time	Northbound Hwy 30				Southbound Hwy 30				Eastbound SW Havlik Rd				Westbound SW Havlik Rd				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
6 00 AM	5	62	0	0	0	257	19	0	6	1	38	0	7	0	1	0	396	0	0	0	0
6:15 AM	4	77	3	0	0	329	24	0	5	2	40	0	9	1	0	0	494	0	0	0	0
6 30 AM	5	83	1	0	1	309	31	0	9	0	28	0	13	3	1	0	484	0	0	0	0
6:45 AM	10	80	4	0	0	350	29	0	9	0	36	0	12	4	0	0	534	0	0	0	0
7 00 AM	7	98	4	0	1	260	42	0	17	1	33	1	14	2	3	0	482	0	0	0	0
7:15 AM	10	110	2	0	4	422	29	0	19	4	30	0	19	6	1	0	656	0	0	0	0
7 30 AM	10	115	6	0	1	332	34	0	22	6	38	0	10	3	2	0	579	0	1	1	0
7:45 AM	11	140	2	0	2	277	44	0	24	2	31	0	5	6	3	0	547	1	0	0	0
8 00 AM	12	108	2	0	4	251	35	0	36	3	29	1	10	3	0	0	493	0	0	0	1
8:15 AM	16	126	7	0	5	249	31	0	37	6	38	0	8	4	1	1	528	0	0	0	0
8 30 AM	8	93	3	0	2	216	40	0	25	6	36	0	13	1	2	0	445	0	1	0	0
8:45 AM	15	106	3	0	3	184	42	0	30	3	27	0	11	2	2	0	428	0	0	0	0
Total Survey	113	1,198	37	0	23	3,436	400	0	239	34	404	2	131	35	16	1	6,066	1	2	1	1

Peak Hour Summary
7:15 AM to 8:15 AM

By Approach	Northbound Hwy 30				Southbound Hwy 30				Eastbound SW Havlik Rd				Westbound SW Havlik Rd				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	528	1,454	1,982	0	1,435	580	2,015	0	244	203	447	1	68	38	106	0	2,275	1	1	1	1
%HV	10 0%				3.8%				4.5%				1 5%				5 2%				
PHF	0.86				0.79				0 90				0 65				0 87				

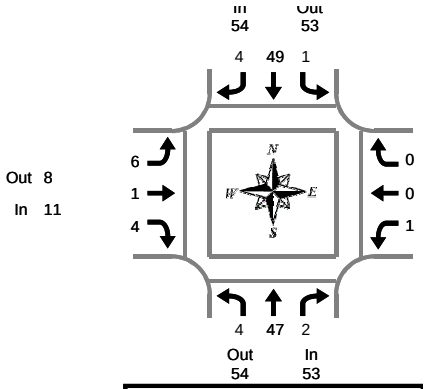
By Movement	Northbound Hwy 30				Southbound Hwy 30				Eastbound SW Havlik Rd				Westbound SW Havlik Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	43	473	12	528	11	1,282	142	1,435	101	15	128	244	44	18	6	68	2,275
%HV	9.3%	9.9%	16.7%	10.0%	9.1%	3.8%	2.8%	3 8%	5.9%	6.7%	3.1%	4 5%	2.3%	0.0%	0.0%	1 5%	5 2%
PHF	0.90	0.84	0.50	0.86	0.69	0.76	0.81	0.79	0.70	0.63	0.84	0 90	0.58	0.75	0.50	0 65	0 87

Rolling Hour Summary
6:00 AM to 9:00 AM

Interval Start Time	Northbound Hwy 30				Southbound Hwy 30				Eastbound SW Havlik Rd				Westbound SW Havlik Rd				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
6 00 AM	24	302	8	0	1	1,245	103	0	29	3	142	0	41	8	2	0	1,908	0	0	0	0
6:15 AM	26	338	12	0	2	1,248	126	0	40	3	137	1	48	10	4	0	1,994	0	0	0	0
6 30 AM	32	371	11	0	6	1,341	131	0	54	5	127	1	58	15	5	0	2,156	0	0	0	0
6:45 AM	37	403	16	0	6	1,364	134	0	67	11	137	1	55	15	6	0	2,251	0	1	1	0
7 00 AM	38	463	14	0	8	1,291	149	0	82	13	132	1	48	17	9	0	2,264	1	1	1	0
7:15 AM	43	473	12	0	11	1,282	142	0	101	15	128	1	44	18	6	0	2,275	1	1	1	1
7 30 AM	49	489	17	0	12	1,109	144	0	119	17	136	1	33	16	6	1	2,147	1	1	1	1
7:45 AM	47	467	14	0	13	993	150	0	122	17	134	1	36	14	6	1	2,013	1	1	0	1
8 00 AM	51	433	15	0	14	900	148	0	128	18	130	1	42	10	5	1	1 894	0	1	0	1

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



Hwy 30 & SW Havlik Rd

Wednesday, August 31, 2011
6:00 AM to 9:00 AM

Peak Hour Summary
7:15 AM to 8:15 AM

Heavy Vehicle 15-Minute Interval Summary
6:00 AM to 9:00 AM

Interval Start Time	Northbound Hwy 30				Southbound Hwy 30				Eastbound SW Havlik Rd				Westbound SW Havlik Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
6 00 AM	3	11	0	14	0	7	1	8	4	0	0	4	0	0	0	0	26
6:15 AM	0	17	1	18	0	12	1	13	2	0	0	2	0	0	0	0	33
6 30 AM	2	12	0	14	0	11	0	11	0	0	1	1	0	0	0	0	26
6:45 AM	0	14	2	16	0	9	1	10	1	0	0	1	1	0	0	1	28
7 00 AM	1	6	0	7	0	9	0	9	3	0	0	3	0	0	1	1	20
7:15 AM	1	11	0	12	0	19	0	19	0	0	2	2	0	0	0	0	33
7 30 AM	0	12	1	13	0	11	1	12	1	1	1	3	1	0	0	1	29
7:45 AM	2	13	1	16	0	10	2	12	2	0	1	3	0	0	0	0	31
8 00 AM	1	11	0	12	1	9	1	11	3	0	0	3	0	0	0	0	26
8:15 AM	3	14	1	18	0	12	2	14	2	0	2	4	2	0	0	2	38
8 30 AM	2	10	0	12	1	13	1	15	1	1	1	3	0	0	0	0	30
8:45 AM	3	13	1	17	0	16	2	18	1	0	1	2	0	0	1	1	38
Total Survey	18	144	7	169	2	138	12	152	20	2	9	31	4	0	2	6	358

Heavy Vehicle Peak Hour Summary
7:15 AM to 8:15 AM

By Approach	Northbound Hwy 30			Southbound Hwy 30			Eastbound SW Havlik Rd			Westbound SW Havlik Rd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	53	54	107	54	53	107	11	8	19	1	4	5	119
PHF	0.28			0.29			0.28			0.08			0 28

By Movement	Northbound Hwy 30				Southbound Hwy 30				Eastbound SW Havlik Rd				Westbound SW Havlik Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	4	47	2	53	1	49	4	54	6	1	4	11	1	0	0	1	119
PHF	0.13	0.27	0.17	0 28	0.13	0.30	0.20	0 29	0.21	0.25	0.25	0 28	0.13	0.00	0.00	0 08	0 28

Heavy Vehicle Rolling Hour Summary
6:00 AM to 9:00 AM

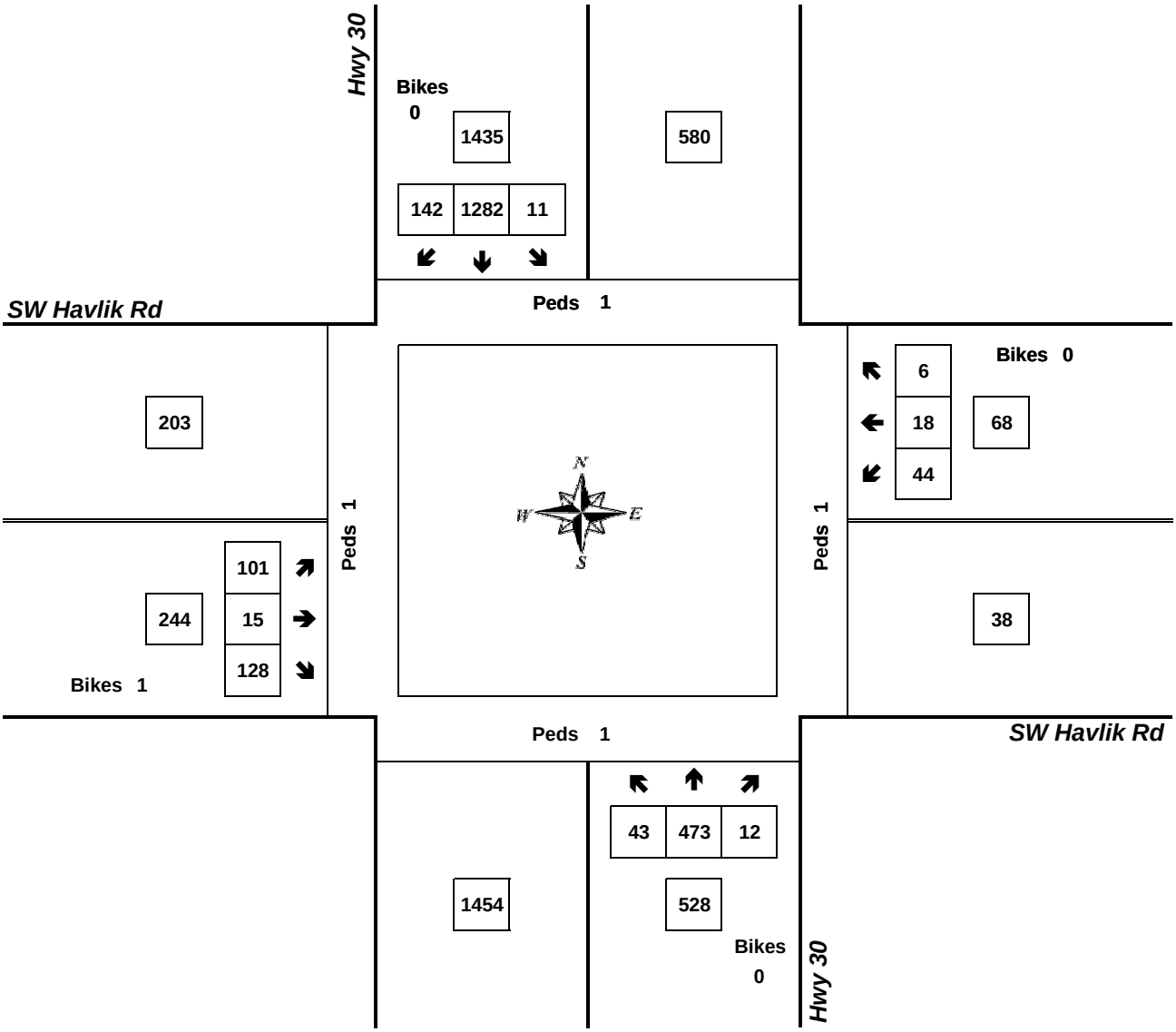
Interval Start Time	Northbound Hwy 30				Southbound Hwy 30				Eastbound SW Havlik Rd				Westbound SW Havlik Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
6 00 AM	5	54	3	62	0	39	3	42	7	0	1	8	1	0	0	1	113
6:15 AM	3	49	3	55	0	41	2	43	6	0	1	7	1	0	1	2	107
6 30 AM	4	43	2	49	0	48	1	49	4	0	3	7	1	0	1	2	107
6:45 AM	2	43	3	48	0	48	2	50	5	1	3	9	2	0	1	3	110
7 00 AM	4	42	2	48	0	49	3	52	6	1	4	11	1	0	1	2	113
7:15 AM	4	47	2	53	1	49	4	54	6	1	4	11	1	0	0	1	119
7 30 AM	6	50	3	59	1	42	6	49	8	1	4	13	3	0	0	3	124
7:45 AM	8	48	2	58	2	44	6	52	8	1	4	13	2	0	0	2	125
8 00 AM	9	48	2	59	2	50	6	58	7	1	4	12	2	0	1	3	132

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

Hwy 30 & SW Havlik Rd

7:15 AM to 8:15 AM
Wednesday, August 31, 2011

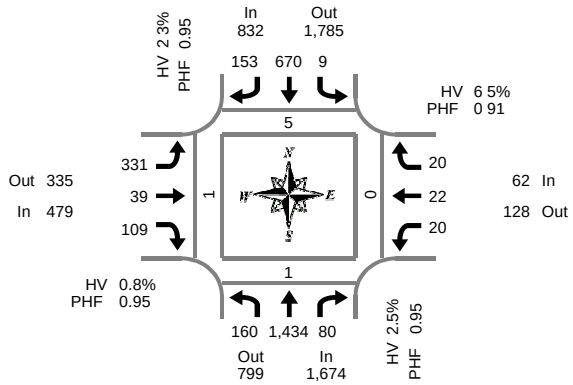


Approach	PHF	HV%	Volume
EB	0.90	4.5%	244
WB	0.65	1.5%	68
NB	0.86	10.0%	528
SB	0.79	3.8%	1,435
Intersection	0.87	5.2%	2,275

Count Period: 6:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
5:00 PM to 6:00 PM

Hwy 30 & SW Havlik Rd

Tuesday, August 30, 2011
3:00 PM to 6:00 PM

15-Minute Interval Summary
3:00 PM to 6:00 PM

Interval Start Time	Northbound Hwy 30				Southbound Hwy 30				Eastbound SW Havlik Rd				Westbound SW Havlik Rd				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
3 00 PM	42	268	7	0	1	140	39	1	72	6	20	0	4	7	4	0	610	0	0	0	0
3:15 PM	28	280	9	0	2	141	27	0	67	6	25	0	3	2	2	0	592	2	0	0	1
3 30 PM	40	332	15	0	1	158	33	0	60	4	22	1	5	7	5	0	682	0	0	0	0
3:45 PM	33	291	11	0	1	159	42	0	68	2	23	0	4	5	6	0	645	0	0	0	1
4 00 PM	40	307	8	0	2	181	42	0	72	8	25	0	5	6	4	0	700	1	0	0	0
4:15 PM	36	321	12	0	3	173	34	1	82	5	20	0	1	5	5	0	697	3	1	0	0
4 30 PM	42	356	19	1	1	165	26	0	69	6	20	1	7	8	4	0	723	2	0	0	0
4:45 PM	48	339	12	0	3	151	34	0	79	9	25	0	3	6	4	0	713	1	1	0	1
5 00 PM	39	328	23	0	1	173	41	0	84	13	25	0	5	4	6	1	742	0	0	0	0
5:15 PM	43	381	18	0	2	176	40	0	88	9	25	0	5	5	3	0	795	2	0	0	0
5 30 PM	32	371	22	0	3	167	34	0	84	11	31	0	6	7	4	0	772	1	1	0	1
5:45 PM	46	354	17	0	3	154	38	0	75	6	28	1	4	6	7	0	738	2	0	0	0
Total Survey	469	3,928	173	1	23	1,938	430	2	900	85	289	3	52	68	54	1	8,409	14	3	0	4

