Florence Transportation System Plan

Florence Realization 2020 Comprehensive Plan Appendix 12

July 2008

This 2008 Update of the *Florence Transportation System Plan (TSP), (Florence Realization 2020 Comprehensive Plan Appendix 12)* is a reprint of the original TSP adopted by the City of Florence on January 14, 2002. This document is different from the original TSP. It has been reformatted consistently throughout and it incorporates all adopted amendments to the text and maps since adoption. A table listing all of the adopting ordinances is included in the front of the *Florence Realization 2020 Comprehensive Plan* for convenient reference.

In 2008, "housekeeping edits" to this TSP were adopted in order to achieve the following objectives:

- To make the TSP text internally consistent;
- To make the TSP Map consistent with the Plan text;
- To improve the readability, clarity, and function of the TSP; and
- To remove references that are outdated or will be outdated, e.g., "by 2001."

This TSP will be modified in the future by incorporating adopted amendments and listing the adopting ordinances in the *Florence Realization 2020 Comprehensive Plan*.

Funding for the Transportation System Plan

The Transportation System Plan in Appendix 12 of the Florence Comprehensive Plan was funded by the Transportation and Growth Management (TGM) Program, a joint program of the Oregon Department of Transportation and the Oregon Department of Land Conservation and Development. The TGM Program relies on the funding from the federal Transportation Efficiency Act for the 21st Century (TEA-21) and the Oregon Lottery. This Transportation System Plan does not necessarily reflect the views or policies of the State of Oregon.

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Executive Summary

The City of Florence, Oregon has adopted a Transportation System Plan (TSP), as required by the State's Transportation Planning Rule (TPR). The adopted TSP, as amended since adoption, is incorporated into the Comprehensive Plan as Appendix 12. This Plan summarizes the technical analyses that have been performed in the development of the TSP, including coordination with the affected agencies.

Because the City of Florence is located on the Oregon Coast, it is significantly affected by summertime tourist traffic. In addition, Florence is experiencing growth pressures from both development and increasing traffic. To address these issues, this plan is based on an evaluation of future growth and includes recommendations for appropriate transportation improvements to serve that growth while maintaining and enhancing the character of the city. The plan recognizes that state roadways must be used efficiently and an effective facilities management plan must be developed to allow the City's street system to operate effectively as in-fill development continues within the Urban Growth Boundary.

To minimize the adverse economic, social, energy and environmental impacts of further development in Florence, development of this plan, and land use and transportation alternatives have been considered in combination with facilities management strategies. To maintain consistency and address further development of the local system, the findings, recommendations and policies of the U.S. 101 Oregon Coast Highway study were incorporated into this study. The plan also takes into account the complex system of state, county, and City roads, Port of Siuslaw facilities, rail, air, bike, pedestrian, transit and other alternative modes, and recognizes that implementation of the TSP will require inter-jurisdictional cooperation. The City of Florence recognizes the importance of the five existing transportation gateways to the community:

- East Highway 126 Gateway
- North Florence Highway 101 Gateway
- Siuslaw River Bridge/South Highway 101 Gateway
- Florence Airport Gateway
- Siuslaw River/Port of Siuslaw Gateway.

A Comprehensive Plan that embraces coordinated and systematic development of all gateways is vital to achieving an efficient transportation system.

To address the requirements of the Transportation Planning Rule, this TSP addresses not only automobile and truck travel in the study area, but also alternative travel modes, such as pedestrian, bicycle, and public transit. Each mode was evaluated to determine how the level of service for the mode can be improved to allow development of a multi-modal transportation system with efficient interconnections to transportation systems within Florence, and to other transportation systems in the Lane County region. In addition, opportunities for new development patterns which encourage pedestrian, transit and bicycle travel were evaluated to allow the City to develop an effective transportation system within Florence that does not rely exclusively on any one mode of transportation.

Finally, this report includes an evaluation of funding approaches for the existing and future transportation system, and identifies financial constraints and opportunities. Recommendations for a Transportation Financing Program are included in Section 5 of the TSP.

This plan is organized by geographic planning areas. It recommends 68 multi-modal transportation system improvements distributed among these planning areas. The Planning Areas and their accompanying improvements are presented below.

Project Summary

Florence Downtown Transportation Planning Area

This area is identified in the *Florence Downtown Implementation Plan which was adopted on September 20, 1999 and incorporated into the Comprehensive Plan as part of Appendix 2 on January 14, 2002.*

1. **Highway 101/126 Enhancement Program.** The Highway 101/126 Enhancement Program is focused on developing pedestrian amenities and parking in the downtown area between the Siuslaw River and the Highway 101/126 intersection and between the Highway 101/126 intersection and the East Gateway.

2. **East Gateway (Highway 126)**. In accordance with the *Oregon Coast Highway Corridor Master Plan*, a gateway (monument type) entrance should be developed at Highway 126 near the east City limits.

3. **Siuslaw River Bridge/Highway 101**. The priorities of the Florence Downtown Implementation Plan related to the bridge include:

    a. location of a parking lot under the Siuslaw River Bridge to be combined with a Scenic Byway Bridge Interpretative Site
    b. installation of irrigation and street trees in the Siuslaw Bridge Gateway along Highway 101.
    c. continuing maintenance and preservation of the Bridge, including cathodic protection.

4. **Highway 126/Highway 101 Intersection.** Location of ODOT safety project scheduled for construction in 2002. The project will configure lanes to improve the safety of traffic movements on Highway 126 between Highway 101 and Spruce Street

5. **Quince Street Improvements.** Proposed improvements are the realignment of the intersection of Highway 101 and Quince Street, and the reconstruction of North Quince Street as a full urban section to allow use of Quince Street as an alternate route through downtown.

Insert 11 X 17 TSP Map and remove pages 3 and 4

6. **Highway 101 Pedestrian Crossing Pilot Project.** This project, located between 6th and 8th Streets on Highway 101, is proposed to increase the safety of pedestrian crossings of Highway 101.

7. **The Downtown Green and the realignment of the intersections of 2nd Street with Highway 101.** Construction of the Downtown Green is the highest priority of the Downtown Implementation Plan. It will provide the main entrance to both the Mainstreet and the Old Town areas, and is also the entrance/exit for the Quince/2nd Street alternate route connecting Highways 101/126.

8. **Access Management Plan.** This Plan, developed by abutting property owners, the City, and ODOT, is an integrated plan for access points to Highway 101 for the section of highway located between the Siuslaw River Bridge and the Highway 101/126 intersection. It is consistent with the ODOT Access Management Rules and supports the Mainstreet concept in the Downtown.

North Florence Transportation Planning Area

This area includes the following areas designated on the Comprehensive Plan Map along Highway 101 in the north Florence UGB: North Commercial Node, Service Industrial, Neighborhood Commercial Gateway, and associated residential districts and streets and highways. The three Plan designation areas, taken together, provide the North Gateway to Florence. The area is served by Highway 101, intersected by Munsel Lake Road and Heceta Beach Road, and served by the parallel local streets, Oak and Spruce.

1. **Highway 101.** The cross section of Highway 101 within the North Commercial Node shall be limited in width consistent with the North Gateway concept and need for safe pedestrian/bike crossing.

2. **Oak Street North Extension (37th Street to Heceta Beach Road).** Oak Street is proposed to be extended from its current terminus at 37th Street to the west extension of Munsel Lake Road within the North Commercial Node, and then further to the north abutting the Service Industrial area to Heceta Beach Road. The extension is proposed in phases:

    - Phase 1: 37^{th} to 46^{th} Streets
    - Phase 2: 46^{th} Street to City Boundary
    - Phases 3 and 4: City boundary to Heceta Beach Road

3. **North Highway 101 Gateway**. Similar to the eastern and southern gateways, this gateway would serve as a formal City entrance to welcome travelers to the community.

4. **Spruce Street North Extension (approximately 46th Street to Heceta Beach Road).** The construction of Spruce Street between 46th Street and Heceta Beach Road would augment the parallel, north-south collector system to serve the local circulation needs of

commercial, limited industrial and residential uses, and to decrease local traffic demands on Highway 101. Spruce Street between 46th and Munsel Lake Road may not be a full urban section due to constraints of abutting residential development and the size/geometrics of the abutting commercial parcel.

5. **Heceta Beach Road Extension (Highway 101 to Spruce Street).** With the extension of Spruce Street from Munsel Lake Road to the vicinity of Heceta Beach Road, the Heceta Beach Road/Highway 101 intersection should be modified to a four-leg intersection and Heceta Beach Road extended east to Spruce Street. The design of the alignment should avoid existing residential development directly east of the current Heceta Beach intersection.

6. **Munsel Lake Road/Highway 101 Traffic Signal.** Continued growth along the Munsel Lake Road corridor will more likely than not generate the need for a traffic signal at the intersection of Munsel Lake Road and Highway 101 during the next 10 years. Signal warrants will need to be met prior to installation.

7. **Munsel Lake Road Extension, Highway 101 west to Oak Street.** The extension of Munsel Lake Road west of Highway 101 to Oak Street will provide a necessary link in the Oak/Spruce/Highway 101 couplet, and will allow access at a signalized intersection for traffic entering the highway from the parallel local streets.

Pacific View Business Park Transportation Planning Area

The Pacific View Business Park is composed of 54 fully serviced lots located on Kingwood/Pacific View Drives which are available for industrial or business park uses. Also included in this designation is a 40-acre undeveloped parcel owned by the Port of Siuslaw which will be accessed, and serviced through connection with the infrastructure in the Pacific View Park.

1. The two blocks of 27th Street between Highway 101 and Oak Street will need to be improved to the standards of the more recent constructed section.

2. **Ninth Street/Kingwood Street**. A comprehensive study of optimal access for the Business/Industrial Parks on Kingwood needs to be completed to guide future transportation improvements serving the parks.

Highway 101 – Other Improvements

1. **Oak Street Connection (15th Street to 20th Street).** This north-south route would provide improved local access to a number of uses including Rhododendron Elementary School, Siuslaw High School, Lane Community College, the new middle school, County shops, the main fire station at 26th Street, the Elks Lodge, the Florence Business Center and residential uses. This extension would complete the west side north-south local route to relieve the need for local travelers to access Highway 101 for local trips.

2. **Highway 101/12th Street Intersection.** This intersection is hazardous due to its alignment. A study needs to be completed on options for improvement, including the extension of 12th to Kingwood.

3. **Transition Commercial area, Highway 126/9th Street to 21st Street.** This area would serve as a transition area between the more arterial functions of Highway 101 north of the 21st Street signal, and the Mainstreet character of Highway 101 in the Downtown.

4. **Highway 101 north of the 21st signal extending to the North Commercial Node**. This section of Highway 101 will continue to function more as an arterial section. Due to the larger size of the lots, businesses will continue to be larger, even with redevelopment, and will likely rely more on auto-oriented businesses.

5. **Highway 101 between 42nd and 46th Streets**. This section of the highway should be improved to a full urban section prior to, or as part of, the siting of large retail developments in the North Commercial Node.

6. **Storm Drainage Improvements.** Increased capacity in the storm drainage system is needed on Highway 101 from Heceta Beach Road south to at least 42nd Street, as determined by the City's Stormwater Management Plan.

West 9th Street Transportation Planning Area

This recently designated area is intended for development of professional offices, continuation of institutional uses primarily related to health care, and development of medium and high density mid and upper range residential units.

1. **Improvements in Local Street Network** The intent is that the designated internal street network will be improved to local street standard as part of the private development of abutting lands.

Other Highway 126 Improvements

The 1997 *Highway 126 West Interim Corridor Strategy* is included in Appendix 12 as guidance for Highway 126 improvements.

1. ***Highway 126 Corridor Plan***. The recommendations fo the Plan should be implemented. These include:

    a. Widening bridges
    b. Adding passing lanes
    c. Constructing improved Highway 101/126 and Highway 126/Quince/Spruce intersections
    d. Safety improvements at Cushman, Badger Mountain and Tiernan
    e. Developing a transportation system that supports the Florence economy

2. ***Highway 126 Access Plan.*** Several operational and safety concerns related to the existing side-street access points and high travel speeds are focused in the one mile segment of Highway 126 between North Fork Siuslaw Road and Highway 101. The right turn lane from Highway 101 to Highway 126 encourages relatively high speeds through the large radius corners on the northbound-eastbound and westbound-northbound movement.

    - Access Consolidation: Existing access points along Highway 126 would be consolidated, by gradual implementation of an access management strategy.

3. **Culvert Replacement.** The replacement of the Munsel Creek culvert should be designed to meet fish passage standards and to allow the Estuary Trail to pass under Highway 126 to connect to the Munsel Creek Bike Path.

4. **Improvements to the Highway 126/North Fork Road Intersection**. The development of the proposed casino on Native American lands adjacent to this intersection will require a traffic study funded by casino developers to identify needed improvements. Since this area is part of the East Gateway, the City will need to be involved in the negotiations on the eventual configuration of this intersection, and associated Highway 126 improvements.

Other Local Street Improvements

1. **Rhododendron Drive Improvements.** As development and redevelopment occurs along Rhododendron, the street should be improved to full urban standards, including curbs, sidewalks and bike lanes. Left turn lanes should be added at Greentrees, 35th, 9th Streets and eventually at Heceta Beach Road, with corresponding left turn lanes installed on 35th and 9th Streets and Heceta Beach Road. Since Rhododendron Drive is also a scenic drive in that it abuts the river, and is bordered by mature growth shore pine and native rhododendrons, the intent is to preserve the street as a two-lane street in the same alignment, (except for the two recommended left turn lanes), maintaining as much of the existing vegetation as possible. For more specific management and design guidelines, refer to the *Rhododendron Drive Integrated Transportation Plan* (RDITP), June 2007. The RDITP shall serve as the definitive document for improvements related to Rhododendron Drive.

2. **Pavement Management Plan**. This program, begun in 2000, will provide an annual plan for pavement maintenance and improvements, based on a system wide analysis of pavement conditions.

3. **Storm Drainage Improvements.** Storm drainage improvements are necessary as determined by the City's Stormwater Management Plan.

Signalization Improvements

1. **30th Street/Highway 101 Traffic Signal.** The intersection of 30th Street and Highway 101 has been identified by staff, consultants, and the City of Florence Street Improvement Task Force as an appropriate location for a traffic signal. 30th Street in 2006 met one of the necessary warrants for a traffic signal.

