

# ATTACHMENT 1

## Excerpt from the Lake Grove Village Center Plan

### ***Transportation Concept***

A variety of safe, convenient and viable transportation options, including walking, cycling, public transit and auto and truck travel, are envisioned to connect the Village Center to the surrounding neighborhoods, employment areas, downtown Lake Oswego and other adjacent centers. Traffic management and urban design concepts are developed to calm traffic on Boones Ferry Road, allowing ease of access to and from commercial areas and neighborhoods and safe crossings of Boones Ferry Road. Convenient and visible public parking, both on and off street, is planned to provide for ease of access to retail, restaurants, neighborhood services, and the village commons and gathering places without encroaching on the surrounding residential neighborhoods. Shared parking and access agreements are encouraged to provide for greater flexibility and more efficient use of private parking areas.

### Boones Ferry Concept

The goal for Boones Ferry Road is to create an attractive street that serves as the centerpiece of the Lake Grove area. Integrated land use and transportation strategies are recommended to promote a safe, welcoming and convenient pedestrian- and bicycle-friendly environment, while accommodating auto traffic efficiently and meeting the needs of businesses by providing adequate vehicle access and sufficient parking.

Recommended transportation concepts for Boones Ferry Road were identified by the Lake Grove Village Center Advisory Committee in the 2005 Boones Ferry Concept Plan. The Boones Ferry Concept Plan provides the basis for policies, projects and design direction for improvements to Boones Ferry Road in the Village Center. During the first phase of the Lake Grove Village Center Planning process (in 2002 and 2003), the 2001 Boones Ferry Road Corridor Plan (Exhibit F-15.4) became the basis for land use plans. Concerns were raised by stakeholders over the challenge of trying to integrate the recommended five-lane arterial and continuous center lane with the vision of a pedestrian friendly, mixed use Village Center. At the request of the Lake Grove Village Center Advisory Committee, the City Council authorized a new study to revisit specific elements of the 2001 Corridor Plan resulting the 2005 Boones Ferry Concept Plan.

### Safety

Safety for all is a paramount concern. Boones Ferry Concept recommendations include reducing posted and effective speed. A key element of the transportation concept is landscaped center medians recommended to enhance safety for pedestrians, bicyclists and vehicles. Center medians enhance safety by providing:

- Access control and the reduction or elimination of vehicle turning movement conflicts with pedestrians, bicyclists and other vehicles; and

- Pedestrian and bicycle refuges at intersections and mid-block crossings. The Boones Ferry Concept introduces new pedestrian crossings as development levels and pedestrian demands warrant for an average spacing between crossings of about 360 feet.

Landscaped medians also provide opportunities for stormwater management, or “green streets,” and attractive landscaping to enhance the quality and identity of the Lake Grove area.

### Access to Businesses

Safe, convenient access to commercial sites requires an integrated approach employing a variety of design strategies in concert with center medians to maximize benefits to Boones Ferry Road businesses. Design elements may include:

- Direct access from signalized locations and cross-streets;
- Through connections between adjacent parking facilities;
- Drive consolidation and shared access;
- Raised center medians to manage turn movements and improve traffic flow; and where needed
- U-turns at selected intersections controlled by phased traffic signals to provide access to businesses that cannot otherwise be accessed from cross streets or driveways.

### **Goal 1: Transform Boones Ferry into a Great Street**

Create an attractive street that promotes a safe, welcoming and convenient environment for pedestrians, bicyclists and vehicles, accommodates auto traffic efficiently, provides adequate vehicle access to meet the needs of businesses, and manages stormwater within the right-of-way.

### Policies:

- 1.1 Utilize engineering and urban design strategies to improve access to and from businesses in the corridor, and calm traffic on Boones Ferry Road.
- 1.2 Provide landscaped center medians along Boones Ferry Road to organize access, enhance safety, manage storm water and to beautify the corridor.
- 1.3 Employ green street concepts in Boones Ferry Road improvements where practicable. Consider Boones Ferry Road’s function as a significant water conveyance system within an urban watershed. Integrate storm water system improvements for watershed health including water quality, habitat, and tree canopy coverage.
- 1.4 Provide continuous sidewalks and bike lanes to enhance safety along Boones Ferry Road.
- 1.5 Provide pedestrian crossings at regular intervals. Consider signalization of pedestrian crossings in design refinement studies.