Peak Hour Summary
5:00 PM to 6:00 PM

By Approach	Northbound Hwy 30				Southbound Hwy 30				Eastbound SW Havlik Rd				Westbound SW Havlik Rd				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	1,674	799	2,473	0	832	1,785	2,617	0	479	335	814	1	62	128	190	1	3,047	5	1	0	1
%HV	2.5%				2.3%				0.8%				6 5%				2 3%				
PHF	0.95				0.95				0 95				0 91				0 96				

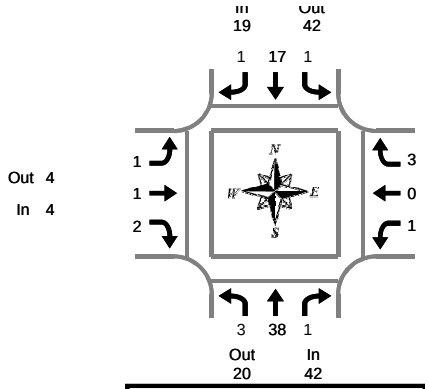
By Movement	Northbound Hwy 30				Southbound Hwy 30				Eastbound SW Havlik Rd				Westbound SW Havlik Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	160	1,434	80	1,674	9	670	153	832	331	39	109	479	20	22	20	62	3,047
%HV	1.9%	2.6%	1.3%	2.5%	11.1%	2.5%	0.7%	2 3%	0.3%	2.6%	1.8%	0 8%	5.0%	0.0%	15.0%	6 5%	2 3%
PHF	0.87	0.94	0.87	0.95	0.75	0.95	0.93	0 95	0.94	0.75	0.88	0 95	0.83	0.79	0.71	0 91	0 96

Rolling Hour Summary
3:00 PM to 6:00 PM

Interval Start Time	Northbound Hwy 30				Southbound Hwy 30				Eastbound SW Havlik Rd				Westbound SW Havlik Rd				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
3 00 PM	143	1,171	42	0	5	598	141	1	267	18	90	1	16	21	17	0	2,529	2	0	0	2
3:15 PM	141	1,210	43	0	6	639	144	0	267	20	95	1	17	20	17	0	2,619	3	0	0	2
3 30 PM	149	1,251	46	0	7	671	151	1	282	19	90	1	15	23	20	0	2,724	4	1	0	1
3:45 PM	151	1,275	50	1	7	678	144	1	291	21	88	1	17	24	19	0	2,765	6	1	0	1
4 00 PM	166	1,323	51	1	9	670	136	1	302	28	90	1	16	25	17	0	2,833	7	2	0	1
4:15 PM	165	1,344	66	1	8	662	135	1	314	33	90	1	16	23	19	1	2,875	6	2	0	1
4 30 PM	172	1,404	72	1	7	665	141	0	320	37	95	1	20	23	17	1	2,973	5	1	0	1
4:45 PM	162	1,419	75	0	9	667	149	0	335	42	106	0	19	22	17	1	3,022	4	2	0	2
5 00 PM	160	1 434	80	0	9	670	153	0	331	39	109	1	20	22	20	1	3 047	5	1	0	1

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



Hwy 30 & SW Havlik Rd

Tuesday, August 30, 2011
3:00 PM to 6:00 PM

Peak Hour Summary
5:00 PM to 6:00 PM

Heavy Vehicle 15-Minute Interval Summary
3:00 PM to 6:00 PM

Interval Start Time	Northbound Hwy 30				Southbound Hwy 30				Eastbound SW Havlik Rd				Westbound SW Havlik Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
3 00 PM	2	19	0	21	0	9	0	9	1	0	1	2	0	0	1	1	33
3:15 PM	1	13	0	14	1	13	1	15	0	0	0	0	0	0	0	0	29
3 30 PM	1	9	0	10	0	11	0	11	1	0	1	2	1	0	0	1	24
3:45 PM	0	12	0	12	1	6	0	7	0	0	0	0	0	0	0	0	19
4 00 PM	0	9	0	9	0	8	0	8	0	0	1	1	0	0	2	2	20
4:15 PM	0	10	0	10	1	9	0	10	1	0	0	1	0	0	0	0	21
4 30 PM	0	14	0	14	0	6	0	6	0	0	1	1	1	0	0	1	22
4:45 PM	1	11	1	13	0	8	1	9	1	0	2	3	0	0	1	1	26
5 00 PM	0	6	0	6	0	5	0	5	0	0	1	1	0	0	0	0	12
5:15 PM	0	14	0	14	0	4	0	4	0	0	0	0	0	0	1	1	19
5 30 PM	1	12	0	13	1	5	0	6	1	1	0	2	0	0	0	0	21
5:45 PM	2	6	1	9	0	3	1	4	0	0	1	1	1	0	2	3	17
Total Survey	8	135	2	145	4	87	3	94	5	1	8	14	3	0	7	10	263

Heavy Vehicle Peak Hour Summary
5:00 PM to 6:00 PM

By Approach	Northbound Hwy 30			Southbound Hwy 30			Eastbound SW Havlik Rd			Westbound SW Havlik Rd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	42	20	62	19	42	61	4	4	8	4	3	7	69
PHF	0.23			0.14			0.20			0.25			0 20

By Movement	Northbound Hwy 30				Southbound Hwy 30				Eastbound SW Havlik Rd				Westbound SW Havlik Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	3	38	1	42	1	17	1	19	1	1	2	4	1	0	3	4	69
PHF	0.19	0.23	0.25	0 23	0.13	0.13	0.25	0.14	0.13	0.25	0.13	0 20	0.25	0.00	0.25	0 25	0 20

Heavy Vehicle Rolling Hour Summary
3:00 PM to 6:00 PM

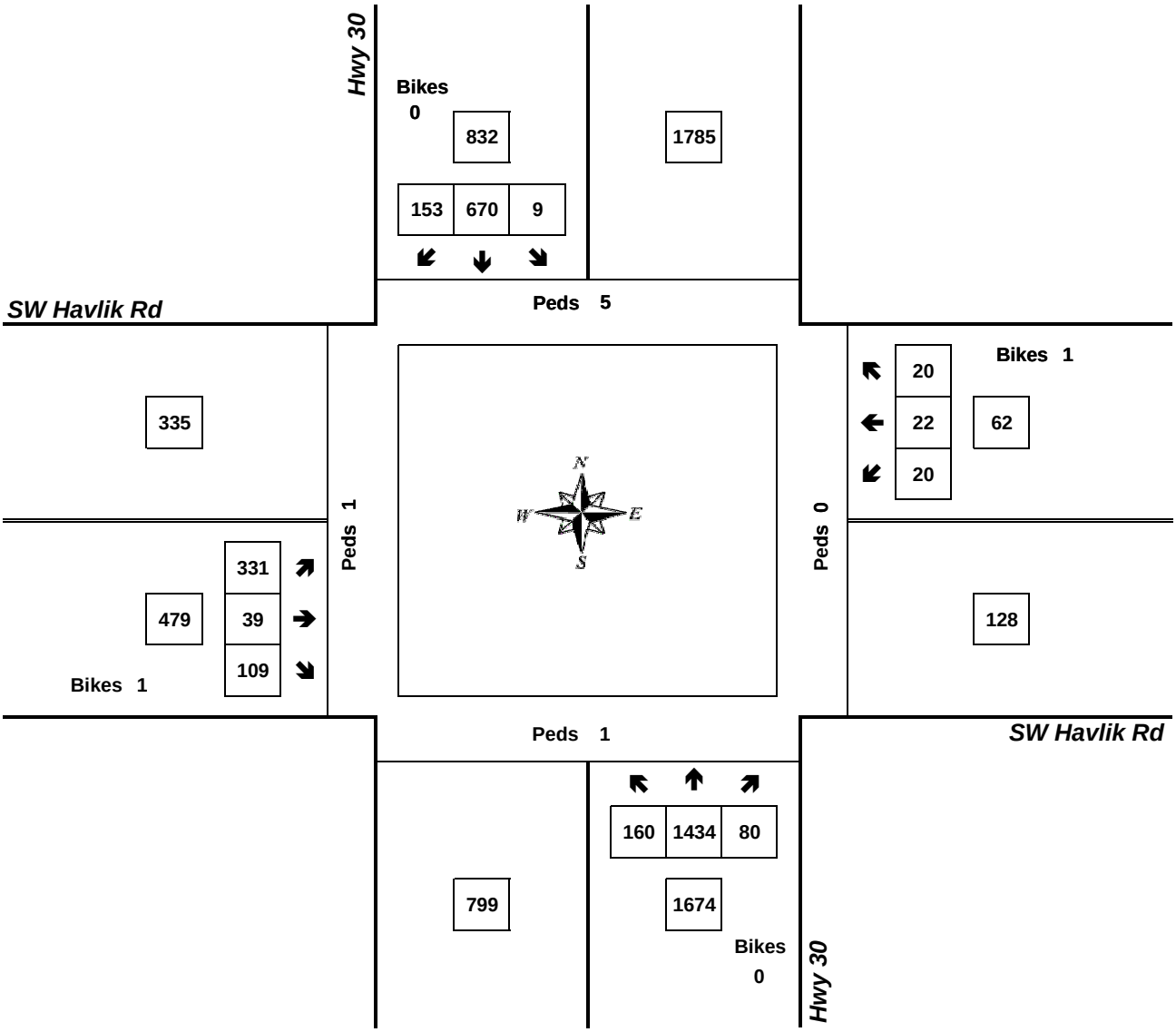
Interval Start Time	Northbound Hwy 30				Southbound Hwy 30				Eastbound SW Havlik Rd				Westbound SW Havlik Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
3 00 PM	4	53	0	57	2	39	1	42	2	0	2	4	1	0	1	2	105
3:15 PM	2	43	0	45	2	38	1	41	1	0	2	3	1	0	2	3	92
3 30 PM	1	40	0	41	2	34	0	36	2	0	2	4	1	0	2	3	84
3:45 PM	0	45	0	45	2	29	0	31	1	0	2	3	1	0	2	3	82
4 00 PM	1	44	1	46	1	31	1	33	2	0	4	6	1	0	3	4	89
4:15 PM	1	41	1	43	1	28	1	30	2	0	4	6	1	0	1	2	81
4 30 PM	1	45	1	47	0	23	1	24	1	0	4	5	1	0	2	3	79
4:45 PM	2	43	1	46	1	22	1	24	2	1	3	6	0	0	2	2	78
5 00 PM	3	38	1	42	1	17	1	19	1	1	2	4	1	0	3	4	69

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

Hwy 30 & SW Havlik Rd

5:00 PM to 6:00 PM
Tuesday, August 30, 2011



Approach	PHF	HV%	Volume
EB	0.95	0.8%	479
WB	0.91	6.5%	62
NB	0.95	2.5%	1,674
SB	0.95	2.3%	832
Intersection	0.96	2.3%	3,047

Count Period: 3:00 PM to 6:00 PM

TRIP GENERATION CALCULATIONS

Land Use: Free-Standing Discount Store
Land Use Code: 815
Variable: 1000 Sq Ft Gross Floor Area
Variable Value: 19

AM PEAK HOUR

Trip Rate: 1.06

	Enter	Exit	Total
Directional Distribution	68%	32%	
Trip Ends	**14**	**6**	**20**

PM PEAK HOUR

Trip Rate: 5.00

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**48**	**47**	**95**

WEEKDAY

Trip Rate: 57.24

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**544**	**544**	**1,088**

SATURDAY

Trip Rate: 71.07

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**675**	**675**	**1,350**

Source: TRIP GENERATION, Eighth Edition

TRIP GENERATION CALCULATIONS

Land Use: High-Turnover (Sit-Down) Restaurant
Land Use Code: 932
Variable: 1000 Sq Ft Gross Floor Area
Variable Quantity: 5.32

AM PEAK HOUR

Trip Rate: 11.52

	Enter	Exit	Total
Directional Distribution	52%	48%	
Trip Ends	**32**	**29**	**61**

PM PEAK HOUR

Trip Rate: 11.15

	Enter	Exit	Total
Directional Distribution	59%	41%	
Trip Ends	**35**	**24**	**59**

WEEKDAY

Trip Rate: 127.15

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**338**	**338**	**676**

SATURDAY

Trip Rate: 158.37

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**421**	**421**	**842**

Source: TRIP GENERATION, Eighth Edition

TRIP GENERATION CALCULATIONS

Land Use: Recreational Community Center
Land Use Code: 495
Variable: 1000 Sq. Feet Gross Floor Area
Variable Value: 15.00

AM PEAK HOUR

Trip Rate: 1.62

	Enter	Exit	Total
Directional Distribution	61%	39%	
Trip Ends	**15**	**9**	**24**

PM PEAK HOUR

Trip Rate: 1.45

	Enter	Exit	Total
Directional Distribution	37%	63%	
Trip Ends	**8**	**14**	**22**

WEEKDAY

Trip Rate: 22.88

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**172**	**172**	**344**

SATURDAY

Trip Rate: 9.10

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**68**	**68**	**136**

Source: TRIP GENERATION, Eighth Edition

TRIP GENERATION CALCULATIONS

Land Use: Tire Superstore
Land Use Code: 849
Variable: 1000 Sq Ft Gross Floor Area
Variable Value: 10.5

AM PEAK HOUR

Trip Rate: 1.34

	Enter	Exit	Total
Directional Distribution	65%	35%	
Trip Ends	**9**	**5**	**14**

PM PEAK HOUR

Trip Rate: 2.11

	Enter	Exit	Total
Directional Distribution	47%	53%	
Trip Ends	**10**	**12**	**22**

WEEKDAY

Trip Rate: 20.36

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**107**	**107**	**214**

SATURDAY

Trip Rate: 19.03

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**100**	**100**	**200**

Source: TRIP GENERATION, Eighth Edition

TRIP GENERATION CALCULATIONS

Land Use: Specialty Retail Center
Land Use Code: 814
Variable: 1000 Sq Ft Gross Leasable Area
Variable Value: 12

PM PEAK OF GENERATOR

Trip Rate: 5.02

	Enter	Exit	Total
Directional Distribution	56%	44%	
Trip Ends	**34**	**26**	**60**

PM PEAK HOUR

Trip Equation: T = 2.40(X) + 21.48

	Enter	Exit	Total
Directional Distribution	44%	56%	
Trip Ends	**22**	**28**	**50**

WEEKDAY

Trip Equation: T = 42.78(X) + 37.66

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**276**	**276**	**552**

SATURDAY

Trip Rate: 42.04

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**252**	**252**	**504**

Source: TRIP GENERATION, Eighth Edition

TRIP GENERATION CALCULATIONS

Land Use: Mobile Home Park
Land Use Code: 240
Variable: Occupied Dwelling Units
Variable Value: 20

AM PEAK HOUR

Trip Rate: 0.44

	Enter	Exit	Total
Directional Distribution	20%	80%	
Trip Ends	**2**	**7**	**9**

PM PEAK HOUR

Trip Rate: 0.59

	Enter	Exit	Total
Directional Distribution	62%	38%	
Trip Ends	**7**	**5**	**12**

WEEKDAY

Trip Rate: 4.99

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**50**	**50**	**100**

SATURDAY

Trip Rate: 5.00

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**50**	**50**	**100**

Source: TRIP GENERATION, Eighth Edition

TRIP GENERATION CALCULATIONS

Land Use: Shopping Center
Land Use Code: 820
Variable: 1,000 Sq Ft Gross Leasable Area
Variable Value: 30.0