2. **Heceta Beach Road/Highway 101 Traffic Signal.** A traffic signal will more likely than not be required at the intersection of Heceta Beach Road and Highway 101 with the completion of the Spruce Street North Extension.

3. **Munsel Lake Road/Highway 101 Traffic Signal.** Continued growth along the Munsel Lake Road corridor will generate the need for a traffic signal at the intersection of Munsel Lake Road and Highway 101 during the next 5 - 10 years.

4. **46th Street/Highway 101 Traffic Signal.** It is possible that traffic congestion in the area of this intersection may generate a need for a traffic signal at some future date.

5. **Second Street/Highway 101 Traffic Signal.** The Downtown Green Refinement Plan recommends installation of this traffic signal as soon as possible.

6. **Highway 126/North Fork Road.** The potential for a traffic signal in relation to the proposed casino should be included in the traffic study identifying needed highway/intersection improvements.

7. **Traffic signal timing** within the Florence Downtown at Highway 101 and Second Street, Rhododendron Drive and Highway 126 should be synchronized to allow smooth flow of traffic thus increasing capacity.

Bicycle Plan Improvements

1. Heceta Beach Road Bikelane Modifications
2. Rhododendron Drive Bikelane Modifications (See the *Rhododendron Drive integrated Transportation Plan*, June 2007)
3. Munsel Lake Road-North Fork Road Bikelane Modifications
4. Extension of Munsel Creek Bikepath
5. 12th Street Bike Path connecting Kingwood and Rhododendron Drive

Pedestrian Improvements

1. **Highway 101 Pedestrian Crossing Pilot Project.** See description under Downtown Implementation Plan.

2. **Other Highway 101/126 Pedestrian Crossings.** Present and future crosswalks located at non-signalized intersections are hazardous to pedestrians on arterial highways. The traveling public does not expect crosswalks in these locations.

3. **Siuslaw River Estuary Trail.** This trail is proposed as part of the Downtown Implementation Plan, and is also a priority of the Port of Siuslaw. The proposed trail will connect the Port's Boardwalk to Highway 126, and eventually, when the Munsel Creek culvert is replaced, through a bike path set into the culvert to connect to the Munsel Creek Bike Path.

4. **Public Access to Public Lands north of Sandpines and west of Fred Meyer.** The extension of Oak Street north from 37th Street, together with accompanying bike lanes and sidewalks, will provide public access to these public lands which contain dunal formations and extensive wetland resources.

5. **Pedestrian/Sidewalk Master Plan.** The City will develop a Sidewalk/Pedestrian Master Plan, together with policies and prioritization for identified pedestrian/sidewalk improvements.

Airport Plan Improvements

The Florence Municipal Airport is one of five transportation gateways into the community. This gateway serves as a formal City entrance to welcome commercial and general aviation air traffic. Recommended improvements are:

1. Florence Airport Gateway
2. Extend Runway 15-33 a distance of 430 feet
3. Extend the parallel taxiway
4. Relocate/elevate the airport beacon
5. Expand the Main Apron
6. Establish a non-precision GPS approach
7. Construct a taxiway extension from the north end of the parallel taxiway
8. Install taxiway reflective markers
9. Provide fencing for the airport perimeter
10. Installation of an AWOS system
11. City should work with private providers to improve connections to the Eugene Airport.
12. Purchase of private lands abutting the airport to provide additional buffer to airport activities.

Port of Siuslaw Water-Related Transportation Improvements

The Siuslaw River/Port of Siuslaw Gateway serves as a formal City entrance to welcome commercial, recreational and general waterway navigation traffic. The improvements listed below, together with recent improvements, will provide improved facilities and enhance the Gateway function of the Port.

1. Port of Siuslaw Gateway
2. Maintain Federal Navigation Channel
3. Rehabilitate the Old Town Wharf
4. Dredge West and East Moorage Basins

5. Rehabilitate East Moorage Basin
6. Establish a Downriver Boat Launch Facility
7. Install infrastructure at Port Industrial Park

Transit Plan

LCOG has recently completed a *Community Transit Plan* for the City of Florence. The Transit Plan includes short-term and long-term Goals as well as organizational strategies and is included in Appendix 12 as the adopted City Transit Plan. The overall goals of the Transit Plan are:

1. Provide transit service that meets the widest possible range of community needs within funding constraints.
2. Maximize service efficiency while maintaining standards for safety and reliability.
3. Provide and manage local transit services in an efficient and cost effective way.
4. Maintain a high level of customer service and good rider and community relations.
5. Plan for short term and long term needs.

Rail Plan

1. **Improvement to the Highway 126 rail overpass at Cushman.** The City should work with ODOT, railroads and other involved parties to ensure that a study be performed in the next two years of alternatives available for correcting the problems at the overpass.

2. **Connections to passenger rail service.** The City should work with private providers to improve connections to passenger rail service in Eugene.

Pipeline Plan

The City of Florence, together with other coastal communities and counties to our south, is exploring the possible extension of a natural gas pipeline north along the coast to the Florence area. Recommended needs relative to this possibility are:

1. **Feasibility Study.** Provision of transportation/economic development funds for an analysis of the feasibility of extension of natural gas service to the Florence area, including a cost analysis, and identification of potential funding resources for engineering and construction.

Telecommunications Plan

1. The City should continue to work for improvement of rural telecommunications services in the Florence area.

    - The City should maintain membership in Fiber South Consortium or a successor in order to have a voice in the provision of telecommunications services to the Florence area.

- The City should continue to support the efforts of BPA and Central Lincoln PUD or their successors, as approved by Fiber South Consortium or its successor, to provide high speed, broadband fiber optic cable to the Florence area.
- The City should continue to support improved basic telephone service to the Florence area.

Functional Roadway Classifications

The purpose of classifying roads within the study area is to provide a balanced transportation system that facilitates mobility for all modes at acceptable levels of service while providing sufficient access to adjacent land uses and ensuring neighborhood livability.

- Arterials
- Collectors
- Local Streets
- Scenic Drives

Roadway Design Standards

Roadway design standards are based on the functional and operational characteristics of streets and are necessary to ensure that the system of streets, as it develops, will be able to safely and efficiently serve the traveling public.

- Typical Roadway Sections
- Alignment and Operational Characteristics
- Access Management

Section 1: Introduction

Overview

The Florence Transportation System Plan (TSP) is the long-range policy document that guides transportation planning within Florence's urban growth boundary (UGB) for the next 20 years. The plan will be updated during periodic review or when needed. The goals and policies are part of Florence's Comprehensive Plan. Ordinance amendments that implement the plan will also be adopted. The City will base its transportation system capital improvements on this plan. Refinements may supplement the plan with more detail and specific information on issues, policies, and projects. These refinement plans must be consistent with the Transportation System Plan.

Plan Context

The City of Florence has considerable growth potential within the City limits and UGB. Long-range comprehensive planning is a tool for looking ahead into the future and shaping growth of an area. Transportation planning is one facet of Florence's long-range plan. Local comprehensive

plans must be consistent with the statewide planning goals. Oregon's Statewide Planning Goal 12: Transportation is "To provide and encourage a safe, convenient and economic transportation system." Goal 12 goes on to state, "A transportation plan shall:

1. consider all modes of transportation including mass transit, air, water, pipeline, rail, highway, bicycle and pedestrian,
2. be based upon an inventory of local, regional and state transportation needs,
3. consider the differences in social consequences that would result from utilizing differing combinations of transportation modes,
4. avoid principal reliance upon any one mode of transportation,
5. minimize adverse social, economic and environmental impacts and costs,
6. conserve energy,
7. meet the needs of the transportation disadvantaged by improving transportation services,
8. facilitate the flow of goods and services so as to strengthen the local and regional economy; and
9. conform with local and regional comprehensive land use plans."

This transportation plan is intended to meet all of the requirements of the state's Transportation Planning Rule, Oregon's Administrative Rule 660 Division 12 that implements Goal 12.

Planning Assumptions

At the time the Comprehensive Plan was adopted, the transportation plan assumed the same plan designations as Florence's Comprehensive Plan when forecasting future land development. The Comprehensive Plan population and housing projections were updated in 2004 with the adoption of the Residential Buildable Lands Analyses (see Appendix 2). The TSP has not been updated to reflect these new data and analyses; it will be updated at the time of the next periodic review of the Comprehensive Plan or update of the TSP.

The transportation plan includes lands within the present City limits and lands within the UGB outside City limits. The base year for the population data is 1998 when there were an estimated 6,715 people in Florence. The base year for the employment data is 1996 when there were 3,030 jobs in Florence. The horizon year, or planning year is 2020. The projected population for 2020 is 15,400 people and the projected employment is 6,538 jobs. See Appendix 2 for more detail on the population and employment projections and allocation of future housing units and jobs to vacant land.

There were 4,638 housing units within the UGB in 1998. The projected number of housing units for 2020 is 7,908, an additional 3,270 units. The 2000 Census shows 4,174 housing units in the City.

Planning Process

The TSP is based on public involvement and citizen review to ensure that the goals of the TSP reflect the values of the community.

To assist the City, county, and state jurisdictions in meeting the requirements of the TPR, the City of Florence, Lane County, and ODOT initiated the original transportation study in January 1995. At that time a technical advisory committee was formed to guide the study process. The following entities were represented on the committee: the City of Florence, the Lane Council of Governments (LCOG), ODOT, the Oregon Department of Land Conservation and Development (DLCD), and Lane County. Four advisory committee meetings were held with these representatives to review technical memoranda prepared throughout the study, to elicit any additional concerns, and to incorporate the agencies' input into the study. A public meeting was also held to obtain input on proposed land use and transportation alternatives.

As one of its first tasks, the advisory committee adopted a specific set of goals and objectives for this study, which are listed in Section 2. Also included are the goals for the segment of Highway 101 serving Florence as they are identified in the Coast Highway Corridor Study. The overall TPR goals that guided this study, as well as county and City development plans and the Oregon Highway Plan also were used in developing the study goals and criteria. Staff conducted a system-wide inventory that provided a basis for determining transportation system needs. At some time following the completion of this study, ODOT determined that the study was not complete, and provided additional funds to LCOG to bring the TSP into fuller compliance with the revised transportation planning rule.

In 1999, LCOG prepared a revised TSP, including modeling of proposed land uses and trips generated. The draft was forwarded to the City, where it has been further revised to include the recommendations of the PC/CAC made since the draft was prepared by LCOG.

Plan Monitoring and Performance

The TSP is the guiding framework for transportation policies, actions, and investments in Florence for the next 20 years. Transportation projects, improvements, and refinement studies must be consistent with the goals, policies, and projects listed in the plan and consistent with state laws. To develop this plan, assumptions on growth and development, population, employment, and travel behavior patterns were made. These assumptions may need to be adjusted and the plan amended over time. Because conditions change over time, some flexibility has been built into the plan. The adopted plan is part of the Comprehensive Plan for Florence which will be reviewed on a routine basis through the periodic review process. It is during this time that the plan assumptions, policies, and implementation actions will be re-evaluated.

Plan Organization

The remaining sections of this chapter are summarized below.

Section 2: Goals and Policies

The transportation goals are listed. These broad statements of philosophy were developed by the Planning Commission and the Citizen Advisory Committee and guided the development of the TSP. The policies provide a specific course of action that will move the community toward the attainment of its goals.

Section 3: Modal Maps

These maps graphically portray the street plan, bicycle plan, pedestrian plan, and public transportation plan.

Section 4: Implementation Actions

There are four types of implementation actions that are described in this section. The capital improvements section lists projects and improvements. Each project and improvement is accompanied with a brief project description. The ordinance revisions section describes changes that will need to be made in the FlorenceCity Code Titles 10 and 11 to implement the adopted policies. The third section includes education strategies. The last section consists of areas of further study.

Section 5: Financing Strategies

Existing and potential funding sources are described that would pay for the capital improvements, educational efforts, and further studies that were identified in the previous section.

Appendices

Included in Appendices Section:

Appendix 12-A: Existing Conditions

This appendix describes all components of the transportation system. It includes a database and maps for the existing street, sidewalk, bicycle system, and transit system. Also included is an accident summary, a description of existing land uses, and natural and cultural features.

Appendix 12-B: Population and Employment Projections

Data on current population and employment for Florence is presented. The appendix also includes the methodology for the population and employment projections, and explains how those projections have been allocated to the various Transportation Analysis Zones. The Comprehensive Plan population projections were updated in 2004 with the adoption of the Residential Buildable Lands Analysis (see Appendix 2 of the Comprehensive Plan). The TSP has not been updated to reflect these new data. It will be updated at the time of the next periodic review of the Comprehensive Plan or update of the TSP.

Appendix 12-C: Needs Analysis

This needs analysis includes information based on the existing conditions, traffic projections based on the population and employment projections, and issues raised by the Planning Commission, Citizen Advisory Committee, City staff, and the general public.

Appendix 12-D: Policy Framework

This appendix describes what other government policies affect local transportation planning.

Appendix 12-E: Glossary

The glossary defines transportation-related words that may be used in this document or in discussions about the TSP.

Section 2: Goals and Policies

Goals are broad statements of philosophy that describe the hopes of the people of the community for the future of the community. Each goal is developed around a topic area. A goal may never be completely attainable, but is used as a point toward which to strive. The goals guided the development of the transportation system plan and should be used to monitor future transportation strategies and improvements. Policies are statements that provide a specific course of action moving the community toward the attainment of its goals. Policies have the force of law. Each new capital improvement project, land use application, or implementation measure must be consistent with the policies. The adopted goals and policies are part of Chapter 12 of Florence's Comprehensive Plan.