## **Goal 2: Enhance Alternative Modes of Travel**

Promote the safe and convenient use of public transit service and bicycling within to and from the Village Center.

### Policies:

- 2.1 Create enhanced public transit service between the Village Center and surrounding areas (e.g. bus, shuttle bus, trolley, commuter rail). In partnership with TriMet, design and construct bus shelters along Boones Ferry Road and Kruse Way.
- 2.2 Provide a range of safe bicycling options, including, but not limited to, on-street bike lanes on Boones Ferry Road (and major collectors, as appropriate), a marked neighborhood bike route around the Village Center and secure bicycle parking.

## **Goal 3: Enhance the Pedestrian Environment and Connectivity**

Enhance the safety, convenience and attractiveness of walking, transit and bicycling within, to and from the Village Center including safe crossings on Boones Ferry Road and cross streets.

### Policies:

- 3.1 Encourage the orientation of building entrances to pedestrian and transit streets, walkways and public areas, with parking in the rear or at the side.
- 3.2 Provide continuous sidewalks, pedestrian refuges, landscaped medians, consolidated driveways, crosswalks, signals at crosswalks, public restrooms, and attractive transit shelters. Replace overhead utilities with under-ground utilities.
- 3.3 Emphasize pedestrian amenities on cross streets to the neighborhoods to strengthen connections to the Village Center. Augment the non-grid system of streets with additional off-street pedestrian and bike pathways to provide safe and convenient connections for all ages.
- 3.4 Encourage safe pedestrian connections between businesses and parking areas and connectivity between businesses on each side of Boones Ferry Road. Pedestrian arcades, covered walkways and other design features are encouraged to connect uses in a safe and convenient manner.

### **Action Measures – Transportation**

Transportation action measures are organized under five headings:

- i. Village Center Access Management Plan
- ii. Street Design
- iii. Public Involvement
- iv. Transportation Projects
- v. Design Direction

**i. Village Center Access Management Plan.**

A comprehensive access management plan for the Village Center shall be completed prior to initiating Engineering Plans (see ii. Street Design, b. Engineering Plans). The access management plan shall provide first, the Traffic and Safety Analysis followed by the Economic Impacts Analysis identified below. These analyses require consideration of impacts for a base case condition based on existing conditions and standards, and for a Village Center condition based on transportation concepts identified in these Action Measures under v. Design Direction. Both analyses require recommendations for alternative design refinements to mitigate findings for adverse impacts and to advance the goals and policies of the Lake Grove Village Center Plan.

- a. Traffic and Safety Analysis. (Policies 1.1; 1.2; 1.5) Complete a traffic operations and safety analysis to address potential impacts to traffic operations, business access, neighborhood “cut-through” traffic, and safety. Peak hour and non-peak hour assessments should be included. The traffic and safety analysis shall include, but not be limited to, the following:
- (1) Address impacts of delivery trucks and delivery truck access routes on traffic flow and pedestrian safety. The potential use of the outer travel lane on Boones Ferry Road for delivery parking during certain limited times is noted in Transportation Action Measure (v)(7) Delivery Truck Access. Address optimal times for parking/delivery activity on Boones Ferry Road, including ruling out use of the outer travel lane for delivery truck parking if indicated.
  - (2) Address impacts of large passenger vehicle u-turns. The recommended signalized intersection street section for Boones Ferry Road would allow most passenger vehicles to make the u-turns (see Transportation Action Measure (v)(1) Street Cross Sections). Address impacts on traffic flow and safety if several larger passenger vehicle models would not be able to make a simple u-turn within the recommended clear area.
  - (3) Address impacts associated with right-hand turning movements as cars wait for a car exiting a driveway, or for a car to slow down enough to make a right turn into a driveway. Pedestrian traffic along the sidewalk could also cause occasional delays for these right-hand turning movements.
  - (4) Analyze the potential “bottleneck” during peak travel times at locations where cars queuing for u-turns or left-turns at an intersection may back up for a significant distance, possibly creating difficulty for those traveling in the opposite direction (on the other side of the same median) who wish to queue and make a u-turn into the travel lanes where the aforementioned queue has developed. Address the case, for example, of a northbound car intending to make a u-turn at the Reese Road intersection and travel south to access a mid-block business (i.e. Ricardo's Restaurant). If the southbound queue is long and traffic heavy, northbound traffic intending to make a southbound u-turn at Reese may back up behind other southbound traffic and block the flow of vehicles intending to make the u-turn at Reese Road.
  - (5) Address safety and traffic flow impacts for pedestrian crossings that are not located at signalized intersections (see Transportation Action Measure (v)(4)