AM PEAK HOUR

Trip Rate: 1.00

	Enter	Exit	Total
Directional Distribution	61%	39%	
Trip Ends	**18**	**12**	**30**

PM PEAK HOUR

Trip Rate: 3.73

	Enter	Exit	Total
Directional Distribution	49%	51%	
Trip Ends	**55**	**57**	**112**

WEEKDAY

Trip Rate: 42.94

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**644**	**644**	**1,288**

SATURDAY

Trip Rate: 49.97

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**750**	**750**	**1,500**

Source: TRIP GENERATION, Eighth Edition

HCS+™ DETAILED REPORT

General Information		Site Information	
Analyst	*JEC*	Intersection	*OR30 / Havlik Drive*
Agency or Co.	*Lancaster Engineering*	Area Type	*All other areas*
Date Performed	*11/8/2011*	Jurisdiction	*ODOT*
Time Period	*AM Peak*	Analysis Year	*2011*
		Project ID	*Rosedale Zone Change*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes, N_1	*2*	*1*	*0*	*1*	*1*	*0*	*1*	*2*		*1*	*2*	*1*
Lane Group	*L*	*TR*		*L*	*TR*		*L*	*T*		*L*	*T*	*R*
Volume, V (vph)	*101*	*15*	*128*	*44*	*18*	*6*	*43*	*473*		*11*	*1282*	*142*
% Heavy Vehicles, %HV	*1*	*1*	*1*	*1*	*1*	*1*	*3*	*3*		*2*	*2*	*2*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*		*1.00*	*1.00*	*1.00*
Pretimed (P) or Actuated (A)	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*		*A*	*A*	*A*
Start-up Lost Time, l_1	*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*	*2.0*
Extension of Effective Green, e	*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*	*2.0*
Arrival Type, AT	*3*	*3*		*3*	*3*		*3*	*3*		*3*	*3*	*3*
Unit Extension, UE	*3.0*	*3.0*		*3.0*	*3.0*		*3.0*	*3.0*		*3.0*	*3.0*	*3.0*
Filtering/Metering, I	*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*	*1.000*
Initial Unmet Demand, Q_b	*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*	*0.0*
Ped / Bike / RTOR Volumes	*5*	*1*	*0*	*1*	*1*	*6*	*0*	*0*		*1*	*0*	*0*
Lane Width	*12.0*	*12.0*		*12.0*	*12.0*		*12.0*	*12.0*		*12.0*	*12.0*	*12.0*
Parking / Grade / Parking	*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*
Parking Maneuvers, N_m												
Buses Stopping, N_B	*0*	*0*		*0*	*0*		*0*	*0*		*0*	*0*	*0*
Min. Time for Pedestrians, G_p	*3.2*			*3.2*			*3.2*			*3.2*		

Phasing	Excl. Left	EB Only	Thru & RT	04	Excl. Left	NB Only	Thru & RT	08
Timing	G = *10.0*	G = *4.0*	G = *9.0*	G =	G = *5.0*	G = *9.0*	G = *59.0*	G =
	Y = *4*	Y = *4*	Y = *4*	Y =	Y = *4*	Y = *4*	Y = *4*	Y =
Duration of Analysis, T = *0.25*						Cycle Length, C = *120.0*		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate, v	*101*	*143*		*44*	*18*		*43*	*473*		*11*	*1282*	*142*
Lane Group Capacity, c	*521*	*226*		*149*	*141*		*263*	*2107*		*74*	*1744*	*778*
v/c Ratio, X	*0.19*	*0.63*		*0.30*	*0.13*		*0.16*	*0.22*		*0.15*	*0.74*	*0.18*
Total Green Ratio, g/C	*0.15*	*0.14*		*0.08*	*0.08*		*0.15*	*0.60*		*0.04*	*0.49*	*0.49*
Uniform Delay, d_1	*44.6*	*48.6*		*51.7*	*51.8*		*44.4*	*11.1*		*55.4*	*24.3*	*17.0*
Progression Factor, PF	*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*	*1.000*
Delay Calibration, k	*0.11*	*0.21*		*0.11*	*0.11*		*0.11*	*0.11*		*0.11*	*0.29*	*0.11*
Incremental Delay, d_2	*0.2*	*5.7*		*1.1*	*0.4*		*0.3*	*0.1*		*0.9*	*1.7*	*0.1*
Initial Queue Delay, d_3	*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*	*0.0*
Control Delay	*44.8*	*54.2*		*52.8*	*52.2*		*44.7*	*11.1*		*56.4*	*25.9*	*17.1*
Lane Group LOS	*D*	*D*		*D*	*D*		*D*	*B*		*E*	*C*	*B*
Approach Delay	*50.3*			*52.6*			*13.9*			*25.3*		
Approach LOS	*D*			*D*			*B*			*C*		
Intersection Delay	*26.2*			X_C = *0.58*			Intersection LOS			*C*		

HCS+™ DETAILED REPORT

General Information		Site Information	
Analyst	*JEC*	Intersection	*OR30 / Havlik Drive*
Agency or Co.	*Lancaster Engineering*	Area Type	*All other areas*
Date Performed	*11/8/2011*	Jurisdiction	*ODOT*
Time Period	*PM Peak*	Analysis Year	*2011*
		Project ID	*Rosedale Zone Change*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes, N_1	*2*	*1*	*0*	*1*	*1*	*0*	*1*	*2*		*1*	*2*	*1*
Lane Group	*L*	*TR*		*L*	*TR*		*L*	*T*		*L*	*T*	*R*
Volume, V (vph)	*331*	*39*	*109*	*20*	*22*	*20*	*160*	*1434*		*9*	*670*	*153*
% Heavy Vehicles, %HV	*1*	*1*	*1*	*1*	*1*	*1*	*3*	*3*		*2*	*2*	*2*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*		*1.00*	*1.00*	*1.00*
Pretimed (P) or Actuated (A)	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*		*A*	*A*	*A*
Start-up Lost Time, l_1	*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*	*2.0*
Extension of Effective Green, e	*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*	*2.0*
Arrival Type, AT	*3*	*3*		*3*	*3*		*3*	*3*		*3*	*3*	*3*
Unit Extension, UE	*3.0*	*3.0*		*3.0*	*3.0*		*3.0*	*3.0*		*3.0*	*3.0*	*3.0*
Filtering/Metering, I	*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*	*1.000*
Initial Unmet Demand, Q_b	*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*	*0.0*
Ped / Bike / RTOR Volumes	*5*	*1*	*0*	*1*	*1*	*15*	*0*	*0*		*1*	*0*	*0*
Lane Width	*12.0*	*12.0*		*12.0*	*12.0*		*12.0*	*12.0*		*12.0*	*12.0*	*12.0*
Parking / Grade / Parking	*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*
Parking Maneuvers, N_m												
Buses Stopping, N_B	*0*	*0*		*0*	*0*		*0*	*0*		*0*	*0*	*0*
Min. Time for Pedestrians, G_p	*3.2*			*3.2*			*3.2*			*3.2*		

Phasing	Excl. Left	EB Only	Thru & RT	04	Excl. Left	NB Only	Thru & RT	08
Timing	G = *10.0*	G = *4.0*	G = *9.0*	G =	G = *5.0*	G = *9.0*	G = *59.0*	G =
	Y = *4*	Y = *4*	Y = *4*	Y =	Y = *4*	Y = *4*	Y = *4*	Y =
Duration of Analysis, T = *0.25*						Cycle Length, C = *120.0*		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate, v	*331*	*148*		*20*	*27*		*160*	*1434*		*9*	*670*	*153*
Lane Group Capacity, c	*521*	*233*		*149*	*137*		*263*	*2107*		*74*	*1744*	*778*
v/c Ratio, X	*0.64*	*0.64*		*0.13*	*0.20*		*0.61*	*0.68*		*0.12*	*0.38*	*0.20*
Total Green Ratio, g/C	*0.15*	*0.14*		*0.08*	*0.08*		*0.15*	*0.60*		*0.04*	*0.49*	*0.49*
Uniform Delay, d_1	*47.9*	*48.6*		*51.0*	*52.1*		*47.7*	*16.2*		*55.4*	*19.1*	*17.2*
Progression Factor, PF	*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*	*1.000*
Delay Calibration, k	*0.22*	*0.22*		*0.11*	*0.11*		*0.19*	*0.25*		*0.11*	*0.11*	*0.11*
Incremental Delay, d_2	*2.6*	*5.6*		*0.4*	*0.7*		*4.0*	*0.9*		*0.7*	*0.1*	*0.1*
Initial Queue Delay, d_3	*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*	*0.0*
Control Delay	*50.5*	*54.2*		*51.4*	*52.8*		*51.7*	*17.1*		*56.1*	*19.3*	*17.3*
Lane Group LOS	*D*	*D*		*D*	*D*		*D*	*B*		*E*	*B*	*B*
Approach Delay	*51.6*			*52.2*			*20.6*			*19.3*		
Approach LOS	*D*			*D*			*C*			*B*		
Intersection Delay	*25.8*			X_C = *0.60*			Intersection LOS			*C*		

HCS+™ DETAILED REPORT

General Information		Site Information	
Analyst	*JEC*	Intersection	*OR30 / Havlik Drive*
Agency or Co.	*Lancaster Engineering*	Area Type	*All other areas*
Date Performed	*11/8/2011*	Jurisdiction	*ODOT*
Time Period	*AM Peak Existing Zoning*	Analysis Year	*2026*
		Project ID	*Rosedale Zone Change*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes, N_1	*2*	*1*	*0*	*1*	*1*	*0*	*1*	*2*		*1*	*2*	*1*
Lane Group	*L*	*TR*		*L*	*TR*		*L*	*T*		*L*	*T*	*R*
Volume, V (vph)	*117*	*20*	*149*	*79*	*21*	*40*	*62*	*677*		*67*	*1840*	*206*
% Heavy Vehicles, %HV	*1*	*1*	*1*	*1*	*1*	*1*	*3*	*3*		*2*	*2*	*2*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*		*1.00*	*1.00*	*1.00*
Pretimed (P) or Actuated (A)	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*		*A*	*A*	*A*
Start-up Lost Time, l_1	*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*	*2.0*
Extension of Effective Green, e	*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*	*2.0*
Arrival Type, AT	*3*	*3*		*3*	*3*		*3*	*3*		*3*	*3*	*3*
Unit Extension, UE	*3.0*	*3.0*		*3.0*	*3.0*		*3.0*	*3.0*		*3.0*	*3.0*	*3.0*
Filtering/Metering, I	*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*	*1.000*
Initial Unmet Demand, Q_b	*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*	*0.0*
Ped / Bike / RTOR Volumes	*5*	*1*	*0*	*1*	*1*	*16*	*0*	*0*		*1*	*0*	*0*
Lane Width	*12.0*	*12.0*		*12.0*	*12.0*		*12.0*	*12.0*		*12.0*	*12.0*	*12.0*
Parking / Grade / Parking	*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*
Parking Maneuvers, N_m												
Buses Stopping, N_B	*0*	*0*		*0*	*0*		*0*	*0*		*0*	*0*	*0*
Min. Time for Pedestrians, G_p	*3.2*			*3.2*			*3.2*			*3.2*		

Phasing	Excl. Left	EB Only	Thru & RT	04	Excl. Left	NB Only	Thru & RT	08
Timing	G = *10.0*	G = *4.0*	G = *9.0*	G =	G = *6.0*	G = *2.0*	G = *65.0*	G =
	Y = *4*	Y = *4*	Y = *4*	Y =	Y = *4*	Y = *4*	Y = *4*	Y =
Duration of Analysis, T = *0.25*					Cycle Length, C = *120.0*			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate, v	*117*	*169*		*79*	*45*		*62*	*677*		*67*	*1840*	*206*
Lane Group Capacity, c	*521*	*226*		*149*	*128*		*175*	*2078*		*89*	*1921*	*857*
v/c Ratio, X	*0.22*	*0.75*		*0.53*	*0.35*		*0.35*	*0.33*		*0.75*	*0.96*	*0.24*
Total Green Ratio, g/C	*0.15*	*0.14*		*0.08*	*0.08*		*0.10*	*0.59*		*0.05*	*0.54*	*0.54*
Uniform Delay, d_1	*44.9*	*49.4*		*52.7*	*52.7*		*50.4*	*12.4*		*56.3*	*26.2*	*14.5*
Progression Factor, PF	*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*	*1.000*
Delay Calibration, k	*0.11*	*0.30*		*0.13*	*0.11*		*0.11*	*0.11*		*0.31*	*0.47*	*0.11*
Incremental Delay, d_2	*0.2*	*12.9*		*3.6*	*1.7*		*1.2*	*0.1*		*29.8*	*12.1*	*0.1*
Initial Queue Delay, d_3	*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*	*0.0*
Control Delay	*45.1*	*62.3*		*56.3*	*54.4*		*51.6*	*12.5*		*86.1*	*38.3*	*14.6*
Lane Group LOS	*D*	*E*		*E*	*D*		*D*	*B*		*F*	*D*	*B*
Approach Delay	*55.3*			*55.6*			*15.8*			*37.5*		
Approach LOS	*E*			*E*			*B*			*D*		
Intersection Delay	*34.8*			X_C = *0.81*			Intersection LOS			*C*		

HCS+™ DETAILED REPORT

General Information		Site Information	
Analyst	*JEC*	Intersection	*OR30 / Havlik Drive*
Agency or Co.	*Lancaster Engineering*	Area Type	*All other areas*
Date Performed	*11/8/2011*	Jurisdiction	*ODOT*
Time Period	*PM Peak Existing Zoning*	Analysis Year	*2026*
		Project ID	*Rosedale Zone Change*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes, N_1	*2*	*1*	*0*	*1*	*1*	*0*	*1*	*2*		*1*	*2*	*1*
Lane Group	*L*	*TR*		*L*	*TR*		*L*	*T*		*L*	*T*	*R*
Volume, V (vph)	*384*	*48*	*127*	*62*	*27*	*88*	*232*	*2055*		*65*	*960*	*222*
% Heavy Vehicles, %HV	*1*	*1*	*1*	*1*	*1*	*1*	*3*	*3*		*2*	*2*	*2*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*		*1.00*	*1.00*	*1.00*
Pretimed (P) or Actuated (A)	*A*	*A*	*A*	*A*	*A*		*A*	*A*		*A*	*A*	*A*
Start-up Lost Time, l_1	*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*	*2.0*
Extension of Effective Green, e	*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*	*2.0*
Arrival Type, AT	*3*	*3*		*3*	*3*		*3*	*3*		*3*	*3*	*3*
Unit Extension, UE	*3.0*	*3.0*		*3.0*	*3.0*		*3.0*	*3.0*		*3.0*	*3.0*	*3.0*
Filtering/Metering, I	*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*	*1.000*
Initial Unmet Demand, Q_b	*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*	*0.0*
Ped / Bike / RTOR Volumes	*5*	*1*	*0*	*1*	*1*	*21*	*0*	*0*		*1*	*0*	*0*
Lane Width	*12.0*	*12.0*		*12.0*	*12.0*		*12.0*	*12.0*		*12.0*	*12.0*	*12.0*
Parking / Grade / Parking	*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*
Parking Maneuvers, N_m												
Buses Stopping, N_B	*0*	*0*		*0*	*0*		*0*	*0*		*0*	*0*	*0*
Min. Time for Pedestrians, G_p	*3.2*			*3.2*			*3.2*			*3.2*		