Goal	Policies
To create a safe transportation system.	1. City street standards shall promote street design which provides for adequate lane widths, curvature and grades to create a street network which provides safe transportation at all seasons of the year. 2. Vision clearance provisions shall be enforced. 3. The City shall work with ODOT to improve safety of existing crosswalks on state highways, and to cooperate in the location of additional crosswalks in safe locations.
To operate transportation facilities at a level of service that is cost-effective and appropriate for the area served.	1. The City shall develop systematic annual maintenance plans for streets, bike, pedestrian and air facilities. 2. The City shall continue to pursue grant and loan funds to supplement local transportation facility funds. 3. The City shall continue to require new development to pay its share of costs of development of, or improvements to, transportation facilities which will serve the proposed development.
To develop systematic annual maintenance plans for streets, bike, pedestrian and air facilities.	1. The City shall continue to pursue grant and loan funds to supplement local transportation facility funds. 2. The City shall continue to require new development to pay its share of costs of development of, or improvements to, transportation facilities which will serve the proposed

Goal	Policies
	development.
To create a transportation network to support existing and proposed land uses.	1. The City shall protect the function of existing and planned transportation systems as identified in this Plan through application of appropriate land use and access management techniques.
To meet the needs of land development while protecting public safety, transportation operations and mobility of all transportation modes.	1. At the time of land development or land division, the City shall require right-of-way or easements consistent with the adopted TSP in order to maintain adequate street widths, bikeways and walkways and to accommodate transit facilities. 2. New development shall gain access primarily from local streets. Driveway access onto arterials and collectors shall be evaluated based on access options, street classifications and the effects of new access on the function, operation and safety of surrounding streets and intersections. Land development shall not encroach within setbacks required for future expansion of transportation facilities.
To provide a balanced transportation system that provides options for meeting the travel needs of all modes of transportation.	1. The City shall consider the potential to establish or maintain bikeways and/or walkways prior to vacating any public easement or right-of-way. 2. Convenient access for motor vehicles, transit, bicycles and pedestrians shall be provided to major activity centers, including public buildings and schools, shopping areas, parks and places of employment. 3. Streets, bikeways and walkways shall be designed to meet the needs of pedestrians and cyclists to promote safe and convenient bicycle and pedestrian circulation within the community. To promote bicycling and walking, all new collector and arterial streets should have bicycle lanes, and all new streets, except short, very low volume local streets, should have sidewalks.
To enhance the quality of life for citizens and visitors by providing adequate access to residences, employers, services, social and recreational opportunities.	1. Streets shall be designed to efficiently and safely accommodate emergency service vehicles. 2. The North, South and East Gateways shall be pursued as soon as funding can be obtained. 3. City policies shall discourage the placement of streets serving primarily commercial or industrial development from negatively impacting adjoining residential development. 4. Encourage placement of streets that minimizes negative impacts in residential development.
To minimize transportation-related energy consumption by using energy efficient	1. The City shall encourage demand management programs such as park-and-ride facilities and vanpools to reduce single occupancy vehicle trips, especially to and from Eugene. 2. The City shall promote the use of telecommunications, transit

Goal	Policies
modes of transportation for movement of goods, services and people where possible.	and rail facilities as energy efficient alternatives to vehicular transport.
To provide economic health and diversity through the efficient and effective movement of goods, services and people.	1. The City shall strongly promote a feasibility study to identify solutions to the deficient rail overpass in Cushman, and support implementation of the chosen alternative. 2. The City shall continue to be advocates for the provision of effective telecommunications facilities in Florence, including provision of quality basic telephone service. 3. The City shall continue to pursue the cooperative effort of coastal cities and counties to bring a natural gas pipeline north on the coast to Florence and other communities.
To minimize the impacts on natural and cultural resources when constructing transportation facilities and should encourage non-polluting transportation alternatives.	1. Design and construction of transportation facilities shall be responsive to topography and should minimize impacts on natural resources such as streams, wetlands and wildlife corridors. 2. Stormwater shall be required to have appropriate pre-treatment prior to discharge. 3. The City shall amend the City Code as appropriate to include processes for identification, inventory, classification, and conflict resolution on sites which contain cultural resources.
To choose transportation facilities which balance the requirements of other transportation goals with the need to minimize air, water and noise pollution.	1. As the use of the airport increases, and night operations become a reality, the City shall work with neighboring residential uses to resolve issues of noise and vibration. 2. The City shall continue to discourage new residential uses, schools, hospitals, and similar facilities in the approach zones of the airport.
To provide for adequate parking facilities in conjunction with other transportation facilities, as appropriate.	1. On-site parking for motor vehicles shall continue to be provided, unless another adopted City plan expressly provides otherwise. 2. The policies and direction of Downtown Implementation Plan regarding the provision of on-street parking shall be implemented. 3. Appropriate bicycle parking facilities shall be provided at places of employment, at business and at public buildings.
To collaborate and coordinate with state, county and other agencies during long range planning efforts, development review, design and construction of transportation projects.	1. The City shall notify ODOT of all project proposals and development applications adjacent to state highways. The City should notify Lane County of all project proposals and development applications adjacent to county roads. 2. The City shall notify ODOT and Lane County of all major development proposals which will generate more than 50 trips during an average peak hour or which require a traffic study.

Goal	Policies
	3. The City shall notify ODOT, DLCD and Lane County of any proposed changes or amendments to this Transportation System Plan.

Section 3: Modal Plans

This section provides a plan for each of the transportation modes. Where applicable, the plan includes a map that graphically describes the location of existing and proposed transportation facilities. It also includes a map showing capital improvement projects. They are to be used in conjunction with the policies of Section Two and implementation actions of Section Four.

To address transportation deficiencies, several transportation system improvements are recommended within the City of Florence, including:

1. Highway/Street Improvements
   a. Signalization Improvements
   b. Roadway Design Standards
   c. Circulation Plan and Functional Classifications
2. Bikeway Plan
3. Pedestrian Plan
4. Air Plan
5. Rail Plan
6. Water Transportation Plan
7. Transit Plan
8. Pipeline Plan
9. Telecommunications Plans

Transportation System Improvements

Transportation system improvements are needed to achieve acceptable transportation networks within, and serving, the City of Florence. There is a partial street grid pattern within the City of Florence, particularly in the older sections of the community platted in the early 1900s. However, the traffic within the City is mostly focused on the loop road system created by Highway 101, Rhododendron Drive or Kingwood, and 9th Street-Highway 126. As the area to the north of the City continues to develop, it is important to provide a transportation network that will offer alternative routes for local traffic. Transportation system improvements need to accomplish acceptable levels of operation in all modes throughout the planning period. The Florence Transportation System Plan is organized by geographic planning area, rather than by modal category, in order to provide an integrated transportation system within each area.

Detailed Project Descriptions

Florence Downtown Implementation Plan, adopted September 20, 1999

(adopted 9/20/1999) (Map 12-A-1)

1. Highway 101/126 Enhancement Program

The Highway 101/126 Enhancement Program is focused on developing pedestrian amenities and parking in the downtown area located between the Siuslaw River and the intersection of Highways 101 and 126. This program would include the construction of curb extensions, street lighting, planters, directional signing, on-street parking and traffic control devices, and would identify interior parking areas strategically placed within walking distance of downtown businesses to meet parking needs during the busier parts of the year. Initiation to begin with construction of pilot blocks on Highway 101 between 6th and 8th Streets, and incorporating safety improvements relative to existing pedestrian crossings. Investigation of designation as an Special Transportation Area (STA)[4] for the Highway 101/126 corridor within the Downtown area is important for the success of the Downtown Plan and should be pursued in cooperation with ODOT.

2. East Gateway (Highway 126) (Map 12-A-2)

In accordance with the *Oregon Coast Highway Corridor Master Plan*, a gateway (monument type) entrance should be developed at Highway 126 near the east City limits. This Gateway begins naturally with the Rhododendron Gardens at Gallagher Park and the vegetative corridor formed by the crossing of Munsel Creek. This gateway would serve as a formal City entrance from the east to welcome travelers and to provide drivers with a definitive indication of changing travel characteristics (e.g., speed, cross traffic, pedestrians, congestion) as they enter the City. The Gateway will also calm traffic to reduce vehicle speeds.

3. Siuslaw River Bridge/Highway 101 (Map 12-A-3)

The Siuslaw River Bridge is a very important feature of the Florence Downtown Plan. This historic bridge, designed by Conde B. McCullough, has been admired for decades by locals and visitors. More than a critical transportation link, the architecture and setting in the beautiful Siuslaw River estuary make this bridge unique. The Bridge is listed on the National Register of Historic Places. The Pacific Coast Scenic Byway Plan highlighted four projects to be forwarded to the CPACT Subcommittee from the Yachats/North Dunes Regional Planning Group. The first priority was the Siuslaw River Bridge Walk. This project includes a pedestrian loop across and under the bridge, a viewpoint for the bridge, Old Town and the estuary, interpretation, and parking. The Scenic Byway Plan sets forth several Management Goals and Strategies for the Bridge. Project. These are:

[4] STA - Designated compact district located on a state highway within an urban growth boundary in which the need for appropriate local access outweighs the considerations of highway mobility exception designated Freight Highways where accessibility and mobility needs are balanced.

- Enhancement
- Rehabilitate/improve facilities
  - Preserve the bridge by implementing the cathodic protection system
  - light the bridge aesthetically and for safety
- Access
  - Provide parking for pedestrian access to the bridge
  - Develop a pedestrian loop across the bridge
  - Provide opportunities to view the bridge
  - Improve safety at south entrance to the bridge
- Interpretation
  - Interpret bridge and area history
  - Provide interpretation on bridge history, history of Florence area and natural and human history of the Siuslaw estuary at viewpoints adjacent to the bridge and at bridge/estuary viewpoints in Old Town.
- Awareness
  - Alert drivers to safety hazard at bridge entrance on south side. Provide sign south of curve leading to bridge to slow traffic and alert drivers to safety hazard at bridge entrance on south side
  - Sign interpretation and viewing opportunities. Provide signage for bridge walk at parking areas and at entrances to bridge. Provide signage on road regarding interpretation and bridge walk
  - Provide information on historic bridge at appropriate locations and in tourist documents. Develop marketing information for historic bridge
- Stewardship
  - Manage traffic to preserve the historic Siuslaw River Bridge. The bridge was constructed in 1936 and is on the National Register of Historic Places.
  - City supports retention of the Bridge, not replacement
  - City requests that the Bridge receive cathodic protection before serious deterioration has occurred
  - At such times as additional capacity is needed on the Bridge, the City recommends a parallel span located on the wet side of the existing bridge to maintain the scenic integrity of the historic bridge.

The priorities of the *Florence Downtown Implementation Plan* related to the bridge include:

- location of a parking lot under the Siuslaw River Bridge to be combined with a Scenic Byway Bridge Interpretative Site,
- installation of irrigation and street trees in the Siuslaw Bridge Gateway along Highway 101.

The Siuslaw River Bridge Gateway would be located between the north end of the Bridge and the proposed Downtown Green to be located at Highway 101 and Maple/2nd Streets.

The Downtown Green project includes realignment of 2nd Street west of Highway 101 to form right angle intersections with the realigned 2nd Street intersections on the east side of Highway 101.

Siuslaw River Bridge Gateway/South Gateway includes:

- Signage welcoming the traveling public to Florence Mainstreet
- Installation of street trees and historic street lighting beginning as close to the north side of the bridge as possible
- Limiting 1st Street to right-out only
- Working with ODOT to insure that rewiring of the Bridge includes provision for architectural/holiday lighting
- Planning for long-term preservation of the Bridge, with installation of a cathodic protection system
- Planning for long term preservation of the bridge by planning for a parallel bridge to carry additional lanes of traffic as demand warrants.

Scenic Byway Bridge Interpretative Site and associated parking.

- Relies on the direction of the *Pacific Coast Byway Plan* for the detailed implementation strategy.

4. Highway 126/Highway 101 Intersection

The Highway 126/Highway 101 intersection is the location of several existing safety problems related to the large intersection area, proximity of private driveway and public street access points, and high number of vehicle turning movements. This intersection is currently scheduled for construction in 2001. The City strongly supports implementation of the safety project during 2001/2002.

5. Quince Street Improvements

a. Highway 101/Quince Street Intersection

- Realign the intersection of Highway 101 and Quince Street to provide two-way travel on Quince, thus providing an alternate route into the Old Town area. Preliminary engineering should include investigation of all viable options, including placement of a traffic signal at Quince and Highway 126 when signal warrants are met.

b. Improve Quince Street as necessary to provide an alternate route to and from the Old Town and incidentally a secondary connection between Highways 101 and 126

- Retain the Old Town character of Quince Street, including sidewalks, plantings and historic lighting.

- Retain/provide on-street parking
- Provide appropriate signage to make Quince the through street
- Provide left turn pockets where appropriate and possible, given available funding sources
- Integrate Quince Street plans with the plans for the safety improvements in the area of the Highway 101/126 intersection, particularly with respect to left and right turn lanes
- Investigate location of a traffic signal at Highway 126 and Quince Street at such time as demand warrants such location
- Apply for Local Street Networks funds for preliminary engineering and construction of improvements

6. Highway 101 Pedestrian Crossing Pilot Program

The pedestrian crossing/local street improvement program was developed to address concerns about the safety of pedestrians crossing Highways 101 and 126, and to provide a better access control and circulation system with the local street system, consistent with the Downtown Plan. The pilot project is proposed to feature wider sidewalks with bulb-outs, crosswalks with demand activated light bars, and marked on-street parking on Highway 101. These blocks, located between 6th and 8th Streets, have been chosen because they have existing, heavily used crosswalks connecting low and moderate income housing complexes, the post office and a financial institution on the west side of Highway 101 with major grocery stores and other daily shopping destinations on the east side of the highway. A center median is not proposed.

Highway 101 is a state highway under the jurisdiction of the Oregon Department of Transportation (ODOT). According to ODOT, the existing crosswalks are included in the Downtown Implementation Plan (September 1999) which was funded by a TGM grant in consultation with ODOT staff. The Access Management Plan (October 2002) also shows Highway 101 crosswalks with pedestrian refuges at 6th and 8th Streets, and a crosswalk at 7th Street, all within the Pilot Blocks. FHWA has just included lighted crosswalk systems in the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). The City will need to work closely with ODOT to implement the conceptual crosswalk plans.

In the Downtown Implementation Plan, access control is proposed by the use of on-street parking, and by location of strategically placed parking courtyards in the interior of blocks paralleling Highway 101 and other major local streets in the Downtown. These parking courtyards will access to side streets, which will then intersect with Highway 101. As properties redevelop, together with interior parking courtyards, individual access points to Highway 101 will be eliminated consistent with the access Management Plan for Highway 101 in Downtown Florence, October 2002. As the need for a continuous center turn lane decreases, the remaining center turn lane can and should be landscaped to create more of a boulevard appearance in the Downtown. Because of the need for local businesses to re-evaluate their business plans to be able to compete with major outside retailers, we expect the pattern of re-development in the Downtown to occur at a faster pace than might occur under normal business conditions, therefore meeting the goals of ODOT to

maintain/increase through capacity on Highway 101 by implementation of access management plans.