Pedestrian Crossings).

- (6) Provide recommendations for conceptual design refinements to mitigate for traffic operations and safety impacts, and to advance the goals of the Lake Grove Village Center Plan. In the event of a conflict between the various goals of the Plan, design refinements for mitigation shall give priority to pedestrian facilities.

b. Economic Impacts Analysis. (Policies 1.1; 1.2) Complete an economic impacts analysis incorporating findings and recommendations from the Traffic and Safety Analysis. The economic impacts analysis shall include, but not be limited to, the following:

- (1) Address potential economic impacts to Lake Grove businesses including impacts to parking supply, business access, commercial deliveries, and business performance during street construction. Include an assessment of economic impacts on adjacent neighborhoods.
- (2) Provide recommendations for conceptual design refinements to mitigate for economic impacts, and to advance the goals of the Lake Grove Village Center Plan. In the event of a conflict between the various goals of the Plan, design refinements for mitigation shall give priority to pedestrian facilities.

## ii. **Street Design.**

a. Green Streets. (Policy 1.3) Fund and complete a detailed stormwater management and engineering feasibility study to fully assess issues and costs associated with incorporating green streets elements into the design and engineering of Boones Ferry Road. This is a high priority study, particularly given that incorporation of green street concepts is a major element of the overall roadway design. Investigate a variety of funding sources for the study including funds allocated through the City of Lake Oswego Capital Improvement Plan (CIP), Metro “green street” funds, city storm water management funds and federal funds.

b. Boones Ferry Corridor Engineering Plans. (Policies 1.1; 1.2; 1.3; 1.4; 1.5; 2.1; 2.2; 3.2; 3.3; 3.4. See also Transportation Project 1: Boones Ferry Corridor Improvements.) Fund and complete the following engineering plans after the Access Management Plan and any design refinements have been completed:

- (1) 35% Engineering Plan – The 35 % engineering plan identifies constructability issues, necessary right-of-way acquisitions, and establishes the framework for the final design, such as grade, slope, sub-base of road and undergrounding of utilities. The 35% engineering plan includes the following:
  - Evaluation of centerline alignment to balance engineering and safety needs with reduction of impacts to adjacent properties, where technically feasible;
  - Assessment and design for mitigation of specific economic impacts to adjacent properties including impacts to existing buildings, parking supply, access, delivery access, and business operations during street construction; and
  - Preparation of preliminary cost estimates.
- (2) 65% Engineering Plan - The 65% engineering plan provides sufficient design information to allow the City to provide a private developer with preliminary

plans that form the basis for the completion of detailed engineering plans for a segment of the roadway adjacent to a proposed development.

**iii. Public Involvement.**

- a. Provide timely, complete notice and endeavor to receive meaningful public input prior to making decisions for the planning, analysis, design, and construction of transportation improvements.
- b. Invite and consider input from design, engineering and economic analysis professionals and the public, particularly Lake Grove community stakeholders including residents, institutional and business representatives, and commercial property owners for the planning and analysis, design, and construction of transportation improvements.
- c. Ensure that the public remains informed by effectively publicizing and making available documentation of processes, products and recommendations related to the traffic and safety analysis, economic impacts analysis, street design studies, and engineering plans.