Phasing	Excl. Left	EB Only	Thru & RT	04	Excl. Left	NB Only	Thru & RT	08
Timing	G = *10.0*	G = *4.0*	G = *9.0*	G =	G = *5.0*	G = *9.0*	G = *59.0*	G =
	Y = *4*	Y = *4*	Y = *4*	Y =	Y = *4*	Y = *4*	Y = *4*	Y =
Duration of Analysis, T = *0.25*						Cycle Length, C = *120.0*		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate, v	*384*	*175*		*62*	*94*		*232*	*2055*		*65*	*960*	*222*
Lane Group Capacity, c	*521*	*233*		*149*	*126*		*263*	*2107*		*74*	*1744*	*778*
v/c Ratio, X	*0.74*	*0.75*		*0.42*	*0.75*		*0.88*	*0.98*		*0.88*	*0.55*	*0.29*
Total Green Ratio, g/C	*0.15*	*0.14*		*0.08*	*0.08*		*0.15*	*0.60*		*0.04*	*0.49*	*0.49*
Uniform Delay, d_1	*48.7*	*49.5*		*52.2*	*54.4*		*50.0*	*23.1*		*57.2*	*21.3*	*18.0*
Progression Factor, PF	*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*	*1.000*
Delay Calibration, k	*0.29*	*0.31*		*0.11*	*0.30*		*0.41*	*0.48*		*0.41*	*0.15*	*0.11*
Incremental Delay, d_2	*5.5*	*12.8*		*1.9*	*21.3*		*27.5*	*14.2*		*65.0*	*0.4*	*0.2*
Initial Queue Delay, d_3	*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*	*0.0*
Control Delay	*54.2*	*62.3*		*54.1*	*75.7*		*77.5*	*37.4*		*122.2*	*21.6*	*18.2*
Lane Group LOS	*D*	*E*		*D*	*E*		*E*	*D*		*F*	*C*	*B*
Approach Delay	*56.7*			*67.1*			*41.4*			*26.3*		
Approach LOS	*E*			*E*			*D*			*C*		
Intersection Delay	*39.9*			X_C = *0.91*			Intersection LOS			*D*		

HCS+™ DETAILED REPORT

General Information		Site Information	
Analyst	*JEC*	Intersection	*OR30 / Havlik Drive*
Agency or Co.	*Lancaster Engineering*	Area Type	*All other areas*
Date Performed	*11/8/2011*	Jurisdiction	*ODOT*
Time Period	*AM Peak Proposed Zoning*	Analysis Year	*2026*
		Project ID	*Rosedale Zone Change*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes, N_1	*2*	*1*	*0*	*1*	*1*	*0*	*1*	*2*		*1*	*2*	*1*
Lane Group	*L*	*TR*		*L*	*TR*		*L*	*T*		*L*	*T*	*R*
Volume, V (vph)	*117*	*21*	*149*	*84*	*21*	*40*	*62*	*677*		*77*	*1835*	*206*
% Heavy Vehicles, %HV	*1*	*1*	*1*	*1*	*1*	*1*	*3*	*3*		*2*	*2*	*2*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*		*1.00*	*1.00*	*1.00*
Pretimed (P) or Actuated (A)	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*		*A*	*A*	*A*
Start-up Lost Time, l_1	*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*	*2.0*
Extension of Effective Green, e	*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*	*2.0*
Arrival Type, AT	*3*	*3*		*3*	*3*		*3*	*3*		*3*	*3*	*3*
Unit Extension, UE	*3.0*	*3.0*		*3.0*	*3.0*		*3.0*	*3.0*		*3.0*	*3.0*	*3.0*
Filtering/Metering, I	*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*	*1.000*
Initial Unmet Demand, Q_b	*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*	*0.0*
Ped / Bike / RTOR Volumes	*5*	*1*	*0*	*1*	*1*	*29*	*0*	*0*		*1*	*0*	*0*
Lane Width	*12.0*	*12.0*		*12.0*	*12.0*		*12.0*	*12.0*		*12.0*	*12.0*	*12.0*
Parking / Grade / Parking	*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*
Parking Maneuvers, N_m												
Buses Stopping, N_B	*0*	*0*		*0*	*0*		*0*	*0*		*0*	*0*	*0*
Min. Time for Pedestrians, G_p	*3.2*			*3.2*			*3.2*			*3.2*		

Phasing	Excl. Left	EB Only	Thru & RT	04	Excl. Left	SB Only	Thru & RT	08
Timing	G = *11.0*	G = *4.0*	G = *13.0*	G =	G = *7.0*	G = *2.0*	G = *59.0*	G =
	Y = *4*	Y = *4*	Y = *4*	Y =	Y = *4*	Y = *4*	Y = *4*	Y =
Duration of Analysis, T = *0.25*						Cycle Length, C = *120.0*		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate, v	*117*	*170*		*84*	*32*		*62*	*677*		*77*	*1835*	*206*
Lane Group Capacity, c	*550*	*281*		*164*	*192*		*102*	*1727*		*192*	*1921*	*857*
v/c Ratio, X	*0.21*	*0.60*		*0.51*	*0.17*		*0.61*	*0.39*		*0.40*	*0.96*	*0.24*
Total Green Ratio, g/C	*0.16*	*0.17*		*0.09*	*0.11*		*0.06*	*0.49*		*0.11*	*0.54*	*0.54*
Uniform Delay, d_1	*44.0*	*45.7*		*51.9*	*48.6*		*55.2*	*19.2*		*49.9*	*26.1*	*14.5*
Progression Factor, PF	*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*	*1.000*
Delay Calibration, k	*0.11*	*0.19*		*0.12*	*0.11*		*0.19*	*0.11*		*0.11*	*0.47*	*0.11*
Incremental Delay, d_2	*0.2*	*3.7*		*2.7*	*0.4*		*10.0*	*0.1*		*1.4*	*11.7*	*0.1*
Initial Queue Delay, d_3	*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*	*0.0*
Control Delay	*44.2*	*49.4*		*54.7*	*49.0*		*65.2*	*19.4*		*51.2*	*37.9*	*14.6*
Lane Group LOS	*D*	*D*		*D*	*D*		*E*	*B*		*D*	*D*	*B*
Approach Delay	*47.2*			*53.1*			*23.2*			*36.1*		
Approach LOS	*D*			*D*			*C*			*D*		
Intersection Delay	*34.8*			X_C = *0.81*			Intersection LOS			*C*		

HCS+™ DETAILED REPORT

General Information		Site Information	
Analyst	*JEC*	Intersection	*OR30 / Havlik Drive*
Agency or Co.	*Lancaster Engineering*	Area Type	*All other areas*
Date Performed	*11/8/2011*	Jurisdiction	*ODOT*
Time Period	*PM Peak Proposed Zoning*	Analysis Year	*2026*
		Project ID	*Rosedale Zone Change*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes, N_1	*2*	*1*	*0*	*1*	*1*	*0*	*1*	*2*		*1*	*2*	*1*
Lane Group	*L*	*TR*		*L*	*TR*		*L*	*T*		*L*	*T*	*R*
Volume, V (vph)	*384*	*50*	*127*	*82*	*28*	*114*	*232*	*2044*		*90*	*954*	*222*
% Heavy Vehicles, %HV	*1*	*1*	*1*	*1*	*1*	*1*	*3*	*3*		*2*	*2*	*2*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*		*1.00*	*1.00*	*1.00*
Pretimed (P) or Actuated (A)	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*		*A*	*A*	*A*
Start-up Lost Time, l_1	*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*	*2.0*
Extension of Effective Green, e	*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*		*2.0*	*2.0*	*2.0*
Arrival Type, AT	*3*	*3*		*3*	*3*		*3*	*3*		*3*	*3*	*3*
Unit Extension, UE	*3.0*	*3.0*		*3.0*	*3.0*		*3.0*	*3.0*		*3.0*	*3.0*	*3.0*
Filtering/Metering, I	*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*	*1.000*
Initial Unmet Demand, Q_b	*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*	*0.0*
Ped / Bike / RTOR Volumes	*5*	*1*	*0*	*1*	*1*	*71*	*0*	*0*		*1*	*0*	*0*
Lane Width	*12.0*	*12.0*		*12.0*	*12.0*		*12.0*	*12.0*		*12.0*	*12.0*	*12.0*
Parking / Grade / Parking	*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*
Parking Maneuvers, N_m												
Buses Stopping, N_B	*0*	*0*		*0*	*0*		*0*	*0*		*0*	*0*	*0*
Min. Time for Pedestrians, G_p	*3.2*			*3.2*			*3.2*			*3.2*		

Phasing	Excl. Left	EB Only	Thru & RT	04	Excl. Left	NB Only	Thru & RT	08
Timing	G = *7.5*	G = *4.0*	G = *8.5*	G =	G = *9.0*	G = *7.0*	G = *60.0*	G =
	Y = *4*	Y = *4*	Y = *4*	Y =	Y = *4*	Y = *4*	Y = *4*	Y =
Duration of Analysis, T = *0.25*						Cycle Length, C = *120.0*		

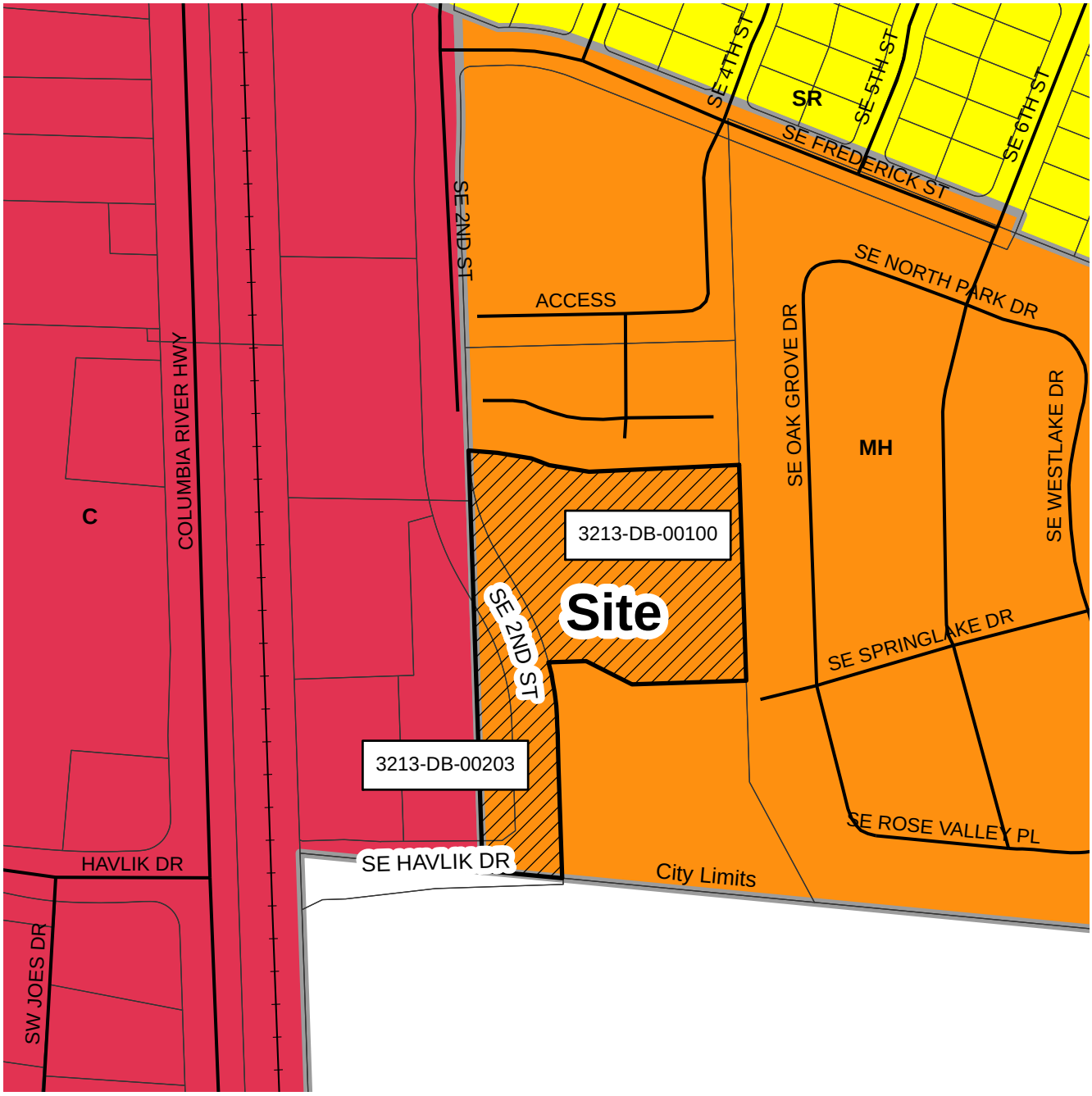
Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate, v	*384*	*177*		*82*	*71*		*232*	*2044*		*90*	*954*	*222*
Lane Group Capacity, c	*448*	*227*		*112*	*120*		*292*	*2078*		*133*	*1774*	*791*
v/c Ratio, X	*0.86*	*0.78*		*0.73*	*0.59*		*0.79*	*0.98*		*0.68*	*0.54*	*0.28*
Total Green Ratio, g/C	*0.13*	*0.14*		*0.06*	*0.07*		*0.17*	*0.59*		*0.08*	*0.50*	*0.50*
Uniform Delay, d_1	*51.2*	*50.0*		*55.3*	*54.1*		*48.0*	*23.9*		*54.1*	*20.5*	*17.4*
Progression Factor, PF	*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*		*1.000*	*1.000*	*1.000*
Delay Calibration, k	*0.39*	*0.33*		*0.29*	*0.18*		*0.34*	*0.49*		*0.25*	*0.14*	*0.11*
Incremental Delay, d_2	*15.2*	*15.9*		*21.7*	*7.6*		*14.1*	*16.0*		*12.9*	*0.3*	*0.2*
Initial Queue Delay, d_3	*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*		*0.0*	*0.0*	*0.0*
Control Delay	*66.3*	*65.9*		*76.9*	*61.6*		*62.1*	*39.9*		*67.0*	*20.8*	*17.6*
Lane Group LOS	*E*	*E*		*E*	*E*		*E*	*D*		*E*	*C*	*B*
Approach Delay	*66.2*			*69.8*			*42.2*			*23.6*		
Approach LOS	*E*			*E*			*D*			*C*		
Intersection Delay	*40.8*			X_C = *0.91*			Intersection LOS			*D*		