7. The Downtown Green and the realignment of 2nd and Maple Streets to 90° intersections with Highway 101

The Downtown Plan's highest priority is design and construction of the Downtown Green. The Green is proposed to be located in the vicinity of the Maple Street/Highway 101 intersection between the existing City Hall and Pro Lumber. Conceptual design in the September 1999 *Downtown Implementation Plan* shows a pentagon of approximately 1-acre bounded by Maple and 2nd Streets to form 90° intersections with Highway 101. The Green is proposed to embody the Mainstreet concepts of wider sidewalks, on-street parking on Highway 101, and curb extensions with crosswalk(s) across Highway 101 to the corresponding intersections of Laurel and 2nd Streets on the west side of the highway.

A Refinement Plan for the Downtown Green and the Pilot Blocks was completed and adopted by the City Council in Summer 2001. The Refinement Plan is included by reference in Appendix 12 of the Comprehensive Plan. The 2001 Refinement Plan provides for the extension of 2nd Street to Highway 101 at a futue signalized intersection, and improvement of 2nd Street west of Highway 101 to form a four way intersection. The City has received funding from Land County for the construction of the east leg of the 2nd Street Extension. Construction is anticipated in 2003. Maple is not proposed to be realigned, but will have on-street parking. The process for determining uses on the Green was a community-wide effort since the Green is the point of entrance into the main part of the Mainstreet District, and also the point of entrance to Old Town and the Quince Street alternative transportation route between Highways 101 and 126. The purpose of the Siuslaw Bridge Gateway project is to provide the boulevard leading to the Green, or for southbound travelers, to provide a pleasant final view of the community, as well as a boulevard featuring the Bridge.

8. Access Management Plan

The September 1999 Florence Downtown Implementation Plan includes the following policies:

a. Recognize the portion of Highway 101 located between the Siuslaw River Bridge and Highway 126 as the City's retail core, and "Mainstreet" of the new downtown Florence.

b. Design streetscapes and buildings to support the pedestrian-oriented Mainstreet character by implementing transportation and land use changes.

In April, 2000, the Oregon Administrative Rules were amended to include Division 51, titled, Highway Approaches, Access Control, Spacing Standards and Medians. During this same period, a Phase I Implementation Plan for the Downtown Green and the Pilot Blocks was being developed by Parsons, Brinkerhoff under a TGM grant. Their work included an

Access Management Plan consistent with the newly adopted Division 51 standards. Because platted blocks in Florence are smaller than in many communities and do not meet the access spacing standards in the Division 51 rules, the resulting draft plan resulted in closure of all private access in this section of Highway 101. That draft plan was, of course, unacceptable the businesses located in that area, and was not adopted, The resulting discussion provided education about the new Division 51 rules, including the growing understanding that applications to ODOT for access by individual businesses would likely not meet the spacing standard, and would be denied. It was also learned that the Division 51 rules allow for a community to develop a formal Access Management Plan which provides guidance to ODOT and the local government in maintaining through traffic on a highway of statewide significance while providing reasonable access to abutting properties.

A local Access Management Plan Task Force comprised of a cross-section of abutting property owners was appointed by the City Council and worked with ODOT and local staff to develop an Access Management Plan for the section of Highway 101 located between the Siuslaw River Bridge and the intersection with Highway 126. Public meetings were held, revisions were made, and a final draft Plan was presented to the Council for adoption.

The City Council adopted the Access Management Plan on October 21, 2002 and forwarded it to ODOT for approval and for execution of an IGA for implementation. The Access Management Plan for Highway 101 in Downtown Florence, October 2002 is hereby included as Appendix 12-N of the Comprehensive Plan

North Florence Transportation Planning Area

This area includes the areas along Highway 101 with the following Plan designations: North Commercial Node, Service Industrial, Neighborhood Commercial Gateway, Heceta Beach Neighborhood Cluster, and associated residential zoning and streets and highways. These areas, taken together, provide the north gateway to Florence. The area is served by Highway 101, a major arterial state highway, intersected by Munsel Lake Road and Heceta Beach Road (local arterials), and served by the parallel local arterial streets, Oak (north of 35th Street) and Spruce (north of Munsel Lake Road).

1. Highway 101

a. North Commercial Node (NCN)

Highway 101 will need to be expanded within the NCN during this planning period in order to create capacity for the intended larger retail businesses, and associated service, food and lodging facilities. However, in order to maintain the North Florence Gateway concept, expansion shall be limited to a cross-section of two northbound and two southbound travel lanes, a center lane, bike lanes and a single deceleration/right turn lane on each side of the highway. Volume to capacity (v/c) ratios shall be maintained as required by OAR 660-012, the transportation Planning Rule.

LCOG performed a traffic analysis of this highway configuration using traffic volumes typical of large retail establishments and their companion uses, and determined that the uses, as proposed, would not exceed the v/c ratios in the Rule. Traffic volumes will need to be monitored to determine whether the v/c ration requirements continue to be met.

Any reductions in development levels on parcels in the NCN necessary to maintain the v/c ratios shall be apportioned to those properties on a pro rata basis. Parcels benefitting from transportation improvements in the NCN will be required, as part of development approvals, to sign a non-remonstrance agreement for Highway 101 improvements and to contribute to the cost of those improvements. Construction of sidewalks, curbs and stormwater facilities shall be required as part of development approvals of abutting properties. Unused portions of the center lane may be planted to enhance the Gateway character of the NCN.

b. Service Industrial

This area is located immediately north of the NCN with an extension to the east, and is served by Highway 101 and the parallel local streets, Oak and Spruce Streets. The uses contemplated for the Service Industrial designation require large lots. Partitioning or subdivision of lots is discouraged, and combination of smaller lots into larger lots which better meet the puposes fo the Service Industrial designation is strongly encouraged.

Primary access to this district shall be from the parallel local street system, with access to Highway 101 at signalized intersections at Munsel Lake Road and Heceta Beach Road. Until the parallel street system is constructed, access to Highway 101 shall be via combined driveways subject to ODOT approval under the ODOT Access Management Rules. Based on traffic modeling performed by LCOG, it is not anticipated that the existing improved cross-section of Highway 101 will not need to be expanded during this planning period. The modeling was based in part on certain assumptions about traffic volumes. Traffic volumes will need to be monitored to determine whether the LCOG model continues to be valid. Non-remonstrance agreements for future improvements on Highway 101 will be required at the time of development approvals. The TSP supports the addition of bike lanes, sidewalks, curbs and storm water improvements, and street lighting on Highway 101.

c. Heceta Beach Neighborhood Cluster

This area is located immediately north of the area designated Service Industrial, and surrounds the intersection of Heceta Beach Road and Highway 101. This area is intended for a mix of high and medium density residential development service by a Neighborhood Commercial Center, portions of which are existing. Access shall be primarily to Heceta Beach Road, and to the extension of Spruce Street. Highway 101 is not anticipated to require expansion of the existing improved cross-section

during the planning period, with the exception of the addition of the bike lanes, sidewalks, curbs and stormwater facilities, and street lighting. Benefitting properties shall participate in the costs of these improvements.

Traffic volumes will need to be monitored to determine whether this projection continues to be valid. Non-remonstrance agreements for future improvements on Highway 101 will be required at the time of development approvals.

Pedestrian crossings shall be installed on all legs of the intersection of Heceta Beach Road and Highway 101 either at the time of the extension of Heceta Beach Road to the east of Highway 101, or the installation of the traffic signal at the Heceta Beach Road/Highway 101 intersection. If significant residential development precedes the installation of the traffic signal, developers of residential projects may be required to contribute to the cost of a lighted crosswalk system, and/or the installation of the traffic signal. Traffic signals and pedestrian crossings require approval by the State Traffic Engineer.

2. Oak Street North Extension (37th Street to Heceta Beach Road)

Oak Street is proposed to be extended from its current terminus at 37th Street to the west extension of Munsel Lake Road within the North Commercial Zoning District, and then further to the north abutting the proposed Limited Industrial/Commercial District to Heceta Beach Road. The City applied for Local Street Networks funds during the 2000 funding cycle, and received funding for the construction of Oak Street between 37th and 46th Streets. The City will continue to seek funding for the remaining phases. This parallel local street will serve traffic generated by abutting residential developments, as well as the commercial and industrial traffic generated from those zones. This link will minimize short trips, and the number of turning movements at many two-way stop controlled intersections on Highway 101.

3. North Highway 101 Gateway

Similar to the eastern and southern gateways, this gateway would serve as a formal City entrance to welcome travelers and to provide drivers with a definitive indication of changing travel characteristics (e.g., speed, cross traffic, pedestrians, congestion) as they enter the City. The Gateway will also serve to calm traffic to reduce vehicle speeds. Figure 12B-2 provides an illustration of the proposed northern Highway 101 Gateway design concept.

The North Gateway is included in the larger Heceta Beach Neighborhood Cluster, which includes a Neighborhood Commercial area in the northwest and southwest quadrants of the intersection of Heceta Beach Road and Highway 101 surrounded by higher density residential use. Primary access is proposed via Spruce and Oak Streets and Heceta Beach Road.

4. Spruce Street North Extension (approximately 46th Street to Heceta Beach Road)

The construction of Spruce Street between 46th Street and Heceta Beach Road would augment the parallel, north-south collector system to serve the local circulation needs of commercial, limited industrial and residential uses, and to decrease local traffic demands on Highway 101. The section between 46th Street and Munsel Lake Road need not be a full urban section street due to the constraints of abutting residential development and the size of the commercial parcel to the west. However, construction of a street link between the signalized intersections at 46th Street and at Munsel Lake Road precludes the need for direct access to Highway 101 by commercial development on the abutting parcel. Construction should occur as part of abutting development.

5. Heceta Beach Road Extension (Highway 101 to Spruce Street)

With the extension of Spruce Street from Munsel Lake Road to the vicinity of Heceta Beach Road, the Heceta Beach Road/Highway 101 intersection should be modified to a four-leg intersection and Heceta Beach Road extended to Spruce Street. This extension of Heceta Beach Road will allow local traffic to travel north-south along Spruce Street to access the northeast part of Florence. Additionally, this improvement will enhance access to Spruce Street and increase its use as a parallel north-south route, which will reduce the demand on Highway 101. A traffic signal will more likely than not be required at the intersection of Heceta Beach Road and Highway 101 with the completion of the Spruce Street North Extension. The signal will need to meet signal warrants prior to installation. The alignment of this extension should avoid existing residential development east of Highway 101.

6. Munsel Lake Road/Highway 101 Traffic Signal

Continued growth along the Munsel Lake Road corridor will more likely than not generate the need for a traffic signal at the intersection of Munsel Lake Road and Highway 101 during the next 5-10 years. Signal warrants will need to be met prior to installation. Traffic signals require approval by the State Traffic Engineers.

7. Munsel Lake Road Extension, Highway 101 west to Oak Street

The extension of Munsel Lake Road west of Highway 101 to Oak Street will provide a necessary link in the Oak/Spruce/Highway 101 couplet, and will allow access at a signalized intersection for traffic entering the highway from the parallel local streets.

8. Munsel Lake Road

Munsel Lake Road is presently (2001) a County Road. Within the Planning Period, it is anticipated that the jurisdiction will transfer to the City. Munsel Lake Road is classified as both a minor arterial and a scenic road. As abutting development occurs, the street will be improved to urban standards including curbs, sidewalks and bike lanes. However, since it is also a scenic road, street standards may be modified as necessary tomaintina scenic

values. The proposed location of a casino near the intersection of North Fork Road and Highway 126 may impact Munsel Lake Road, since that street provides a link from Highway 101 to the casino site.

Pacific View Business Park

Ninth Street, 27th Street and 35th Street will likely be the primary access points for the Airport Industrial Park and the Pacific View Business Park (formerly Kingwood Industrial/Business Park). Ninth Street is the west extension of Highway 126 transporting materials and products to and from the I-5 Corridor. 35th Street is the northern access point to Kingwood Drive, and will likely be an employee and client access route. It is less well suited for truck traffic because of its configuration, and because it traverses residential neighborhoods. Truck traffic heading south on Highway 101 will either use the signalized intersection at 35th Street, or the intersection at 30th Street to access Kingwood. Truck traffic heading north on Highway 101 will more likely than not access Kingwood Street via the signalized intersection at 9th Street.

1. **The two blocks of 27th Street between Highway 101 and Oak Street** will need to be improved to the standards of the more recent constructed section.

2. **Ninth Street/Kingwood Street**

   Kingwood Street north of 15th Street was constructed to full urban standards as part of the construction of the Pacific View (Kingwood) Business Park. The section of Kingwood between 9th and 15th Streets is not fully improved. A study needs to be performed to determine the optimal access routes for the business and industrial parks, and to identify any needed street improvements.

3. **Access points** through residential developments such as 20th Street, shall continue to be discouraged. However, a direct access to Kingwood from the County shop site is supported.

Highway 101 - Other Improvements

Highway 101 between its intersection with Highway 126 and with 46th Street serves both as a highway of statewide and national significance, and as a local street. It is bordered for that entire length with either the Commercial Zoning District or the Highway Zoning District. Businesses of many types abut, and access directly to the highway. One signalized intersection exists at 21st Street, serving the elementary school, and a shopping center, and a second light was installed at 35th Street in 2000. Unofficial crosswalks exist at unsignalized intersections at 15th and 30th Streets. The 30th Street crosswalk serves the high school. It was the site of a vehicle/pedestrian accident resulting in the death of a student pedestrian in 2001.

Highway 101 is a 5-lane cross-section with sidewalks, curbs and gutters between its intersection with Hgiwahy 126 and approximately 42nd Street where it narrows to a 3-lane rural cross-section with shoulders and no sidewalks. The 3-lane section is a rural section with shoulders and no sidewalks. This section of the highway between 42nd Street and the north City limits includes the

North Commercial Node. Improvements to the east side of Highway 101 from 42nd Street north must be consistent with the policies in the NCN which limit future cross-section improvements to one additional northbound lane, and one right turn lane only, with accompanying bike lane, sidewalks, curb, and gutter.

Parallel local streets, Oak and Spruce, exist for much of this section of Highway 101. Spruce Street extends from Highway 126 north to approximately 33rd Street where it detours west to Redwood Street to avoid a sand dune, then returns to Spruce Street at 35th Street, extending north to approximately 45th Street. At this point, development prevents any further extension to the north as a continuous street.

Oak Street extends from 21st Street north to 37th Street, where it terminates in lands owned by the Sandpines development. Oak Street cannot be extended north from 9th Street because its intersection with 9th Street coincides with the intersection of 9th Street and Highway 126. Undeveloped Oak Street right-of-way exists beginning at 10th Street, and extending north to 15th Street. The section of ROW between 12th Street and 15th Street traverses a high dune abutted by development. 10th and 11th Streets are minor local streets, and 12th Street is not a through street. Oak Street from 15th Street to 21st Street is the location of a bicycle path which abuts Miller Park. The area is level, and is an area of older dwellings redeveloping to an area of multi-family units. 15th Street is a through street connecting Highway 101 with Kingwood Street.

The character of Highway 101 in this section is that of a major arterial highway. The highway is designed as a "highway" and not as a "street". It is designed to meet its major purpose, which is to move the through traveler through Florence at a reasonable speed, and without undue impedance from abutting uses. However, this section of Highway 101 is located between the north and south gateways to Florence, and begins just north of the "Mainstreet" section of Highway 101 in the Florence Downtown. Its character is not consistent with City policies and plans for the remainder of the highway within Florence.

Existing development patterns have developed as history and/or zoning district standards have allowed. The section of Highway 101 between the intersection of Highway 126 and about the 21st Street signal are zoned Commercial. The resulting development is generally smaller scale uses, located near the back side of the sidewalks, often with combined access points to Highway 101. Since commercial zoning extends back one block on each side of the highway, there is often a second layer of commercial uses behind the front businesses. This area, with a few modifications, could become a slightly relaxed extension of the Downtown area. Access management could further implement shared access points, preferably to side streets or alleys, and additional landscaping and extension of the Downtown historic lighting program, combined with existing sidewalks, would extend the pedestrian streetscape character through this area. An added amenity which would encourage this character is on-street parking. The highway cross-section in most areas is wide enough to allow marking of on-street parking spaces.

The section of Highway 101 between about 21st Street and 42nd Street generally abuts larger lots with a highway orientation. Auto dealers, fast food restaurants, larger sit-down restaurants, lodging facilities, larger retail, RV parks and similar uses comprise much of the commercial business fronting this section. Buildings are set back further from the street, and there is less

attention to landscaping the highway frontage. Alleys are generally undeveloped. A business often controls a half, or full block frontage. Because of this ownership pattern, it should be easier to require access from side streets. The extensive frontages allow ample opportunity for a shopper to identify the business in time to make the correct turn. On-street parking is not appropriate in this section of Highway 101. However, parking lots now located in the front yards of buildings should be relocated to the side and rear of the lots as properties redevelop, and the frontages improved with increased landscaping.

The section of the highway between about 42nd Street and 46th Street should be improved to a full urban section, preferably before the siting of the next large retail commercial development in the North Commercial Node.

Access management is also a goal of the TSP. Reducing the number of driveways accessing directly to Highway 101 will provide more unbroken landscaped frontages thus improving the appearance of the corridor, while also maintaining through capacity on the highway. Access should be restricted to side streets and to existing alley openings in mid-block. Initially, as properties redevelop and access to side streets or to alleys is unavailable, properties will be strongly encouraged to share access with abutting sites. Right-in, right-out only access may be allowed on a case-by-case basis. Elimination of the need for a continuous left turn lane in Highway 101 may provide enough additional right-of-way to enhance on-street parking.

1. Oak Street Connection (15th Street to 21st Street)

This north-south route would provide improved local access to a number of uses including Rhododendron Elementary School, Siuslaw High School, Lane Community College, the new middle school, County shops, the main fire station at 26th Street, the Elks Lodge, the Florence Business Center and residential uses. This extension would complete the west side north-south local route to relieve the need for local travelers to access Highway 101 for local trips. The existing bike path could be incorporated into the street design, or could remain a separated bikeway within Miller Park due to the large number of students who use this path.

2. Highway 101/12th Street Intersection

12th Street serves as a commercial collector street. It abuts the Florence Elk's Lodge, the Florence Business Center (a business incubator), the Siuslaw Area Women's Center, the Church of the Nazarene, and several small, commercial establishments. 12th Street is not a through street. Its intersection with Highway 101 is hazardous due to the alignment of the highway. A traffic study should be completed to determine the best option for 12th Street improvements.

3. Transition Commercial area, Highway 126/9th Street to 21st Street

This area would serve as a transition area between the more arterial functions of Highway 101 north of the 21st Street signal, and the Mainstreet character of Highway 101 in the Downtown. Speed will decrease at the 21st Street signal, combined access, preferably to

side streets, and installation of historic lighting will occur incrementally, as redevelopment occurs. Sidewalks will be required of development or redevelopment where none presently exist, and buildings will be encouraged to locate near the back of the sidewalk, with increased landscaping. Monument signs, as opposed to free-standing pole signs, will be encouraged in this section. The use of on-street parking on Highway 101 will be pursued in order to better serve businesses, to further traffic calming, and to provide a protective barrier for pedestrian movement. The intersection of Highway 101 and Quince Street occurs within this section of the highway. Its design will need to be integrated with this transition character.

4. Highway 101 north of the 21st signal extending to the North Commercial Node

This section of Highway 101 will continue to function more as an arterial section. Due to the larger size of the lots, businesses will continue to be larger, even with redevelopment, and will likely rely more on auto-oriented businesses. On-street parking on Highway 101 is not contemplated in this section, nor is unreasonable speed reduction. Parallel local streets will carry many local trips, freeing Highway 101 for through traveler use. As businesses redevelop, assess management should require reduced access directly to the highway. Access should be to side streets, with emphasis on signalized intersections, where available. Access to the local street network at the rear of the properties should also be encouraged to increase local usage of the local street network.

5. Highway 101 between 42nd and 46th Streets

This section of the highway should be improved to a full urban section prior to, or as part of, the siting of large retail developments in the North Commercial Node.

6. Storm Drainage Improvements

Increased capacity in the storm drainage system is needed on Highway 101 from Heceta Beach Road south to at least 42nd Street, as determined by the City's Stormwater Management Plan.

West 9th Street Planning Area

This recently designated area is intended for development of professional offices, continuation of institutional uses primarily related to health care, and development of medium and high density mid and upper range residential units. 9th Street has been developed to full urban standard throughout this area. The Comprehensive Plan amendment which designated this area includes a local street network throughout the area between 9th and 12th Streets, and between Rhododendron Drive and Ivy Street. All rights-of-way exist as platted in historic subdivisions during the early years of Florence history. Many of these ROWs are not proposed to be opened as public streets. Part of the reason for this is to preserve the two stream corridors which traverse this area from north to south. The existence of a large dune in the northwest corner of this area resulted in a designation as Residential PUD, with the internal road network to be developed as part of any PUD. The goal is to preserve as much of the dune as possible.

1. Improvements in Local Street Network

The intent is that the designated internal street network will be improved to full urban standard as part of the private development of abutting lands. If this is not practicable, then developers will be required to sign non-remonstrance agreements for future improvements. Map 12-E-1 illustrates the proposed internal street network.

Other Highway 126 Improvements

1. Highway 126 Corridor Plan

The 1997 Highway 126 Interim Corridor Strategy includes recommendations for several categories of improvements on Highway 126. The Corridor has preservation, safety and modernization needs. The Corridor provides the major link between Florence and I-5. Improvements are essential for economic, mobility and safety reasons. The most critical needs are the widening of several substandard width bridges and the additions of passing lanes and/or pullouts. The City needs to continue to work with ODOT to make these improvements a high priority.

Within the city, the intersections of Highways 101/126 is of concern. The intersection is projected to operate a Level Of Service F by as early as 2015 and occasionally operates at the LOS during summer weekends in 2001. The City and ODOT need to begin discussions about the design of an improved intersection by 2005.

2. Highway 126 Access Plan

Several operational and safety concerns related to the existing side-street access points and high travel speeds are focused in the one mile segment of Highway 126 between North Fork Siuslaw Road and Highway 101. The completion, in 2002, of al long anticipated safety project on Highway 126 between Highway 101 and Tamarack Street has provided much needed left torn refuges at Spruce and Quince Streets and has removed the free right turn lane northbound from Highway 101 to Highway 126. The Highway 101/126 intersection has been reconstructed to provide a left turn lane from Highway 126 southbound, and brings all northbound Highway 101 lanes under the control of the traffic signal at the intersection. The Level of Service appears to have improved drastically at many of these intersections. However, monitoring of volumes and service levels, as well as accident rates and severity will be needed to verify performance of the improvements.

The safety project currently planned by ODOT for construction in 2001 for the section of Highway 126 between Spruce Street and the Highway 101 intersection will greatly improve access and speed problems in this section. Future redevelopment of the Dunes Village shopping center should include closing of access points directly to Highway 126. Closing of the access point closest to the Highway 101 intersection should occur as part of the safety project.

The Spruce Street/Highway 126 intersection currently operates at Level of Service (LOS) A and will continue to operate acceptably in year 2020 with the addition of the left turn lane on Highway 126 which is part of the safety project.

To mitigate the current safety and operational deficiencies along Highway 126 between North Fork Siuslaw Road and Highway 101, additional access management will become necessary. Several years ago, two options were studied, an 8th/9th Street one-way couplet, or consolidation of existing access points on the highway. The couplet is not supported locally. This TSP instead supports consolidation of access points.

a. Access Consolidation

Existing access points along Highway 126 would be consolidated, by gradual implementation of an access management strategy.

3. Culvert Replacement

At a future date, capacity improvements, together with the requirements for improved fish passage in Munsel Creek, will dictate the replacement of the Munsel Creek Culvert. The reconstruction may or may not include a culvert structure. However, the corssing structure must be designed to include the passage of the Siuslaw Estuary Trail under Highway 126 to connect to the Munsel Creek Bike/Ped Path and its planned extension to Munsel Lake.

Other Local Street Improvements

1. Rhododendron Drive Improvements

For specific management and design guidelines, refer to the *Rhododendron Drive Integrated Transportation Plan* (RDITP), June 2007. The RDITP shall serve as the definitive document for improvements related to Rhododendron Drive.

Rhododendron Drive west of Greenwood Street is a paved rural section road with shoulders and drainage ditches. It serves several large subdivisions located off Rhododendron in the City, as well as a significant portion of the developed subdivisions in the UGB area outside the City. Rhododendron Drive is intersected by only two City streets, 9th Street, and 35th Street. Topography and the location of the airport have precluded any other east-west connections. As development, and redevelopment occurs along Rhododendron, the street

should be improved to include curbs, sidewalks and bike lanes, unless otherwise indicated in the RDITP. Left turn lanes should be added at Greentrees, 35th and 9th Streets on both Rhododendron Drive and the intersecting streets. Since Rhododendron Drive is also a scenic drive in that it abuts the river, and is bordered by mature growth shore pine and native rhododendrons, the intent is to preserve the street as a two-lane street in the same alignment, (except for the two recommended left turn lanes), maintaining as much of the existing vegetation as possible. Consideration should be given to routing sidewalks around significant groves of rhododendrons or mature trees where feasible. Street lighting is needed at 9th and 35th Streets, but should be carefully placed in other locations along the street so as not to detract from the night views along the river. The Rhododendron Drive/Heceta Beach Road intersection should also have left turn lanes on all legs of the intersection.

2. Pavement Management Plan

This program, begun in 2000, will provide an annual plan for pavement maintenance and improvements, based on a system wide analysis of pavement conditions.

3. Storm Drainage Improvements

Storm drainage improvements are necessary as determined by the City's *Stormwater Management Plan*.

Signalization Improvements

The traffic signal timing capability for the section of Highway 101 through the City of Florence was analyzed to determine the compatibility of needed intersection control improvements inside the city. Currently, there are four signalized intersections within the City of Florence, all of which are located along Highway 101 at: Rhododendron Drive, Highway 126, 21st Street and 35th Street. The primary factors considered by ODOT in determining the location of new traffic signals on state highways are signal warrants, safety, spacing, integration with crosswalks, and cost.

Proposed Signalization Improvements:

1. 30th Street/Highway 101 Traffic Signal

In 2006, the City adopted the Florence Pedestrian Study. This study recommended the signalization of 30th Street and Highway 101. City staff, consultants, the City's Street Improvement Task Force and the general public indicated that 30th Street is the more appropriate location for a traffic signal, and 30th Street provides greater connectivity and connections to the eastern neighborhoods.

2. Heceta Beach Road/Highway 101 Traffic Signal

A traffic signal will more likely than not be required at the intersection of Heceta Beach Road and Highway 101 with the completion of the Spruce Street North Extension. The signal will need to meet signal warrants prior to installation.

3. Munsel Lake Road/Highway 101 Traffic Signal

Continued growth along the Munsel Lake Road corridor will generate the need for a traffic signal at the intersection of Munsel Lake Road and Highway 101 during the next 5 - 10 years. Signal warrants will need to be met prior to installation.

4. 46th Street/Highway 101 Traffic Signal

It is possible that traffic congestion in the area of this intersection may generate a need for a traffic signal at some future date. Traffic delays and congestion will need to be monitored so that a signal can be anticipated well in advance of a LOS of F. Signal warrants will need to be met prior to installation.

5. Downtown Green Traffic Signal

The Summer 2001 Refinement Plan for the Downtown Green supports the installation of a traffic signal at the intersection of 2nd Street and Highway 101.

6. Highway 126/North Fork Road

Development of a casino on 100 acres of land near the intersection of North Fork Road and Highway 126 may create the need for a traffic signal. The casino developers should prepare a traffic study identifying impacts and proposing mitigating measures including a need for a signal.

Bicycle Plan Improvements

Classification of Bicycle Facilities

Bicycle Path A facility separated from motor vehicle traffic by an open space or barrier, either within the roadway right-of-way or within an independent right-of-way. They are typically used by pedestrians, joggers, skaters and bicyclists as two-way facilities. Bicycle paths are appropriate in corridors not well served by the street system (if there are few intersecting roadways), to create short cuts that link destination and origin points, and as elements of a community trail plan. Bike paths are generally synonymous with Multi-Use Paths in the ODOT Bicycle and Pedestrian Plan (Draft 1995).

Bicycle Lane A portion of the roadway designated for preferential use by bicyclists. Bike lanes are appropriate on City arterials and collectors. Bike lanes must always be well marked to call attention to their preferential use by bicyclists. Striped on-street bike lanes should be provided on all arterial streets and on collector streets in the following situations: collector streets that have daily volumes of more than 3,000 vehicles; where the collector street directly connects major residential areas with schools or parks; and where it may be necessary to ensure safe bicycle travel.