Existing Comprehensive Plan Designation

Comprehensive Plan Map Amendment CPA1-12 & Zone Change ZC1-12

Location: SE 2nd Street near SE Havlik Drive
Columbia County Assessor Map: 3213-DB-00100 & 3213-DB-00203



SCAPPOOSE GIS

Legend

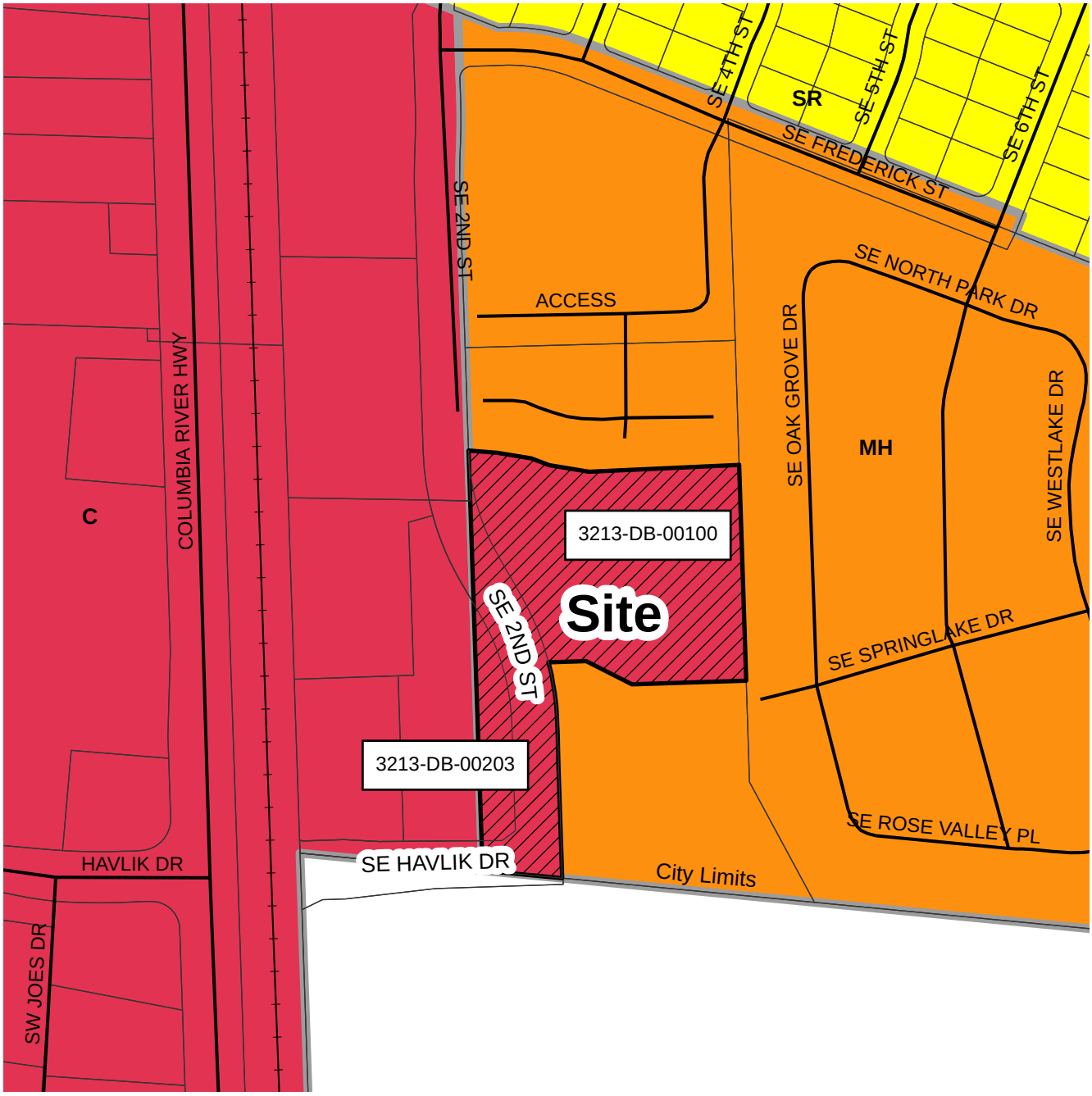
- Streets
- Taxlots Boundary
- SR Suburban Residential
- MH Manufactured Home
- C Commercial

0 125 250 500 Feet

Proposed Comprehensive Plan Designation

Comprehensive Plan Map Amendment CPA1-12 & Zone Change ZC1-12

Location: SE 2nd Street near SE Havlik Drive
Columbia County Assessor Map: 3213-DB-00100 & 3213-DB-00203



SCAPPOOSE GIS

Legend

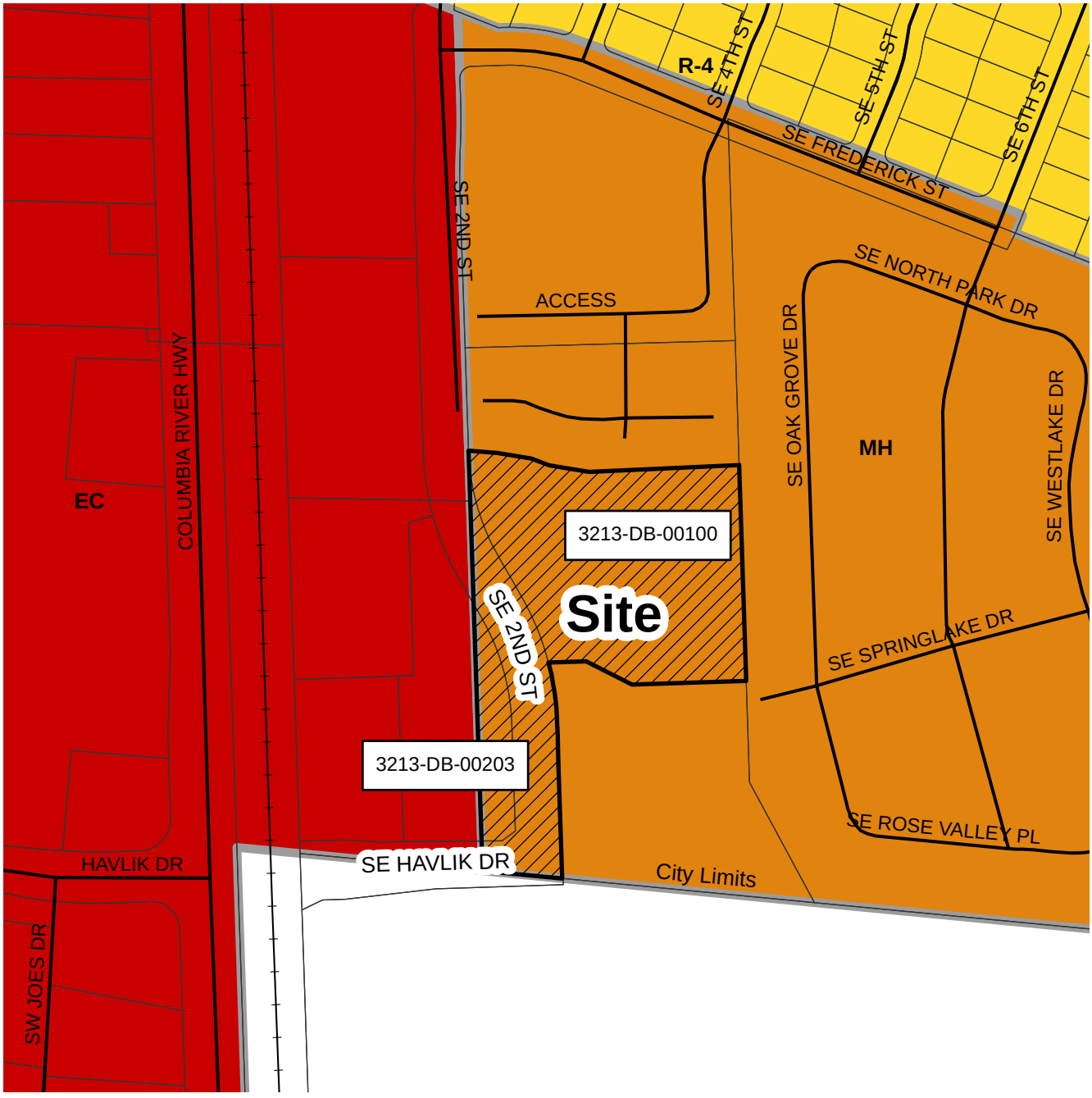
- Streets
- Taxlots Boundary
- SR Suburban Residential
- MH Manufactured Home
- C Commercial

0 125 250 500 Feet

Existing Zoning

Comprehensive Plan Map Amendment CPA1-12 & Zone Change ZC1-12

Location: SE 2nd Street near SE Havlik Drive
Columbia County Assessor Map: 3213-DB-00100 & 3213-DB-00203



SCAPPOOSE GIS

Legend

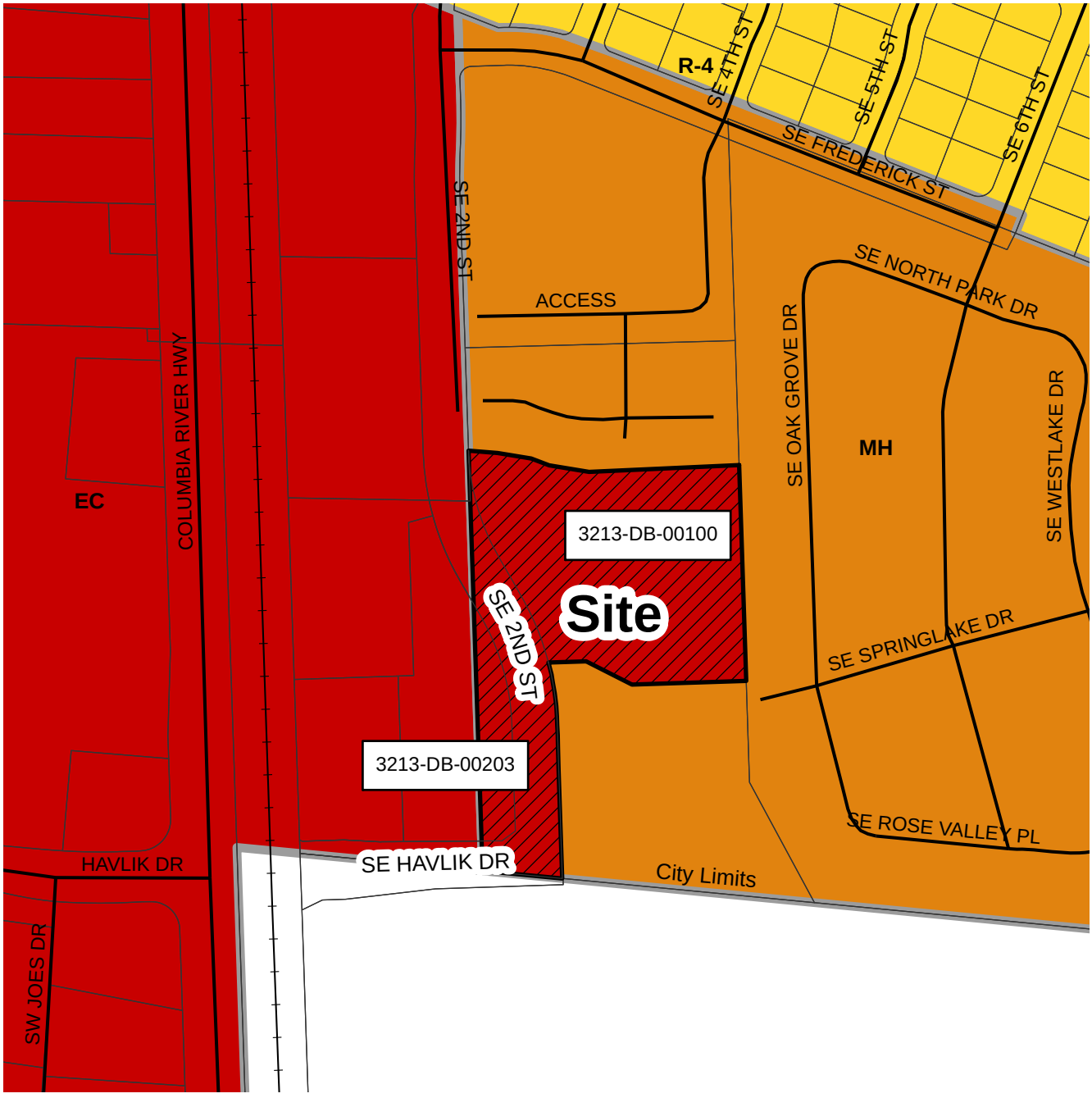
- Streets
- Taxlots Boundary
- R-4 Moderate Density Residential
- MH Manufactured Housing Residential
- EC Expanded Commercial

0 125 250 500 Feet

Proposed Zoning

Comprehensive Plan Map Amendment CPA1-12 & Zone Change ZC1-12

Location: SE 2nd Street near SE Havlik Drive
Columbia County Assessor Map: 3213-DB-00100 & 3213-DB-00203



SCAPPOOSE GIS

Legend

- Streets
- Taxlots Boundary
- R-4 Moderate Density Residential
- MH Manufactured Housing Residential
- EC Expanded Commercial

0 125 250 500 Feet

Exhibit 7

Oregon
John A. Kitzhaber, M.D., Governor

Department of Transportation
Region 2, Area 1
350 W Marine Dr
Astoria, OR 97103-6206
503.325.7222

Correspondence

TO: Brian Varricchione, City of Scappoose

FROM: Bill Johnston, ODOT Region 2, Transportation Planner

DATE: April 5, 2012

RE: Rosedale plan amendment and zone change request (CPA1-12 & ZC1-12)

Thank you for the opportunity to comment on this proposed plan amendment.

The Transportation Planning Rule (OAR 660-012-0060) requires that local governments amending adopted plans and regulations demonstrate that the amendment will not significantly affect existing or planned transportation facilities. The Oregon Highway Plan (OHP) provides specific criteria for determining if the effect is significant.

To assist the City in complying with this requirement, the applicant submitted a Traffic Impact Study. ODOT has reviewed this study and finds the following:

- Certain assumptions, interpretations, and methodology used by the consultant to prepare this study are not consistent with ODOT's generally accepted practices.
- ODOT does not concur with the study's finding that the proposed zone change will not significantly affect the operation of the intersection of US 30 and Havlik Drive.
- ODOT does not concur with the assumption used in the study that 30,000 s.f. of general retail space is the "reasonable worse case" land development and trip generation scenario. The proposed zoning (EC) allows for more intense uses.
- ODOT's own analysis indicates that the change in allowed use will have a significant effect on the intersection. In order to mitigate the effect, ODOT recommends limiting development of property to uses that will not increase average daily trips by more than 1000, consistent with OHP Policy 1F.5.