For facilities on Rhododendron Drive, see the *Rhododendron Drive Integrated Transportation Plan* (RDITP), June 2007.

Bikeway On a bikeway, bicyclists and motorists share the same travel lanes. A motorist will usually have to cross over into the adjacent travel lane to pass a bicyclist. Bikeways are common on neighborhood streets and on rural roads and highways. Bikeways are generally the same as "shared roadways" in the ODOT Bicycle and Pedestrian Plan.

The inventory of existing bicycle facilities, by type, is shown on Map 12-I-1.

Design guidelines for each of these facility types are included in Appendix 12, as shown in the State of Oregon Bicycle Facilities Master Plan. Design of bicycle facilities should conform with *Design for Development of New Bicycle Facilities* by the American Association of State Highway and Transportation Officials (AASHTO).

Local bicycle system improvements should also be consistent with the *State of Oregon Bicycle Facilities Master Plan.* It should be noted that Highways 101 and 126 are State designated bike routes.

Bicycle pathway signing should conform with the *Manual on Uniform Traffic Control Devices* (MUTCD) and the Oregon supplement to this document.

Recommended Improvements

1. Heceta Beach Road Bikelane Modifications

This street is currently a narrow 26-28 foot roadway with no shoulders. Heavy vegetation adjacent to the street provides a scenic "feel" to the traveler, and also makes widening difficult. A five-foot striped bike lane should be provided on both sides, resulting in a 34-foot wide cross-section.

2. Rhododendron Drive Bikelane Modifications

Similar to Heceta Beach Road, this street is currently 26-28 feet wide with no shoulders. A five-foot striped bike lane should be provided on each side, resulting in a 34-foot wide cross-section. Heceta Beach Road and Rhododendron Drive could serve as a scenic route

for coast highway bicyclists. When bike lanes are completed on Heceta Beach Road and Rhododendron Drive, the coast highway bike route should be redesignated to these streets. There is a potential for a future connection to the north with bikepaths at the USFS Sutton Lake recreational facilities. Addition of bikelanes to Kingwood Street south of Rhododendron Street would provide a connection to Old Town and to Highway 126 without accessing Highway 101.

3. Munsel Lake Road Bikelane Modifications

Provide five-foot bike lanes on both sides of the roadway resulting in a 34-foot wide cross-section. This bikepath provides an alternate connection of Highways 101/126 that avoids much of the developed section of Highway 101 within the City limits. In the future, it would also connect to Rhododendron Drive via Oak Street and either Heceta Beach Road or 35th Street, or directly to Heceta Beach Road via Spruce Street. Care must be taken in design and construction to maintain scenic values.

4. Munsel Creek Bike/Pedestrian Path

This bikepath is developed between Quince Street on the south and 25th Street on the north. Between 16th and 25th Streets, the path follows Willow Loop and 23rd Street to connet to the stream corridor on Willow Street. The Downtown Implementation Plan includes a plan for development of an estuary trail connecting the Port of Siuslaw Boardwalk in Old Town with the south end of the Munsel Creek Bikepath. Development of the estuary trail is also a goal of the Port. The plan envisions the trail being carried under Highway 126 in an oversize, open bottomed culvert similar to several already constructed around the state. Extension of the Munsel Creek Bikepath to the north is also proposed. The Munsel Lake Boat Launch and Lake Access Area on Munsel Lake Road is a logical destination for water habitat and related trails. The bikepath is proposed to be extended from its termination point west of the City wellfields through City lands to City owned overlook over the Florentine Estates wetland and then east across City land to the service road for the wellsites north of City lands. The last section from the service road to Munsel Lake Road will require negotiation with private developers for acquisition of easements or ownership of right-of-way.

5. 12th Street Bikepath connecting Rhododendron Drive and Kingwood Street

12th Street south of Greentrees PUD will not be opened. A vegetated buffer will be maintained adjacent to Greentrees, and a bikepath will be developed in the south side of the ROW to the east edge of Greentrees. At this point, 12th Street will be developed to provide access to the industrial land west of the airport. This improvement will include bike lanes which will connect the 12th Street bikepath to bike lanes on Kingwood.

Pedestrian Improvements

1. Highway 101 Pedestrian Crossing Pilot Project

See description under Downtown Implementation Plan.

2. Other Highway 101/126 Pedestrian Crossings

Present and future crosswalks located at non-signalized intersections are hazardous to pedestrians on arterial highways. The traveling public does not expect crosswalks in these locations, and does not use due caution when approaching them. Conversely, the pedestrian needs conveniently placed crosswalks to access both sides of the highway. The City must work with ODOT to design a crosswalk solution which increases safety for the pedestrian, but does not unduly impede traffic on the highway.

3. Siuslaw River Estuary Trail

This trail is proposed as part of the Downtown Implementation Plan, and is also a priority of the Port of Siuslaw. The proposed trail will connect the Port's Boardwalk to Highway 126, and eventually, when the Munsel Creek culvert is replaced, through a bike path set into the culvert to connect to the Munsel Creek Bike Path. The proposed path will connect future development on the Middle School site in Old Town with the Boardwalk. The trail will feature interpretative signage about estuarine formation, maintenance, wildlife species and habitat, and other pertinent data.

4. Public Access to Public Lands north of Sandpines and west of Fred Meyer

The extension of Oak Street north from 37th Street, together with accompanying bike lanes and sidewalks, will provide public access to these public lands which contain dunal formations and extensive wetland resources. Access could also be provided from Rhododendron Drive through a willing owner easement over private property. Development of a trail system through these public lands is a project for the distant future, and may become an action of the Parks and Recreation District, should such be formed.

5. Sidewalk Master Plan

All new subdivisions must provide sidewalks on at least one side of local streets, and on both sides of collectors and arterials. Infill sidewalks will generally be provided by property owners as part of redevelopment of abutting properties, or through the formation of Local Improvement Districts. All sidewalk improvements will be ADA compliant. Sidewalk maintenance is the responsibility of the abutting property owner. There are several areas of existing, structurally deficient sidewalks some of which are in the Downtown Area. There are also areas where infill is necessary. Recent sidewalk improvement projects have been accomplished through a public/private partnership with the City contributing a portion of the costs in order to reduce assessments to abutting property owners.

6. Rhododendron Drive

See the *Rhododendron Drive Integrated Transportation Plan* (RDITP), June 2007.

Airport Plan Improvements

The Florence Municipal Airport is one of five transportation gateways into the community. This gateway serves as a formal City entrance to welcome commercial and general aviation air traffic. It is important to both the tourist industry, and to the future of the Pacific View Business Park, that the airport present a welcoming and modern aspect in its operations and facilities. Projected improvements at the Florence Municipal Airport are governed by the October 1997 Airport Layout Plan. The Plan provides a 20-year Facility Requirement Plan. Improvements recommended by the Plan are:

1. Airport Gateway

The Florence Municipal Airport serves as a transportation gateway for persons arriving by air. The improvements listed below will provide for modernization and upgrading of the facility to enhance its gateway function. In addition, improvements to the FBO should move in the direction of providing facilities for visitors and business people using the airport, separate from operations and meeting rooms.

2. Extend Runway 15-33 430 feet

Extend Runway 15-33 430 feet to the north for a total length of 3430 feet in order to accommodate 100% of the general aviation fleet (aircraft with fewer than 10 seats). Install a precision approach path indicator (PAPI) when the extension is complete, and the existing terrain obstructions are eliminated. The extension is not intended to accommodate larger aircraft but will provide an additional margin of safety for the class of aircraft currently using the airport.

3. Extend the parallel taxiway

Extend the parallel taxiway in conjunction with the runway extension, with an aircraft turnaround provided adjacent to the threshold.

4. Relocate/elevate airport beacon

Relocate/elevate airport beacon to improve visibility for aircraft approaching the airport.

5. Expand the Main Apron

Expand the Main Apron to accommodate additional aircraft parking and passenger loading/unloading adjacent to the fixed base operator (FBO) building. A second access

taxiway should be incorporated into the apron design to improve aircraft flow through the parking, fueling and passenger loading/unloading areas.

6. Establish a nonprecision GPS approach and install an AWOS System

Establish a nonprecision GPS approach and provide an Automated Weather Observation System (AWOS) to accommodate commercial and business aviation users, medivac flights, Coast Guard, the Port and others. The AWOS automatically records and constantly updates barometric pressure, ceiling, temperature, wind direction and velocity, dewpoint and related humidity. It can be accessed by an 800 number or a dedicated radio frequency.

7. Construct a taxiway extension from the north end of the parallel taxiway

Construct a 25' wide, 800 foot long taxiway extension from the north end of the parallel taxiway to serve the future Aviation Industrial Area.

8. Install taxiway reflective edge markers

Install taxiway reflective edge markers on the parallel taxiway and major access taxiways to improve safety of taxiing during night-time ground operations. Medium intensity taxiway edge lighting should be considered later in the current planning period.

9. Provide for through-the-fence access to the airport for airport dependent businesses on abutting Kingwood lots, particularly leased lots.

10. Explore purchase of abutting lands to the south under the glidepath and to the west to reduce conflict with and to provide additional buffer areas for Port activities.

Port of Siuslaw Water-Related Transportation Improvements

The Siuslaw River is a navigable waterway that connects Florence to other inland communities as well as the Pacific Ocean. For 16.5 miles, the Siuslaw River is an officially designated federal waterway and is maintained as a navigation project by the US Army Corps of engineers with local sponsorship by the Port of Siuslaw. The remainder of the approximately 720 square mile Siuslaw river drainage basin falls within the district boundary of the Port of Siuslaw. Approximately 5 miles of the lower Siuslaw River system flows through the City of Florence.

The Highway 101 Siuslaw River Bridge crosses the river at River Mile (RM) 4.5. This drawbridge structure can be opened to accommodate waterborne commerce, primarily timber barges and fishing boats. As mentioned previously, the Central Oregon and Pacific Railroad line cross the river on the Cushman swing bridge at RM 8.2. State Highway 126 crosses the Siuslaw River in Mapleton at RM 22.5. The Mapleton bridge and shallow water upstream effectively limit waterborne commerce at that point.

Industrial activities on the navigable waterway include private industry shipping terminals at RM 6.5, 7.5 and 16. Tug, barge and marine construction services operate from a site at RM 6.5.

Within the City of Florence, the Port of Siuslaw operates a commercial shipping and seafood buying terminal at RM 4.8, commercial and recreational marinas at RM 5.0, a waterfront campground and parks, and multiple water-dependent, water-related leased or marketable properties.

The US Coast Guard Station Siuslaw and coast Guard Auxiliary Flotilla provide motor lifeboat service and safety patrols on the Siuslaw River and coastal waters. Station Siuslaw is located at RM 1.5 in the City of Florence. US Coast Guard Air Operations utilize the Florence Municipal Airport to support training and air/sea rescue operations.

The US Army Corp of Engineers maintains the federal waterway project on the Siuslaw River. Two rock jetties protect the mouth of the river. The authorized navigation waterway consists of an 18' deep x 300' wide entrance channel, a 16' deep x 200' wide channel to the Florence Turning Basin at RM5.0, and a 12' x 150' wide channel extending upriver to RM 16.5. At RM 15.8, the channel widens into a turning basin 12' deep x 300' wide. The project was first authorized in 1910 with several later modifications. Annual maintenance dredging is performed on the lower reaches of the river with smaller amounts of dredging taking place upriver at less regular intervals. The Port of Siuslaw sponsors the federal water project on the Siuslaw River and maintains the only authorized upriver dredged material disposal site.

Data from the mid-1990s shows that commercial vessels arrived and departed the port with an average of about 82,000 tons of cargo annually, consisting mostly of logs and fish. Value of cargo was approximately $15,000,000 per year for the period of 1993-5. According to an annual report from the Oregon Coastal Zone Management Association (OCZMA),[1] 117 jobs with an annual payroll of $2.3 million are directly attributable to port-enabled economic activities. Total related economic activity was estimated in the report to be about $13.5 million.

The Port of Siuslaw has recommended several water transportation related improvements, including:

1. Port of Siuslaw Gateway

The improvements listed below, together with recent improvements, will provide improved facilities and enhance the Gateway function of the Port. As the fishing industry, and water-based transport of wood products continues to decline, facility improvements which attract recreational users, as well as those persons traveling by boat for business or pleasure will become a greater part of the mix of facilities at the Port and will further enhance its gateway function.

2. Maintain the Federally Authorized Navigation Channel

The US Army Corps of Engineers, who have traditionally provided maintenance dredging at the small Oregon coastal ports, are under pressure to recoup the cost of dredging, and to

[1] Navigation and Other Activities on Oregon Coastal and Columbia River Waterways and Harbors in 1996, The Research Group for OCZMA.

consider cost-effectiveness of their dredging activities. Smaller ports like the Port of Siuslaw that do not have the activity of large ports are at a disadvantage when competing for diminishing dredging funds. The cost of dredging is beyond the resources of the Port district and supporting communities.

3. Rehabilitate the Old Town Wharf

Originally constructed during the 1960's and restored after a fire in the 1980's, the Old Town Wharf structure supports the seafood buying station, two hoists, the public transfer dock, and two waterfront restaurant facilities. Adjoining the Old Town Wharf is the Maple Street Landing and Transient Dock. The timbers in these structures are approaching the end of their design life and rehabilitation is necessary to maintain the economy dependent upon the structures.

4. Dredge the West and East Moorage Basins

The two marinas combined provide moorage for over fifty (50) year-round commercial fishing vessels and eighty (80) seasonal recreational vessels. Maintenance dredging is required periodically to maintain sufficient water depth in the marinas.

5. Rehabilitate East Moorage Basin

The East Moorage Basin provides the only operational public recreational marina on the Siuslaw River in Florence. The marina suffered severe storm damage in 1996. Partial repairs were completed in 1999, but full capacity has not been restored. Permanent repairs are needed to restore economic viability of the facility. A new landing needs to be constructed and twenty-four (24) substandard slips need to be rehabilitated.

6. Establish a Downriver Boat Launch Facility

The Port operated public boat ramp at RM 5.0 is the closest ramp to the ocean. The ramp is becoming capacity-limited due to the increased tourism activity and commercial development in the Old Town district of Florence. An additional ramp and transient boarding facility downriver will be needed to serve the increasing motorized boater traffic on the river. The facility should also be designed to provide additional access for non-motorized users.

7. Install infrastructure at Port Industrial Park

Extension of Pacific View Drive and related utility systems, plus addition of fiber optic cable, into an undeveloped 40-acre Port-owned parcel will provide up to 38 additional acres for industrial job creation in Florence. Access to the Siuslaw River will support water-dependent and water-related business and industrial development.

Transit Plan

LCOG has recently completed a Transit Plan for the City of Florence, which provides direction for the planning period. The Plan recommends addition of selected public transit services, and the continuation of the taxi voucher program for qualified clients. The components of the proposed Transit Plan are:

Foundation Goals

- Provide transit service that meets the widest possible range of community needs within funding constraints.

- Establish a visible and accessible transit service open to the general public that also targets the needs of people who are older or have disabilities.
- Provide for vehicle accessibility: full ADA compliance
- Develop and implement an advertising and marketing program to inform Florence residents of transit availability
- Do not displace existing transportation services that are efficient and effective
- Meet existing and future transit demand; expand transit service over time to meet increasing needs
- Respond to and modify service as necessary to effectively meet the needs of seniors and the disabled
- Maximize service efficiency while maintaining standards for safety and reliability
- Provide reliable service: good availability, short wait times
- Provide safe service: low/no vehicular accidents, no passenger loading accidents.
- Manage and provide local transit services in an efficient and cost effective way
- Maintain current levels of public funding (at a minimum)
- Adhere to an operations plan realistic to existing community resources
- Minimize operating costs: (cost per mile, costs per passenger)
- Maintain vehicles for safety and reliability
- Provide for a productive transit service: (passenger per vehicle mile)
- Minimize subsidy requirements: (fares and agency fees)
  - Balance costs and revenues: (avoid significant overruns)
  - Pursue a financing strategy to take advantage of state and federal funding opportunities
- Plan for the short-term (1 year) and the long term (ten years)
- Design a transit system to be attractive to future riders
- Address seasonal transportation needs
- Maintain a high level of customer service and good rider and community relations

Short-term Goals

- Establish general public service by July 1, 2000 (to meet FTA Section 5311 funding requirements)

- Explore shuttle opportunities targeting (shopping) trips from existing voucher program (shopper shuttles)
- Provide a combination bus-taxi system; establish a limited Dial-A-ride service
- Provide service to general public (workers) in combination with trips from voucher program
- Pursue (former) FACT vehicle available in Eugene

Long-term Goals

- Develop a combination service: comprehensive deviated route for fixed route service and Taxi or Dial-A-Ride Service (door to door)
- Develop an Old Town summer tourist shuttle system; explore the use of trolleys
- Pursue a public transit service connection to Eugene, (fill inter-city gaps not served by Porter Stage Lines and Greyhound Bus Lines)
- Establish regional transit connections to the north, south and east of Florence
- Meet the City's long-term economic development goal (by serving tourists and the visiting population)
- Develop a Transit Center as part of service delivery system (transit hub or dispatch center)
- Provide transportation services for conferences at the Florence Events Center
- Provide for after-hours and/or evening transit service
- Determine feasibility of forming an independent transportation district or establishing a local-based subsidiary of Lane Transit District
- Provide effective service to the general public in Florence and surrounding communities
- Provide stable and consistent operation and service within a local transit environment

Rail Plan

There is no rail service directly to Florence. The nearest rail freight facilities are in the Mapleton/Cushman area. Southern Pacific Railroad still maintains ownership of the facilities. Central Oregon Pacific Rail currently operates a commercial branch connecting Eugene to Coos Bay. This track parallels Highway 126 from the east, until it crosses Highway 126 and the Siuslaw River in Cushman to turn south to Coos Bay. Passenger rail is available in Eugene via AMTRAK with bus connections from Florence.

The potential of a barge/rail freight terminal in the Mapleton/Cushman area is a possibility realized by the Port of Siuslaw should the economies of transportation of goods make this a feasible option once again.

The rail overpass over Highway 126 at Cushman has less than the optimal 18' clearance. In addition, due to its elevation, and proximity to the Siuslaw River, the road is flooded often for several hours each day during high water/high tides. This situation creates a hazard to the traveling public, a serious disruption in emergency services, and a disruption to general transport of goods and services. Recommended rail improvements are:

1. Improvement to the Highway 126 rail overpass at Cushman

The City should work with ODOT, the railroad and other involved parties to ensure that a study of alternatives available for correcting the problems at the overpass is performed in the next two years. Construction funds should be budgeted, and the situation corrected within the next 5 to 10 years.

2. Connections to passenger rail service

Passenger rail connections are available in Eugene. Currently, a private bus service connects Florence and Eugene twice daily. AMTRAK has established a private bus connection to transport rail passengers to Eugene.

Pipeline Plan

The City of Florence, together with other coastal communities and counties is exploring the possibility of extending a natural gas pipeline north along the coast to serve these cities and counties, including Florence. Natural gas will provide an alternative energy source for economic development, as well as for heating of homes and businesses. In 1999, voters in Coos County approved a ballot measure authorizing expenditures for building a natural gas pipeline from Roseburg into Coos County. The costs of such a project are high, and the likelihood of a second line being constructed to the coast is low. Natural gas is available to the north in Newport, from a pipeline in Lincoln County, but there is no additional capacity to serve areas south of Newport. If such an option is determined to be possible, pipeline routes, funding sources, and agreements about wholesale and retail provision of natural gas will need to be determined.

1. Feasibility Study

Provision of transportation/economic development funds for an analysis of the feasibility of extension of natural gas service to the Florence area, including a cost analysis, and identification of potential funding resources for engineering and construction. This study needs to occur prior to the preliminary engineering work on the approved natural gas trunkline, so that, if needed, additional capacity can be included in the initial engineering.

Telecommunications Plan

Telecommuting is becoming an increasingly popular method of working at home using telephone communications and home computers. Use of telecommuting technology will result in the reduction or even elimination of some auto and transit work travel; travel that typically occurs during the heaviest time periods. This plan recognizes this expanding mode of telecommuting as an effective means of decreasing the need for expanded or new conventional transportation system infrastructure. With the advent of internet services, goods and services can be provided without leaving the community. Due to the City's distance from the I-5 Corridor, and the less than ideal conditions of our connecting highways for the efficient transport of goods and materials, the need for expanded telecommunications service is essential for continued economic development in the

community. For these reasons, the Florence Transportation System Plan encourages the use of telecommunications as an alternative to other travel modes.

Fiber optic cable has been provided to the Florence area through the services of Bonneville Power Administration via their transmission lines located east of Florence. Central Lincoln PUD has made the connection from this main cable into Florence. Private providers will be the medium to distribute fiber optic capability to individual businesses and homes. The City is a member of the Fiber South Consortium which is overseeing provision of fiber and other new telecommunication technologies to the central coast area.

The provision of direct access to fiber optic capability will relieve some of the poor services now available only through Qwest. Internet speed is presently slow, and capacity is lacking at peak times to carry the demand. Qwest is not planning to provide DSL capability to Florence in the foreseeable future.

Basic telephone service is also poor, with call blocking, periods of no dial tone, and long waits for installation of new service. The City will continue to work to improve telephone and telecommunications services to the community, utilizing the most current technologies available. Chapter 11, Utilities and Facilities, of the Florence Comprehensive Plan has a detailed commentary on the scope of the problem.

Recommended improvements are:

1. Improved basic telephone service

The City should continue to work for improvement in basic telephone services in Florence.

2. Fiber optic services

a. The City should maintain membership in Fiber South Consortium or a successor in order to have a voice in the provision of telecommunications services to the Florence area.

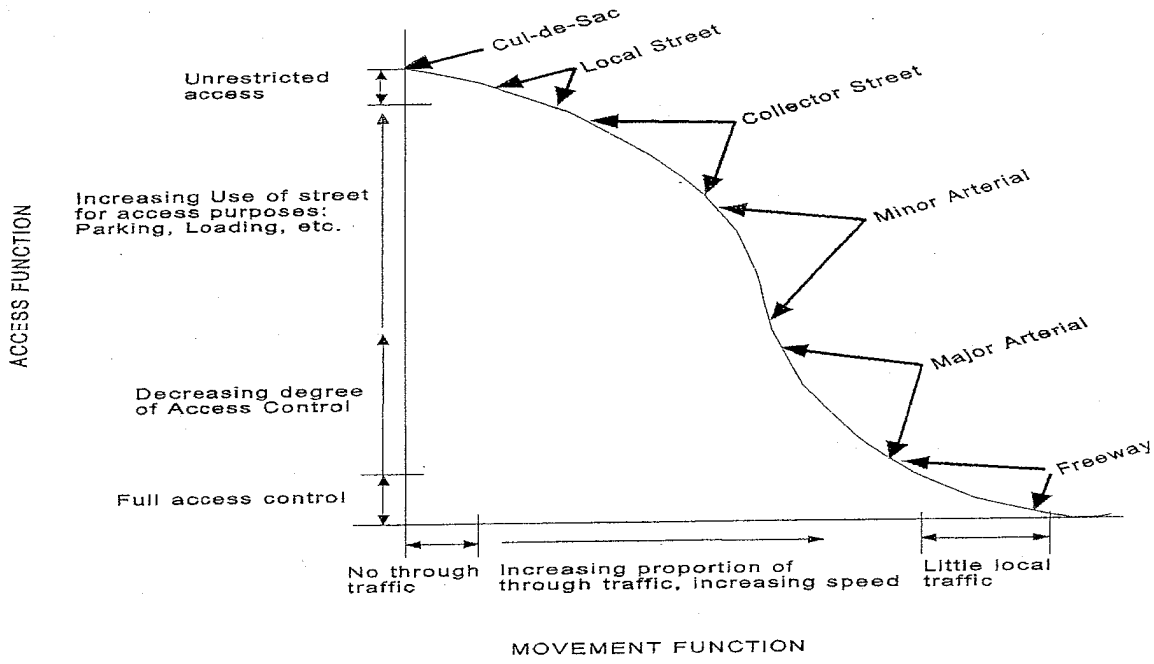
b. The City should continue to support the efforts of BPA and Central Lincoln PUD or their successors, as approved by the Fiber South Consortium or its successor, to provide fiber optic cable to the Florence area.

Functional Roadway Classifications

The purpose of classifying roads within the study area is to provide a balanced transportation system that facilitates mobility for all modes at acceptable levels of service while providing sufficient access to adjacent land uses and ensuring neighborhood livability. Currently, the City of Florence, Lane County, and ODOT each have their own roadway classifications and standards for roads within the City's planning area.

As part of the development of the Florence Transportation System Plan, roadway classifications and standards were identified that will provide consistency across jurisdictional boundaries. To classify roadways within the study area, each existing and recommended facility was examined to determine the level of land use accessibility and resulting transportation demand it will serve. Figure 12-Q-1 is an illustration of the relationship between land use, access control, travel movement, and the types of roadways best used to serve local access needs and carry local traffic at lower speeds.

Figure 12- Q-1. Relationship between Control of Access and Traffic Management



In addition, the facilities must accommodate various travel modes, including passenger vehicles, heavy trucks, transit, pedestrians, and bicycles. The facilities also must provide utility corridors (i.e., electricity, gas, telephone, cable, water) to serve the region and adjacent land uses. The City of Florence and Lane County Road Standards, the City of Florence Bikeway Master Plan, and the existing right-of-way widths in the corridor were reviewed to determine the most appropriate functional roadway classifications and street standards for the corridor. The recommended roadway functional classifications include:

- major arterials
- minor arterials
- collectors
- local streets
- scenic drives.

The functional purpose of each classification is described below.

Arterials The primary function of arterials is to provide through-movement for traffic, distributing it to collector streets and providing limited land access to minimize interruption to the arterial traffic.

The distinction between major and minor arterials is based upon the nature and volume of travel anticipated. Major arterial generally serve longer distance trips at higher speeds and volumes. Minor arterials serve generally slightly lower volume, lower speed travel.

Major arterial streets are characterized by a five lane roadway section, especially in the heavily urbanized area; pedestrian and bicycle pathways; signalization at intersections with other arterials and collector streets, as warranted.

Major Arterial Facilities: Highway 101 and Highway 126

Minor arterial streets are characterized by a three lane roadway section; pedestrian and bicycle paths; and signalization at arterial and collector streets, as warranted.

Minor Arterial Facilities:

- Rhododendron Drive (scenic drive) (See the *Rhododendron Drive Integrated Transportation Plan* (RDITP), June 2007)
- 35th Street
- Munsel Lake Road (scenic drive)*
- Heceta Beach Road (scenic drive)*
- North Fork Road
- Kingwood, 15th to 35th Streets
- Oak Street, north of 35th Street
- Spruce Street, north of Munsel Lake Road

*Parts or all of these facilities are currently under jurisdiction of Lane County. Under the County transportation plan, these facilities are classified as Major Collectors.

Collectors The primary functions of collectors are to move traffic between arterial facilities and local streets, and to provide access to adjacent uses. Collector streets are characterized by a two or three-lane roadway section; sidewalks on both sides of the street; signalization of intersections with other collectors and arterials, if warranted; and bike lanes where:

- average daily traffic volumes exceed 3,000 vehicles per day (vpd)
- the collector street directly connects to a land use that generates significant bicycle traffic (e.g., a school or park)
- on any other street where separately striped bike lanes may be necessary to accommodate safe bike travel along the facility.

Collector Facilities:

- Greenwood Street
- 42nd Street (Spruce to Highway 101)
- 43rd Street (Oak Street to Highway 101)
- 30th Street (Oak Street to Spruce Street)
- 27th Street (Kingwood Street to Highway 101)
- 21st Street (Oak Street to Spruce Street)
- 15th Street (Kingwood Street to Highway 101)
- Maple Street (Highway 101 to Bay Street)
- Bay Street (Kingwood Street to Harbor Street)
- 46th Street (Spruce to Oak)
- Ninth Street
- Quince Street between Highways 101 and 126
- Oak Street, south of 35th Street
- Spruce Street, south of Munsel Lake Road

Local Streets The function of local streets is to provide local access to private dwellings and businesses. Local streets are characterized by two travel lanes. Local streets should primarily serve passenger cars, pedestrian, and bicycle modes of travel. Transit and heavy truck traffic should be discouraged from using local streets.

Generic cross-sections for two types of local streets have been provided, Type A and Type B (both with parking). Type A – for local streets serving very few adjacent lane uses, due to their discontinuous nature or short length; Type B – for local streets that serve a higher role in terms of neighborhood circulation.