RECOMMENDATION: ODOT recommends the City of Scappoose attach the following condition of approval to the plan amendment: Development of the property shall be limited to uses that will not increase average daily trips by more than 1000

Thank you again for the opportunity to comment. Please include this correspondence in the record of the upcoming Planning Commission hearing and any subsequent hearings on this matter. If you have any questions regarding these comments, please contact me at 503.325.5281 or bill.johnston@odot.state.or.us.

c: ODOT: Seth Brumley, Doug Baumgartner, Matt Caswell; DLCD: Gary Fish

Oregon
John A. Kitzhaber, M.D., Governor

Department of Transportation
Region 2, Area 1
350 W Marine Dr
Astoria, OR 97103-6206
503.325.7222

Correspondence

TO: Brian Varricchione, City of Scappoose

FROM: Bill Johnston, ODOT Region 2, Transportation Planner

DATE: April 12, 2012

RE: Rosedale plan amendment and zone change request (CPA1-12 & ZC1-12)

I have some additional comments and a revised recommendation concerning this proposed plan amendment. These comments supplement the memo from me dated April 5 that was included in the Planning Commission packet. Please transmit this memo and attachments to the Planning Commission.

Representatives from the City and ODOT met with the applicant and his consulting engineer on April 10 to discuss the impact of this proposed amendment on the intersection of US 30 and Havlik Drive. Based on this conversation, all parties agreed that the recommended limit on the allowable total daily trips, at the property, should be revised from 1,000 to 1,311 ADT.

This adjustment incorporates a ten percent trip distribution reduction to account for trips to the property that do not impact the US 30/Havlik intersection. The adjustment also accounts for more intense development that would be allowed under existing zoning.

Attached is supplemental traffic analysis dated April 11, prepared by ODOT, that documents the methodology used to arrive at the revised "trip cap." Also attached is an April 10 memo from the applicant's consultant, Lancaster Engineering, that provides additional detail. ODOT concurs with the consultant's methodology and incorporates their memo into our own analysis by reference.

This supplemental traffic analysis replaces the Traffic Impact Study previously prepared by Lancaster Engineering that was included in the Planning Commission agenda packet. Ordinarily, ODOT would have coordinated more closely to ensure the findings of the study were consistent with ODOT criteria and methodology. In this case, we met with the consultant early in the process but provided incorrect information about how to apply newly adopted criteria. In order to keep this case on schedule with the Planning Commission we have expedited revisions in this less formal manner.

REVISED RECOMMENDATION: ODOT recommends the City of Scappoose impose a limit on development of the property such that uses will not generate more than 1,311 total daily trips.

c: ODOT: Seth Brumley, Doug Baumgartner, Matt Caswell; DLCD: Gary Fish

Exhibit 9

4/10/12

REGISTERED PROFESSIONAL ENGINEER
54983PE
OREGON
JULY 10, 2002
MICHAEL T. ARD
EXPIRES: 12/31/13

TECHNICAL MEMORANDUM

LANCASTER
ENGINEERING

321 SW 4th Ave., Suite 400
Portland, OR 97204
phone: 503.248.0313
fax: 503.248.9251
lancasterengineering.com

TO: Joe Scharf, Rosedale Development, LLC

FROM: Michael Ard, PE

DATE: April 10, 2012

SUBJECT: Rosedale Zone Change
Trip Cap Analysis

PURPOSE

This memo is written to provide information to be used in implementing the trip cap for the proposed Rosedale Zone Change. It reflects the consensus reached between the City of Scappoose, ODOT and Lancaster Engineering during a phone conference on April 10, 2012.

WORST-CASE DEVELOPMENT SCENARIO FOR EXISTING ZONING

The subject property was previously analyzed as accommodating 20 mobile home units under the existing zoning. However, the current zoning allows for somewhat more intense development. Based on information provided by the City of Scappoose, a 30-unit multifamily development could be constructed on the subject property. This level of development would result in 15 trips during the morning peak hour, 19 trips during the evening peak hour, and 200 daily trips. A detailed trip generation worksheet for the 30-unit residential development is attached to this memorandum.

In determining the impacts to ODOT's facilities, it was acknowledged that 10 percent of the site trips from the subject property are destined for areas within Scappoose east of the highway. These trips will not result in traffic impacts to ODOT facilities, and therefore need not be considered in determining the threshold at which a "significant effect" occurs with respect to the state highway.

Based on this ten percent trip distribution reduction, it is projected that development under the existing zoning could result in 180 daily trips (200 ADT * 90%) at the intersection of Highway 30 and Havlik Drive.

ALLOWABLE INCREASE IN SITE TRIPS

In order to comply with the requirements of the Oregon Highway Plan, the trip cap for the subject property must limit development within the property so that an increase of not more than 1,000 ADT occurs at the ODOT facilities. Since this increase is based on a comparison to the trip potential under the existing zoning, the maximum number of site trips permitted to pass through the intersection of Highway 30 at Havlik Drive is 1,180 ADT.

Again, since 10 percent of the trips from future site development will be destined for areas east of the state highway and will not impact ODOT facilities, the allowable total site trips are somewhat higher than the calculated 1,180 ADT. If the total site trip generation is 1,311 average daily trips or fewer, the net increase in site trips at the ODOT intersection will be within 1,180 ADT (1,311 ADT * 90% = 1180 ADT). Accordingly, the trip cap for the subject property should be established as 1,311 ADT.

OTHER SITE TRIP ADJUSTMENTS CONSIDERED

It was acknowledged that pass-by trips may have more limited impacts on the state highway intersection than primary site trips; however since limited data is available for daily pass-by trip rates, no adjustments were made to account for pass-by trips.

CONCLUSIONS

Based on our detailed discussions with City of Scappoose and ODOT staff, it is recommended that a trip cap of 1,311 ADT be imposed on the subject property in conjunction with the proposed zone change in order to avoid significantly impacting ODOT facilities as defined under the Oregon Transportation Planning Rule and the Oregon Highway Plan.

TRIP GENERATION CALCULATIONS

Land Use: Apartment
Land Use Code: 220
Variable: Dwelling Units
Variable Value: 30

AM PEAK HOUR

Trip Rate: 0.51

	Enter	Exit	Total
Directional Distribution	20%	80%	
Trip Ends	**3**	**12**	**15**

PM PEAK HOUR

Trip Rate: 0.62

	Enter	Exit	Total
Directional Distribution	65%	35%	
Trip Ends	**12**	**7**	**19**

WEEKDAY

Trip Rate: 6.65

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**100**	**100**	**200**

SATURDAY

Trip Rate: 6.39

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**96**	**96**	**192**

Source: TRIP GENERATION, Eighth Edition

Exhibit 10

Oregon
John A. Kitzhaber, MD, Governor

Department of Transportation
Region 1 Headquarters
123 NW Flanders Street
Portland, Oregon 97209
(503) 731.8200
FAX (503) 731.8531

TO: Bill Johnston – Planner
Region 2 Planning

FROM: Doug Baumgartner, E.I.T.
Development Review Traffic Analyst
Region 1 Traffic

DATE: April 11, 2012

RE: Scappoose Zone Change
HWY 92 (US30)
Scappoose, Oregon

A zone change has been proposed for a 2.89 acre property in the City of Scappoose involving a change from the Manufactured Housing to Expanded Commercial Zone. The subject property that was studied is located on SE 2nd Street north of Havlik Drive in the southeastern limits of the City of Scappoose. A TIA was prepared for the zone change by Lancaster Engineering and dated February 16, 2012. The study intersection for this TIA is Havlik Drive and Lower Columbia River Highway (US30). US30 is classified as a Statewide Highway in the 1999 Oregon Highway Plan, which was updated in December 2011, lists US30 as part of the National Highway System, a State Freight Route, and a Federally Designated Truck Route. The intersection of US30 with Havlik Drive (Mile Point 19.76) has a mobility standard of a v/c ratio of 0.80. At this intersection US30 is a 6-lane facility with a designated left turn lane, two through lanes, and a designated right-turn lane for each of the north and south bound approaches. Havlik Drive at this intersection is generally a 4-lane facility with two designated left-turn lanes and a shared through/right-turn lane for the eastbound approach and a designated left turn land and a shared through/right-turn lane for the westbound approach. The Burlington Northern Railroad is located along the east side of US30 and a signalized rail crossing is located just east of the intersection on Havlik Drive. US30 has a posted speed of 45 MPH at the

I have reviewed the TIA for the Scappoose zone change and have prepared the following comments with the relevant TIA pages listed:

- (pg 4) US30 in the vicinity of Scappoose is classified as a Statewide Highway, not a Regional Highway and has a mobility standard of a 0.80 v/c ratio.

- (pg 9 - 10) The TIA used the Institute of Transportation Engineers (ITE) Eighth Edition Trip Generation Manual to estimate the trip generation of the subject and surrounding properties. ITE Codes 815 Free Standing Discount Store, 932 High-Turnover (Sit-Down) Restaurant, 849 Tire Super Store, 814 Specialty Retail Center, and Code 495 Recreational Community Center were used to develop the background trip generation for the commercially zoned adjacent land parcels to the west of the subject site. ITE Code 240 Mobile Home Park was used for the existing zoning and Code 820 Shopping Center

was used for the proposed EC zoning. The TIA included an Internal trip reduction of 10% for all ITE Codes used in the study in addition to Pass-By trip reductions with rates taken from the Second Edition ITE Trip Generation Handbook and applied to the AM, PM , and Daily trip generation periods for all Codes. All of these ITE Codes do not have Pass-By studies for the AM and Daily periods. A 23% Pass-By reduction was applied to Code 815 for all time periods yet the 23% was from a Saturday Midday study while the PM Peak Weekday study has a 17% reduction. Code 849 and 814 do not have Pass-By studies. The PM Peak period for Code 495 should use the regression equation to arrive at 44 trips for the proposed 15,000 sq ft. There is no AM Peak Period trip generation study based on 1,000 sq ft of gross leasable area for Code 814.

- If the applicable ITE trip generation reductions were applied strictly based on the published studies, the net new trips for the Existing worst case scenario would be 117 AM Peak trips and 219 PM Peak trips. The Proposed worst case scenario would be 136 AM Peak trips and 388 PM Peak trips.

I took the revised trip generation and created a Synchro model with the current ODOT signal timing to compare the v/c ratios at the AM and PM peak periods using 1,750 as the value for the ideal saturated flow as called for in the ODOT Analysis Procedures Manual. The results of the model are listed below:

	AM Peak Period	PM Peak Period
2011	0.66	0.68
2026 MH Zone	0.90	1.04
2026 EC Zone	0.90	1.07

The signal timing for the model was based on the existing operations. If the signal timing were to be optimized in the future year, the v/c ratio would experience a significant effect in the PM peak period as a result of the zone change. I also ran my model with the intersection volumes that were reported in the TIA as a check and came up with a significant effect in the PM peak period. The TIA mentioned that the proposed zoning would increase the v/c ratio by 0.02 in the AM peak and 0.03 in the PM peak; however this was not reflected in the HCS+ model printout that was provided in the report. The HCS+ printouts indicate that the model used by the consultant also did not incorporate the Peak Hour Factors (PHF) or the Heavy Vehicle Percentages (9%HV) from the intersection counts that they obtained.

In consideration of the size of the subject site and the allowed uses in the Expanded Commercial Zone, it is ODOT's position that a more trip intensive mix of uses could be anticipated as a reasonable as a worst case proposed scenario and as such ODOT recommends that the zone change be capped such that the no more than an increase of 1,000 daily trips passes through the US30 and Havlik Drive intersection. In a follow up meeting with the City, representatives from Lancaster, and the applicant that occurred on April 10, 2012, the City revealed that the reasonable worst case development scenario for the existing zoning could comprise a 30-unit apartment complex (quadraplexes) so as to give a daily trip generation of 200 trips. Lancaster released an updated trip generation memo dated April 10, 2012 that revealed that 1,180 trips would pass through the US30 and Havlik Drive intersection under the capped increase and that 131 trips, 10% of the site trip generation, would be distributed to and from the north and east of the site without traveling on US30. The memo called for a trip cap of 1,311 total daily trips to be placed on the subject site in order to avoid causing a significant affect to the US30 and Havlik Drive

intersection. ODOT supports this methodology and requests that the City place a trip cap of 1,311 total daily trips on the subject site as a condition of approval for the zone change. Without a trip cap any reasonable improvements that could mitigate the increase in the v/c ratio, such as the addition of separate through and right turn lanes on the Havlik Drive approaches, would face challenges with available right of way and any required approvals for rail crossing modifications. Please note that my analysis was based on the original study provided by Lancaster and does not reflect the updated assumption that the existing worst case scenario can generate 200 daily trips. The resulting difference in AM and PM peak period trips is 6 and 3, respectively, and the v/c ratios from the updated model were not altered.

If there are any questions regarding the contents of this memorandum, please contact me at (503) 731-8225.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	101	15	128	44	18	6	43	473	12	11	1282	142
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.87		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3072	1443		1630	1651		1511	3023	1352	1599	3197	1430
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3072	1443		1630	1651		1511	3023	1352	1599	3197	1430
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	116	17	147	51	21	7	49	544	14	13	1474	163
RTOR Reduction (vph)	0	134	0	0	7	0	0	0	5	0	0	31
Lane Group Flow (vph)	116	30	0	51	21	0	49	544	9	13	1474	132
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	10%	10%	10%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	11.2	9.6		7.3	5.7		7.4	70.9	70.9	1.4	64.9	64.9
Effective Green, g (s)	11.2	9.6		7.3	5.7		7.4	70.9	70.9	1.4	64.9	64.9
Actuated g/C Ratio	0.10	0.09		0.07	0.05		0.07	0.66	0.66	0.01	0.61	0.61
Clearance Time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	321	129		111	88		104	2001	895	21	1937	867
v/s Ratio Prot	0.04	c0.02		c0.03	0.01		c0.03	0.18		0.01	c0.46	
v/s Ratio Perm									0.01			0.09
v/c Ratio	0.36	0.23		0.46	0.24		0.47	0.27	0.01	0.62	0.76	0.15
Uniform Delay, d1	44.6	45.3		48.0	48.6		48.0	7.5	6.2	52.6	15.4	9.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	0.9		3.0	1.4		3.3	0.3	0.0	43.9	2.9	0.4
Delay (s)	45.3	46.3		51.0	50.1		51.3	7.8	6.2	96.5	18.3	9.5
Level of Service	D	D		D	D		D	A	A	F	B	A
Approach Delay (s)		45.9			50.7			11.3			18.1	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM Average Control Delay	20.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	107.1	Sum of lost time (s)	17.9
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

2011 PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	331	39	109	20	22	20	160	1434	80	9	670	153
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.89		1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3193	1542		1554	1518		1614	3228	1444	1630	3260	1458
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3193	1542		1554	1518		1614	3228	1444	1630	3260	1458
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	345	41	114	21	23	21	167	1494	83	9	698	159
RTOR Reduction (vph)	0	78	0	0	20	0	0	0	29	0	0	74
Lane Group Flow (vph)	345	77	0	21	24	0	167	1494	54	9	698	85
Confl. Peds. (#/hr)				3								
Heavy Vehicles (%)	1%	1%	1%	7%	7%	7%	3%	3%	3%	2%	2%	2%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	14.8	19.4		3.3	7.9		14.5	76.6	76.6	1.4	63.5	63.5
Effective Green, g (s)	14.8	19.4		3.3	7.9		14.5	76.6	76.6	1.4	63.5	63.5
Actuated g/C Ratio	0.12	0.16		0.03	0.07		0.12	0.65	0.65	0.01	0.54	0.54
Clearance Time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	398	252		43	101		197	2085	933	19	1745	781
v/s Ratio Prot	c0.11	c0.05		0.01	0.02		c0.10	c0.46		0.01	0.21	
v/s Ratio Perm									0.04			0.06
v/c Ratio	0.87	0.31		0.49	0.24		0.85	0.72	0.06	0.47	0.40	0.11
Uniform Delay, d1	50.9	43.7		56.8	52.5		51.0	13.8	7.7	58.2	16.3	13.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	17.6	0.7		8.5	1.2		27.1	2.1	0.1	17.5	0.7	0.3
Delay (s)	68.6	44.4		65.3	53.8		78.1	16.0	7.8	75.7	17.0	13.9
Level of Service	E	D		E	D		E	B	A	E	B	B
Approach Delay (s)		61.1			57.5			21.5			17.0	
Approach LOS		E			E			C			B	

Intersection Summary			
HCM Average Control Delay	27.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	118.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	117	20	149	62	21	31	62	685	40	49	1857	206
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.87		1.00	0.91		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3072	1446		1630	1561		1511	3023	1352	1599	3197	1430
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3072	1446		1630	1561		1511	3023	1352	1599	3197	1430
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	134	23	171	71	24	36	71	787	46	56	2134	237
RTOR Reduction (vph)	0	156	0	0	33	0	0	0	19	0	0	33
Lane Group Flow (vph)	134	38	0	71	27	0	71	787	27	56	2134	204
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	10%	10%	10%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	10.1	9.3		8.4	7.6		8.6	62.7	62.7	7.6	61.7	61.7
Effective Green, g (s)	10.1	9.3		8.4	7.6		8.6	62.7	62.7	7.6	61.7	61.7
Actuated g/C Ratio	0.10	0.09		0.08	0.07		0.08	0.59	0.59	0.07	0.58	0.58
Clearance Time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	293	127		129	112		123	1790	800	115	1863	833
v/s Ratio Prot	0.04	c0.03		c0.04	0.02		c0.05	0.26		0.04	c0.67	
v/s Ratio Perm									0.02			0.14
v/c Ratio	0.46	0.30		0.55	0.24		0.58	0.44	0.03	0.49	1.15	0.25
Uniform Delay, d1	45.3	45.2		46.9	46.4		46.9	11.9	9.0	47.3	22.1	10.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	1.3		5.0	1.1		6.4	0.8	0.1	3.2	72.3	0.7
Delay (s)	46.4	46.6		51.9	47.5		53.3	12.7	9.1	50.5	94.4	11.5
Level of Service	D	D		D	D		D	B	A	D	F	B
Approach Delay (s)		46.5			49.9			15.7			85.3	
Approach LOS		D			D			B			F	

Intersection Summary			
HCM Average Control Delay	64.1	HCM Level of Service	E
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	105.9	Sum of lost time (s)	13.4
Intersection Capacity Utilization	82.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	384	50	127	66	28	89	232	2064	166	72	964	222
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.89		1.00	0.89		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3193	1546		1554	1449		1614	3228	1444	1630	3260	1458
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3193	1546		1554	1449		1614	3228	1444	1630	3260	1458
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	400	52	132	69	29	93	242	2150	173	75	1004	231
RTOR Reduction (vph)	0	73	0	0	84	0	0	0	54	0	0	80
Lane Group Flow (vph)	400	111	0	69	38	0	242	2150	119	75	1004	151
Confl. Peds. (#/hr)				3								
Heavy Vehicles (%)	1%	1%	1%	7%	7%	7%	3%	3%	3%	2%	2%	2%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	15.0	17.2		9.2	11.4		15.0	66.7	66.7	9.3	61.0	61.0
Effective Green, g (s)	15.0	17.2		9.2	11.4		15.0	66.7	66.7	9.3	61.0	61.0
Actuated g/C Ratio	0.12	0.14		0.08	0.09		0.12	0.55	0.55	0.08	0.51	0.51
Clearance Time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	398	221		119	137		201	1790	801	126	1653	739
v/s Ratio Prot	c0.13	c0.07		0.04	0.03		c0.15	c0.67		0.05	0.31	
v/s Ratio Perm									0.08			0.10
v/c Ratio	1.01	0.50		0.58	0.28		1.20	1.20	0.15	0.60	0.61	0.20
Uniform Delay, d1	52.6	47.6		53.7	50.6		52.6	26.8	13.0	53.7	21.1	16.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	46.4	1.8		6.7	1.1		129.3	96.2	0.4	7.4	1.7	0.6
Delay (s)	99.0	49.4		60.4	51.7		182.0	123.0	13.4	61.0	22.8	16.9
Level of Service	F	D		E	D		F	F	B	E	C	B
Approach Delay (s)		83.4			54.8			121.1			23.9	
Approach LOS		F			D			F			C	

Intersection Summary			
HCM Average Control Delay	86.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	120.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	100.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

AM 2026 Proposed

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	117	21	149	63	21	34	62	685	45	57	1857	206
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.87		1.00	0.91		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3072	1447		1630	1556		1511	3023	1352	1599	3197	1430
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3072	1447		1630	1556		1511	3023	1352	1599	3197	1430
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	134	24	171	72	24	39	71	787	52	66	2134	237
RTOR Reduction (vph)	0	156	0	0	36	0	0	0	22	0	0	33
Lane Group Flow (vph)	134	39	0	72	27	0	71	787	30	66	2134	204
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	10%	10%	10%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	10.1	9.4		8.4	7.7		8.6	62.1	62.1	8.2	61.7	61.7
Effective Green, g (s)	10.1	9.4		8.4	7.7		8.6	62.1	62.1	8.2	61.7	61.7
Actuated g/C Ratio	0.10	0.09		0.08	0.07		0.08	0.59	0.59	0.08	0.58	0.58
Clearance Time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	293	128		129	113		123	1771	792	124	1861	832
v/s Ratio Prot	0.04	c0.03		c0.04	0.02		c0.05	0.26		0.04	c0.67	
v/s Ratio Perm									0.02			0.14
v/c Ratio	0.46	0.31		0.56	0.24		0.58	0.44	0.04	0.53	1.15	0.25
Uniform Delay, d1	45.4	45.2		47.0	46.4		46.9	12.3	9.3	47.1	22.1	10.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	1.4		5.2	1.1		6.4	0.8	0.1	4.3	72.9	0.7
Delay (s)	46.5	46.6		52.2	47.5		53.4	13.1	9.4	51.4	95.0	11.5
Level of Service	D	D		D	D		D	B	A	D	F	B
Approach Delay (s)		46.6			50.0			16.0			85.7	
Approach LOS		D			D			B			F	

Intersection Summary			
HCM Average Control Delay	64.4	HCM Level of Service	E
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	106.0	Sum of lost time (s)	13.4
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	384	53	127	115	32	162	232	2035	226	122	950	222
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.89		1.00	0.87		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3193	1549		1554	1430		1614	3228	1444	1630	3260	1458
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3193	1549		1554	1430		1614	3228	1444	1630	3260	1458
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	400	55	132	120	33	169	242	2120	235	127	990	231
RTOR Reduction (vph)	0	70	0	0	151	0	0	0	81	0	0	83
Lane Group Flow (vph)	400	117	0	120	51	0	242	2120	154	127	990	148
Confl. Peds. (#/hr)				3								
Heavy Vehicles (%)	1%	1%	1%	7%	7%	7%	3%	3%	3%	2%	2%	2%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	15.0	14.7		13.1	12.8		15.0	61.9	61.9	13.2	60.1	60.1
Effective Green, g (s)	15.0	14.7		13.1	12.8		15.0	61.9	61.9	13.2	60.1	60.1
Actuated g/C Ratio	0.12	0.12		0.11	0.11		0.12	0.51	0.51	0.11	0.50	0.50
Clearance Time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	396	188		169	152		200	1654	740	178	1622	725
v/s Ratio Prot	c0.13	c0.08		0.08	0.04		c0.15	c0.66		0.08	0.30	
v/s Ratio Perm									0.11			0.10
v/c Ratio	1.01	0.62		0.71	0.33		1.21	1.28	0.21	0.71	0.61	0.20
Uniform Delay, d1	52.9	50.4		52.0	50.1		52.9	29.4	16.1	52.0	21.9	17.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	47.8	6.2		13.1	1.3		131.7	131.6	0.6	12.7	1.7	0.6
Delay (s)	100.7	56.6		65.1	51.4		184.6	161.0	16.7	64.7	23.6	17.6
Level of Service	F	E		E	D		F	F	B	E	C	B
Approach Delay (s)		86.7			56.5			150.1			26.5	
Approach LOS		F			E			F			C	

Intersection Summary			
HCM Average Control Delay	101.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	107.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	384	50	127	66	28	89	232	2064	166	72	964	222
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.89		1.00	0.89		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3193	1546		1554	1449		1614	3228	1444	1630	3260	1458
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3193	1546		1554	1449		1614	3228	1444	1630	3260	1458
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	400	52	132	69	29	93	242	2150	173	75	1004	231
RTOR Reduction (vph)	0	65	0	0	79	0	0	0	59	0	0	72
Lane Group Flow (vph)	400	119	0	69	43	0	242	2150	114	75	1004	159
Confl. Peds. (#/hr)				3								
Heavy Vehicles (%)	1%	1%	1%	7%	7%	7%	3%	3%	3%	2%	2%	2%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	17.0	14.5		8.0	5.5		25.6	92.6	92.6	7.0	74.0	74.0
Effective Green, g (s)	17.0	14.5		8.0	5.5		25.6	92.6	92.6	7.0	74.0	74.0
Actuated g/C Ratio	0.12	0.10		0.06	0.04		0.18	0.66	0.66	0.05	0.53	0.53
Clearance Time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	388	160		89	57		295	2135	955	82	1723	771
v/s Ratio Prot	c0.13	c0.08		0.04	0.03		c0.15	c0.67		0.05	0.31	
v/s Ratio Perm									0.08			0.11
v/c Ratio	1.03	0.74		0.78	0.76		0.82	1.01	0.12	0.91	0.58	0.21
Uniform Delay, d1	61.5	60.9		65.1	66.6		55.0	23.7	8.7	66.2	22.5	17.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	53.9	16.8		33.5	43.2		16.5	21.2	0.3	70.8	1.4	0.6
Delay (s)	115.4	77.7		98.6	109.8		71.5	44.9	9.0	137.0	23.9	18.1
Level of Service	F	E		F	F		E	D	A	F	C	B
Approach Delay (s)		103.5			105.8			45.0			29.4	
Approach LOS		F			F			D			C	

Intersection Summary			
HCM Average Control Delay	50.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	13.4
Intersection Capacity Utilization	100.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

 2026 PM Prop-Opt

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	384	53	127	115	32	162	232	2035	226	122	950	222
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.89		1.00	0.87		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3193	1549		1554	1430		1614	3228	1444	1630	3260	1458
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3193	1549		1554	1430		1614	3228	1444	1630	3260	1458
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	400	55	132	120	33	169	242	2120	235	127	990	231
RTOR Reduction (vph)	0	70	0	0	151	0	0	0	81	0	0	83
Lane Group Flow (vph)	400	117	0	120	51	0	242	2120	154	127	990	148
Confl. Peds. (#/hr)				3								
Heavy Vehicles (%)	1%	1%	1%	7%	7%	7%	3%	3%	3%	2%	2%	2%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	15.0	14.7		13.1	12.8		15.0	61.9	61.9	13.2	60.1	60.1
Effective Green, g (s)	15.0	14.7		13.1	12.8		15.0	61.9	61.9	13.2	60.1	60.1
Actuated g/C Ratio	0.12	0.12		0.11	0.11		0.12	0.51	0.51	0.11	0.50	0.50
Clearance Time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	396	188		169	152		200	1654	740	178	1622	725
v/s Ratio Prot	c0.13	c0.08		0.08	0.04		c0.15	c0.66		0.08	0.30	
v/s Ratio Perm									0.11			0.10
v/c Ratio	1.01	0.62		0.71	0.33		1.21	1.28	0.21	0.71	0.61	0.20
Uniform Delay, d1	52.9	50.4		52.0	50.1		52.9	29.4	16.1	52.0	21.9	17.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	47.8	6.2		13.1	1.3		131.7	131.6	0.6	12.7	1.7	0.6
Delay (s)	100.7	56.6		65.1	51.4		184.6	161.0	16.7	64.7	23.6	17.6
Level of Service	F	E		E	D		F	F	B	E	C	B
Approach Delay (s)		86.7			56.5			150.1			26.5	
Approach LOS		F			E			F			C	

Intersection Summary			
HCM Average Control Delay	101.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	107.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	384	49	127	62	27	88	232	2055	167	65	960	222
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.89		1.00	0.89		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3193	1545		1554	1447		1614	3228	1444	1630	3260	1458
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3193	1545		1554	1447		1614	3228	1444	1630	3260	1458
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	400	51	132	65	28	92	242	2141	174	68	1000	231
RTOR Reduction (vph)	0	74	0	0	83	0	0	0	54	0	0	80
Lane Group Flow (vph)	400	109	0	65	37	0	242	2141	120	68	1000	151
Confl. Peds. (#/hr)				3								
Heavy Vehicles (%)	1%	1%	1%	7%	7%	7%	3%	3%	3%	2%	2%	2%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	15.0	17.2		9.0	11.2		15.0	67.0	67.0	9.0	61.0	61.0
Effective Green, g (s)	15.0	17.2		9.0	11.2		15.0	67.0	67.0	9.0	61.0	61.0
Actuated g/C Ratio	0.12	0.14		0.07	0.09		0.12	0.56	0.56	0.07	0.51	0.51
Clearance Time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	399	221		116	135		202	1801	806	122	1656	741
v/s Ratio Prot	c0.13	c0.07		0.04	0.03		c0.15	c0.66		0.04	0.31	
v/s Ratio Perm									0.08			0.10
v/c Ratio	1.00	0.49		0.56	0.27		1.20	1.19	0.15	0.56	0.60	0.20
Uniform Delay, d1	52.5	47.4		53.6	50.7		52.5	26.5	12.8	53.6	21.0	16.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	45.7	1.7		6.1	1.1		127.0	90.8	0.4	5.4	1.6	0.6
Delay (s)	98.2	49.2		59.7	51.7		179.5	117.4	13.2	59.1	22.6	16.8
Level of Service	F	D		E	D		F	F	B	E	C	B
Approach Delay (s)		82.8			54.5			116.2			23.5	
Approach LOS		F			D			F			C	

Intersection Summary			
HCM Average Control Delay	83.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	120.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	99.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

 LC-2026 PM Prop

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	384	50	127	82	28	114	232	2044	191	90	954	222
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.89		1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3193	1546		1554	1438		1614	3228	1444	1630	3260	1458
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3193	1546		1554	1438		1614	3228	1444	1630	3260	1458
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	400	52	132	85	29	119	242	2129	199	94	994	231
RTOR Reduction (vph)	0	73	0	0	107	0	0	0	66	0	0	82
Lane Group Flow (vph)	400	111	0	85	41	0	242	2129	133	94	994	149
Confl. Peds. (#/hr)				3								
Heavy Vehicles (%)	1%	1%	1%	7%	7%	7%	3%	3%	3%	2%	2%	2%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	15.0	17.1		9.9	12.0		15.0	63.5	63.5	11.7	60.2	60.2
Effective Green, g (s)	15.0	17.1		9.9	12.0		15.0	63.5	63.5	11.7	60.2	60.2
Actuated g/C Ratio	0.12	0.14		0.08	0.10		0.12	0.53	0.53	0.10	0.50	0.50
Clearance Time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	399	220		128	144		202	1707	763	159	1634	731
v/s Ratio Prot	c0.13	c0.07		0.05	0.03		c0.15	c0.66		0.06	0.30	
v/s Ratio Perm									0.09			0.10
v/c Ratio	1.00	0.51		0.66	0.28		1.20	1.25	0.17	0.59	0.61	0.20
Uniform Delay, d1	52.5	47.6		53.5	50.1		52.5	28.3	14.7	51.9	21.5	16.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	45.7	1.8		12.2	1.1		127.0	116.3	0.5	5.8	1.7	0.6
Delay (s)	98.2	49.4		65.7	51.2		179.5	144.6	15.2	57.7	23.2	17.3
Level of Service	F	D		E	D		F	F	B	E	C	B
Approach Delay (s)		82.8			56.5			137.9			24.6	
Approach LOS		F			E			F			C	

Intersection Summary			
HCM Average Control Delay	95.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	120.1	Sum of lost time (s)	13.4
Intersection Capacity Utilization	102.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Updated 2026 AM Existing

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	117	21	149	63	21	36	62	685	47	59	1857	206
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.87		1.00	0.91		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3072	1447		1630	1553		1511	3023	1352	1599	3197	1430
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3072	1447		1630	1553		1511	3023	1352	1599	3197	1430
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	134	24	171	72	24	41	71	787	54	68	2134	237
RTOR Reduction (vph)	0	156	0	0	38	0	0	0	22	0	0	33
Lane Group Flow (vph)	134	39	0	72	27	0	71	787	32	68	2134	204
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	10%	10%	10%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	10.1	9.4		8.4	7.7		8.6	62.0	62.0	8.3	61.7	61.7
Effective Green, g (s)	10.1	9.4		8.4	7.7		8.6	62.0	62.0	8.3	61.7	61.7
Actuated g/C Ratio	0.10	0.09		0.08	0.07		0.08	0.58	0.58	0.08	0.58	0.58
Clearance Time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	293	128		129	113		123	1768	791	125	1861	832
v/s Ratio Prot	0.04	c0.03		c0.04	0.02		c0.05	0.26		0.04	c0.67	
v/s Ratio Perm									0.02			0.14
v/c Ratio	0.46	0.31		0.56	0.24		0.58	0.45	0.04	0.54	1.15	0.25
Uniform Delay, d1	45.4	45.2		47.0	46.4		46.9	12.3	9.4	47.0	22.1	10.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	1.4		5.2	1.1		6.4	0.8	0.1	4.8	72.9	0.7
Delay (s)	46.5	46.6		52.2	47.5		53.4	13.2	9.4	51.8	95.0	11.5
Level of Service	D	D		D	D		D	B	A	D	F	B
Approach Delay (s)		46.6			49.9			16.1			85.7	
Approach LOS		D			D			B			F	

Intersection Summary			
HCM Average Control Delay	64.4	HCM Level of Service	E
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	106.0	Sum of lost time (s)	13.4
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	384	50	127	66	28	90	232	2064	167	73	964	222
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.89		1.00	0.89		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3193	1546		1554	1448		1614	3228	1444	1630	3260	1458
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3193	1546		1554	1448		1614	3228	1444	1630	3260	1458
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	400	52	132	69	29	94	242	2150	174	76	1004	231
RTOR Reduction (vph)	0	73	0	0	85	0	0	0	54	0	0	80
Lane Group Flow (vph)	400	111	0	69	38	0	242	2150	120	76	1004	151
Confl. Peds. (#/hr)				3								
Heavy Vehicles (%)	1%	1%	1%	7%	7%	7%	3%	3%	3%	2%	2%	2%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	15.0	17.2		9.2	11.4		15.0	66.6	66.6	9.4	61.0	61.0
Effective Green, g (s)	15.0	17.2		9.2	11.4		15.0	66.6	66.6	9.4	61.0	61.0
Actuated g/C Ratio	0.12	0.14		0.08	0.09		0.12	0.55	0.55	0.08	0.51	0.51
Clearance Time (s)	4.0	4.5		4.0	4.5		4.0	5.4	5.4	4.0	5.4	5.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	398	221		119	137		201	1787	799	127	1653	739
v/s Ratio Prot	c0.13	c0.07		0.04	0.03		c0.15	c0.67		0.05	0.31	
v/s Ratio Perm									0.08			0.10
v/c Ratio	1.01	0.50		0.58	0.28		1.20	1.20	0.15	0.60	0.61	0.20
Uniform Delay, d1	52.6	47.6		53.7	50.6		52.6	26.9	13.1	53.6	21.1	16.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	46.4	1.8		6.7	1.1		129.3	97.0	0.4	7.4	1.7	0.6
Delay (s)	99.0	49.4		60.4	51.7		182.0	123.9	13.5	61.0	22.8	16.9
Level of Service	F	D		E	D		F	F	B	E	C	B
Approach Delay (s)		83.4			54.8			121.9			24.0	
Approach LOS		F			D			F			C	

Intersection Summary			
HCM Average Control Delay	86.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	120.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	100.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Chapter 17.68
EC EXPANDED COMMERCIAL

Sections:

17.68.010 Purpose. The purpose of the EC zone is to provide areas:

A. For combining light manufacturing, office, retail sales, and complementary related commercial uses;

B. For combining uses which have no off-site impacts in terms of noise, odor, glare, lights, vibration, smoke, dust or other types of off-site impacts;

C. For combining parking, landscaping and other design features which physically and visually link structures and uses within one development;

D. Which utilize a basic street and utility pattern which will permit flexibility in the size of development sites and provide internal circulation which connect to adjoining sites; and

E. Which provide for a circulation system that provides direct access to arterials or collectors that will not channel traffic through residential areas. (Ord. 634 §1 Exh. A (part), 1995)

17.68.030 Permitted uses. In the expanded commercial zone, except as specifically stated, activities shall be conducted within an enclosed building or structure and are subject to site development review, Chapter 17.120, Site Development Review. Only the following uses and their accessory uses are permitted outright:

A. Agricultural sales;

B. Automotive and equipment:

1. Repairs provided that a five-foot landscaped perimeter setback surround all outdoor parking and storage areas and all repair work is performed indoors;

2. Sales/rental/storage of farm equipment, automobiles, recreational vehicles, boats or light equipment, provided that a five-foot landscaped perimeter setback surrounds all outdoor parking and all storage areas are buffered and screened in accordance with Chapter 17.100, Landscaping, Screening and Fencing.

C. Building materials sales and storage;

D. Building maintenance services;

E. Business equipment sales and services;

F. Church;

G. Commercial amusement facilities including bowling alleys, video arcades, and movie theaters other than adult motion picture theaters;

H. Communication services;
I. Construction sales and services;
J. Day care facility;
K. Dwelling units located on the second floor of a commercial structure;

17.68.030--17.68.040

L. Eating and drinking establishments;

M. Equipment rental and sales;

N. Financial, insurance and real estate services;

O. General retail sales;

P. Home occupation (Type I) subject to Chapter 17.142, Home Occupations;

Q. Laundry services;

R. Medical and dental services;

S. Mini-storage with or without caretaker dwelling;

T. Multifamily dwelling units per A-1 requirements when located at least two hundred feet from Highway 30 and outside of the Scappoose Creek Flood Plain;

U. Packaging and production of finished products from previously prepared materials;

V. Parking facilities:

W. Participation sports and recreation, indoor;

X. Postal services;

Y. Professional and administrative offices;

Z. Public safety services;

AA. Public support facilities;

BB. Recreational vehicle parks subject to Chapter 17.94, Manufactured Home Regulations;

CC. Research services;

DD. Residential care facilities when located at least two hundred feet from Highway 30 and outside of the Scappoose Creek Flood Plain;

EE. Small animal sales and services including veterinary;

FF. Vehicle fuel sales, retail;

GG. Wholesale, storage and distribution;

HH. Hotel/motel;

II. Any permitted use on a temporary basis subject to Scappoose Municipal Code 17.128, Temporary Commercial and Industrial Uses;

JJ. Wireless communications facilities, not to include antenna support structures, subject to the provisions of Chapter 17.93.

KK. Public and private schools including but not limited to charter schools and career schools as defined and regulated by the State of Oregon. (Ord. 777 § 2, 2006; Ord. 740 §§16 and 17, 2004; Ord. 705 §1(part), 2001; Ord. 698 §2, 2000; Ord. 662 §1, 1998; Ord. 636 §1(part), 1996; Ord. 634 §1 Exh. A (part), 1995).

17.68.040 Conditional uses. The following uses and their accessory uses may be permitted when authorized by the planning commission in accordance with the requirements of Chapter 17.130, Conditional Use, other relevant sections of this title and any conditions imposed by the planning commission:

A. Adult bookstore, entertainment or motion picture theaters, provided no sales area or activity is ever visible from the building exterior, all building setbacks shall be a minimum of thirty-five feet from any property line and shall be screen and buffered in accordance with Section 17.100.090. In addition, location shall be at least one thousand five hundred feet, measured in a straight line, from any of the following:

1. Residential district;

2. Public or private nursery, preschool, elementary, junior, middle or high school;

3. Day care facility, nursery school, convalescent home, home for the aged, resident care facility or hospital;

4. Public library;

5. Community recreation;

6. Church;

B. Automotive and equipment body repairs conducted wholly within an enclosed structure;

C. Fleet storage with no buildings or structures, provided that a five-foot screened and buffered perimeter setback surrounds all outdoor parking and storage areas;

D. Home occupations (Type II) subject to Chapter 17.142, Home Occupations;

E. Outside storage subject to buffering and screening in accordance with Chapter 17.100, Landscaping, Screening and Fencing;

F. Outside dining facilities;

G. Major impact utilities provided that a ten-foot perimeter setback containing both externally visible landscaping meeting buffering standards and solid screening surrounds the property;

H. Radio towers and transmitters;

I. Wireless communication facilities, subject to the provisions of Chapter 17.93. (Ord. 705 §1(part), 2001; Ord. 634 §1 Exh. A (part), 1995)

17.68.050 Dimensional requirements. A. The minimum lot size shall be ten thousand square feet with a minimum lot width of one hundred feet.

B. Unless otherwise specified, the minimum setback requirements are as follows:

1. The front yard setback shall be a minimum of ten feet and shall be landscaped per Section 17.100.090;

2. On corner lots and through lots the minimum setback for the side facing the street shall be twenty feet;

3. No side or rear yard setback shall be required except thirty feet shall be required where abutting a residential zoning district and the planning commission may reduce the required yard setback by fifty percent pursuant to Chapter 17.100, Landscaping, Screening and Fencing.

C. No building shall exceed fifty feet in height. Within one hundred feet of a residential zone, no building shall exceed thirty-five feet in height.

D. The maximum lot coverage shall be ninety percent including all buildings and impervious surfaces.

E. Additional requirements shall include any applicable section of this title. (Ord. 634 §1 Exh. A (part), 1995)

17.68.060 Dimensional requirements--Residential districts. Dimensional requirements for residential uses in the expanded commercial district are the same as the A-1 zone, Chapter 17.56, A-1 High Density Residential. (Ord. 636 §1(part), 1996; Ord. 634 §1 Exh. A (part), 1995)

3.5 Saturation Flow Rate Studies

The saturation flow rate is a critical component in the analysis of signalized intersection capacity and can be defined as the flow in vehicles per hour that can be accommodated by a lane group assuming that the green phase is displayed 100 percent of the time. Saturation flow rate data is collected on an ongoing basis. Copies of saturation flow rate studies should be sent to TPAU so that the work on developing the default values can continually be improved. To date, this research has shown that a default saturation flow rate of 1750 passenger cars per hour of green per lane is appropriate in most cases, with some exceptions as noted below[2]. See the Transportation Analysis webpage on the TDD Planning Section website for the latest information on saturation flow rates.

3.5.1 Field Measurements of Saturation Flow Rates

Field measurement of saturation flow rates is preferred over estimation. Using default values and adjustment factors will produce more accurate results and does not require further modification. If possible, saturation flow rates should be collected at no less than one major intersection on each main study area roadway. When using these values in analysis be sure to set all of the adjustment factors to 1.0. The measurement of the saturation flow rate in the field shall be in accordance with methodology described in Appendix H in Chapter 16 of the Highway Capacity Manual 2000 (*HCM*) and submitted on the *HCM* Field Saturation Flow Rate Study Worksheet.

Once the field saturated flow rate is obtained, the ideal (unadjusted) saturation flow rate should be back-calculated by applying adjustment factors to account for the influence of lane widths, heavy vehicles, approach grades, on-street parking, bus stops, area type, lane utilization, turning movements and bicycle and pedestrian conflicts. Heavy vehicles, parking maneuvers, turning movements, and bicycle and pedestrian conflicts must be collected during the same period as the field saturation flow study to be able to back- calculate an accurate value.

3.5.2 Default Values for Base Saturation Flow Rates

Except in larger urban areas, field conditions generally do not allow the *HCM* saturation flow study procedures to be met. A roadway approach may not have long enough queues during the study or intersection spacing may be so tight that long enough queues without gaps are not possible. In these cases, a default ideal unadjusted saturation flow is determined as follows:

- Outside of the Portland, Salem and Eugene MPO urban areas the unadjusted saturation flow rate is 1750 passenger cars per hour of green per lane (pcphgl).
- Inside the Portland, Salem and Eugene MPO urban growth boundaries an unadjusted saturation flow rate of 1900 pcphgl may be used, unless one or more of the following conditions is present, in which case 1750 pcphgl shall be used. Conditions indicating use of lower base saturation flow rate inside urban growth boundaries:
    - On-street parking
    - Greater than 5% trucks

[2] Based on NCHRP Report 599, Default Values for Highway Capacity and Level of Service Analysis, TRB, 2008, and Metropolitan Statistical Area (MSA) population estimates from the U.S. Census Bureau as of July 1, 2007.

- Roadways intersect at severe skew angle (i.e., greater than 20 degrees off perpendicular)
- One or more driveway approach(es) with a combined volume in excess of 5 vph, are present downstream of the intersection within the functional area (see Section 7-3) or upstream within the length of the standing queue
- Poor signal spacing or observed queue spillbacks between signals during the peak hour
- Less than 12-foot travel lanes

The ideal (unadjusted) saturation flow rate is converted to an actual flow rate by applying adjustment factors to account for the influence of lane widths, heavy vehicles, approach grades, on-street parking, bus stops, area type, lane utilization, turning movements and bicycle and pedestrian conflicts. Theoretically, once adjusted, the result would be equivalent to the field measured value.