Scenic Drive The classification of "scenic drive" is an overlay over a basic classification such as arterial, collector or local street. Scenic drives may exhibit traffic volumes and speeds in the range intended for the underlying classification, but the scenic quality of these routes should be emphasized. Therefore, cross-sections and other standards of the underlying classification may be modified in order to be consistent with promoting the scenic value of the street to motorists. For example, overall paved width of scenic drives may be less than required in the underlying classification in order to minimize visual impacts.

It is recommended that scenic drives, whatever their underlying classification, be characterized by:

- a total paved width of 34 feet, including 24 feet for two travel lanes and 10 feet for striped bike lanes
- sidewalks as appropriate for promoting the scenic value of the street

- reduced speed
- turning lanes, as necessary

For facilities on Rhododendron Drive, see the *Rhododendron Drive Integrated Transportation Plan* (RDITP), June 2007.

Scenic Drives - Portions of:

- Rhododendron Drive (See the *Rhododendron Drive Integrated Transportation Plan* (RDITP), June 2007)
- Heceta Beach Road
- Munsel Lake Road

Roadway Design Standards

Roadway design standards are based on the functional and operational characteristics of streets, such as travel volume, capacity, operating speed, and safety. They are necessary to ensure that the system of streets, as it develops, will be able to safely and efficiently serve the traveling public and allow for the orderly development of adjacent lands as well as the transportation infrastructure serving those lands.

The roadway design standards included in this Plan address the following typical parameters: Typical Roadway Section, Alignment and Operational Characteristics, and Access Management.

Typical Roadway Sections

A typical roadway cross-section includes the following components:
- right-of-way
- number of vehicle travel lanes
- bicycle and pedestrian facilities
- drainage system
- other public amenities.

Figure 12-R-1 illustrates typical roadway sections for each of the functional classifications above. Each functional classification has design options to meet the needs of the adjacent land uses and the access demand along a given roadway.

For facilities on Rhododendron Drive, see the *Rhododendron Drive Integrated Transportation Plan* (RDITP), June 2007.

Alignment and Operational Characteristics

The safety and efficiency of travel on the corridor's roadways will be highly affected by the following alignment and operational characteristics:
- design

- operating speed
- horizontal and vertical curvature
- lane use
- parking use.

Access Management

Access points on roadway sections need to be properly located to ensure safe and efficient travel along a given transportation facility. Access points should be placed appropriately to limit potential conflicting turning movements; weaving maneuvers over short distances; and congestion along facilities.

Because both Highway 101 and Highway 126 are considered Highways of Statewide significance, both highways are subject to access management planning. All access to Highway 101/126 needs to be coordinated with ODOT, and should be consistent with the newly adopted (2000) ODOT Access Management Standards.

City Access Management Standards

In order to preserve the function of City arterials and collectors, and to promote safety of travelers, the City has established access management standards, more commonly referred to as driveway spacing standards. The City's standards are based on the American Association of State Highway and Transportation Officials (AASHTO) standards.

Section 4: Implementation Actions

Introduction

There are many ways to implement the goals and policies described in the second Section and to follow the modal plans described in Section 3.

1. Funding

The City can fund projects that provide or improve transportation facilities. These system improvements are often the most visible parts of the plan. These projects are listed in the Capital Improvements and Maintenance Projects sections.

2. Education

As people become more aware of their transportation options and the results of their choices, they may change some of the travel patterns and behaviors. This section lists topics about which Florence should share information with its citizens.

3. Non- capital City improvements

Projects that are not Capital Improvements or Maintenance Projects, but which will require some dedication of City resources.

4. Code Revisions

New development should be required to be consistent with the TSP. The maps in the previous Section show how the transportation systems will be extended in the future. The land division ordinance and land development ordinance set the standards for many things like street design, parking, and lot size and configuration. Code changes will need to be made to implement the TSP.

5. Studies and Research

Further studies will be needed to implement some portions of the TSP.

Capital Improvements

1. Highest Priority Projects

The following projects are the highest priority and should be completed within the first five years of this plan. No priority is intended by the order of the listing.

- Highways 101/126 Intersection Improvements
- The Downtown Green and associated street realignments
- Highway 101 pilot block project
- Construction of a portion of the Oak Street extension
- Cathodic protection fro the Siuslaw River Bridge
- Siuslaw River Bridge Interpretative Sites and associated parking
- Implementation of initial stage of City's Transit Plan
- Completion of the commercial portion of the Port's Boardwalk
- Determine feasibility of extending natural gas pipeline north to Florence
- Completion of portions of the Estuary Trail
- Extension of bikelanes on Rhododendron to Greentrees
- Preparation of Bicycle Master Plan
- Complete all proposed airport improvements, including Airport Gateway improvements.
- Other Highway 101 downtown transportation improvements

2. Medium Priority Projects

These projects will enhance Florence's transportation systems and will be prioritized once the projects of highest priority have been completed. They may be financed through a variety of methods including private assessments, system development charges, and public

money. The cost estimates are for planning purposes only. More precise estimates should be done by an engineer prior to budgeting.

- Gateway Projects (Highway 126, Siuslaw Bridge, and Highway 101 North)
- Extension of Munsel Lake Road west to Oak Street
- Installation of traffic signal at Munsel Lake Road/Highway 101, as warranted
- Extension of Spruce Street north of Munsel Lake Road contingent on development of adjacent properties
- Determination of acceptable solution to situation of rail trestle/Highway 126 flooding in Cushman
- Extension of Oak Street contingent on development of adjacent properties
- Kingwood/9th Street improvements
- Lighting of the Siuslaw River Bridge
- Implementation of subsequent stages of the Transit Plan
- Extension of bikelanes on Rhododendron to River overview area
- Construction of 12th Street bike/pedestrian path connecting Kingwood and Rhododendron
- Implement West 9th Street Area street network as adjacent lands develop
- Construct additional passing lanes on Highway 126
- Install Estuary Trail culvert under Highway 126
- Construct Quince Street improvements

3. Potential Long Range Projects

These major projects will need to overcome some issues in order to be implemented. Planning and monitoring of the traffic situation needs to begin now for these to become a reality. The need for these projects will grow as traffic volumes increase. Each potential project will need additional analysis.

- Provide additional highway capacity across the Siuslaw River on Highway 101 in a way which preserves the Siuslaw River Bridge as part of the transportation network
- Construction of natural gas pipeline to Florence
- Heceta Beach Road Bike lanes
- Extension of Rhododendron bike lanes to Sutton Lake area
- Study of 12th/Highway 101 options

Maintenance Projects

These projects are relatively minor projects that can be done within the next five years. Other maintenance projects may be needed within the twenty-year planning period, so there should be a periodic monitoring of the condition of the transportation system in order to identify future maintenance projects.

Non-Capital Activities

1. Bicycle System Maintenance Procedures

As Florence expands its bicycle system, it may want to adopt maintenance procedures to ensure good pavement condition, visible striping and signage, and safe lanes unobstructed by leaves, gravel, and debris.

2. Support Bicycle and Pedestrian Funding

Support the continuation of federal, state, and local funding mechanisms to implement bicycle and pedestrian projects.

3. Support Special Transportation Services

Consider options for management of transit services, including special transportation needs.

4. Bicycle Parking

The City will work with other agencies as needed to provide adequate bicycle parking in schools, parks, existing shopping and employment areas, and other destination areas to encourage increased use of bicycles.

Educational Efforts

1. Transportation Demand Management

The transportation management activities most likely to work for Florence residents are: carpooling; minimum work weeks/flex time; telecommuting; better bicycling and pedestrian facilities; and local transit.

2. Use of Alternative Modes

- The City will provide better bicycling and pedestrian facilities through its capital improvements program.
- The City could also provide educational material on the benefits of alternative modes and sponsor events that highlight riding the bus, walking and bicycling.
- The City could work with local organizations and schools for suggestions for events that promote alternative modes.

Studies and Research

Many additional studies will need to be done to implement the TSP. For example, preliminary engineering has to be done prior to most transportation facility construction. The Downtown Green

and the Pilot Block studies will be underway in 2000. Studies on improvements to the Cushman trestle and the potential for an extension of a natural gas pipeline will occur at some time. The 12th and Oak Streets/Highway 101 study and a Ninth Street options study also need to be completed.

Plan and Ordinance Review and Recommendations

1. Florence Realization 2020 Comprehensive Plan (Comprehensive Plan)

The Comprehensive Plan is organized in sections which correspond to the State Land Use Goals. Goal 12 and Chapter 12 of the Comprehensive Plan address transportation. An effort has been made to keep transportation-related policies within the transportation chapter, rather than spread them throughout the Plan. However, Chapter 2 of the Comprehensive Plan (Land Use) contains discussion about the road networks, access management, and transportation facilities necessary to support the various proposed land uses. Transportation goals and policies are included in this chapter. A short summary of this Plan is included in the Comprehensive Plan. The entire Transportation System Plan is included in Appendix 12 of the Comprehensive Plan.

2. City Zoning, Subdivision, Site Design, and Streets Standards Ordinances and Handbooks

The City's existing zoning ordinance requires review of parking, access and site circulation as part of Design Review, and as part of conditional uses. Design Review is applicable to all development except one and two-family dwellings. The Subdivision Ordinance requires that streets and sidewalks be provided in any subdivision of three or more lots. Improvements must be completed before the City will sign the final plat, or funds held in escrow for use by the City if the improvements are not completed. The City generally uses American Public Works Association handbooks and standards when reviewing subdivisions and inspecting construction of facilities. The City needs to review its ordinances and handbooks against State standards such as access management, and make any necessary revisions. There will be no time to do this work until after the adoption of the Transportation System Plan.

3. Oregon Coast Highway Corridor Master Plan

Traffic volumes in Florence are among the highest along the Highway 101 corridor. There are numerous existing access points to the highway in Florence. As traffic volumes increase, traffic conflicts and congestion are likely to increase. Key recommendations in the Coast Highway Corridor Master Plan include:

- consolidating access points
- developing a local circulation system to reduce the need for local traffic to use Highway 101
- developing a community design program for Florence (including parking strategies, pedestrian and landscape improvements, signage, view protection and enhancement, and gateways)

- implementing access management including access to Old Town
- identifying a threshold for determining when alternative modes such as local transit service would need to be expanded
- determining a threshold for capacity and strategy to meet demand for the Siuslaw River Bridge
- improving signage to beach loop routes.

4. **Pacific Coast Scenic Byway Corridor Management Plan of US Highway 101 and Scenic Byway Management Plan for the Yachats and North Dunes Region for ODOT**
These sources provide cities and counties guidance in maintaining a region's intrinsic qualities in balance with tourism and other economic development activities.

5. **Comprehensive Plan and Transportation System Plan**

These Plans provide policies and implementation measures consistent with the recommendations of these Plans.

Section 5: Financing Strategies

Introduction

The Goal 12 Transportation Planning Rule (OAR 660-12-040) requires that Transportation System Plans for cities with populations over 2,500 persons include a transportation financing program. Transportation financing programs must include:

- a list of planned transportation facilities and improvements;
- an estimate of the timing and costs of proposed projects; and
- an analysis of the ability of existing and potential funding mechanisms to fund proposed transportation improvements.

Table 12-5-F1. Future Transportation System Improvements

Project #	Project Description	Estimated Cost
A-1	Highway 101/126 Enhancement Program	See below
A-2	East (Highway 126) Gateway	$25,000
A-3a	Siuslaw River Bridge (South) Gateway	$25,000
A-3b	Pacific Coast Scenic Byway Bridge Interpretive Sites and Associated Parking	$173,000
A-4	Highway 101/126 Intersection Improvements	$500,000
A-5a	Realign Highway 101/Quince Street Intersection	$440,000
A-5b	Improvements to Quince Street to provide parallel local alternative route[2]	$720,000
A-6	Highway 101 Pedestrian Crossing Pilot Program	$110,000

[2] Estimates assume $300/linear foot of roadway (40' paved section, curb, gutter and sidewalk)

Table 12-5-F1. Future Transportation System Improvements

Project #	Project Description	Estimated Cost
A-7	The Downtown Green and associated realignment of 2nd Street Intersection with Highway 101	$496,000
B-1	Oak Street North Extension – 37th St. to 2000 City Limits[3] Oak Street North Extension – City limits to Heceta Beach Road[4]	$1,985,000* $936,000*
B-2	North (Highway 101) Gateway	$25,000
B-3	Spruce Street North Extension (Munsel Lake Rd to Heceta Beach Rd)	$900,000
B-4	Heceta Beach Rd Extension (Highway 101 east to Spruce)	$340,000
B-5/H-3	Munsel Lake Road Traffic Signal	$200,000
B-6	Munsel Lake Road West Extension (Highway 1010 to Oak Street)	$240,000*
C-1/H-1	30th Street Traffic Signal	$175,000
C-2	Kingwood Improvements (9th Street to 15th Street)	$225,000
D-1	Oak Street Connection (15th Street to 21st Street)	$900,000
D-2	Transition Commercial – Highway 101 (Highway 101/126 to 21st St)	$0
D-3	Highway 101 Commercial (21st St to 42nd St)	$0
D-4	Highway 101 bewteen 42nd and 46th Streets	$0
D-5	Highway 101 – Storm Drainage Improvements	$1,556,000
E-1	West 9th Street Local Street Network Improvements [5]	$1,425,000
F-1a	Highway 126 Access Consolidation	$0
G-2	18th Street (Willow Loop to Highway 101)	$0
G-3	18th Street west of Highway 101 to Oak Street	$0
G-4	Rhododendron Drive Improvements	$1,800,000
G-5	Pavement Management Plan	$20,000**
G-6	Storm Drainage Improvements – Local Streets	$2,016,000
H-2	Heceta Beach Road Traffic Signal	$175,000
H-4	46th Street Traffic Signal	$175,000
I-1	Heceta Beach Bikelane Improvements	$150,000
I-2	Rhododendron Bikelane Improvements	$250,000
I-3	Munsel Lake Road Bikelane Improvements	$150,000
I-4	12th Street Bikepath between Rhododendron and Kingwood	$90,000
I-5	Munsel Creek Bikepath Improvements	$360,000
J-1	Pedestrian crossing improvements outside Pilot Block Program	$110,000
J-2	Siuslaw River Estuary Trail	$125,000
J-3	Public access to public lands north of Sandpines	Included in Oak St. Extension
J-4	Sidewalk Master Plan	$10,000
K-1	Airport Gateway Improvements	$200,000
K-2	Extend runway 15-33 a distance of 430 feet	
K-3	Extend parallel taxiway	
K-4	Relocate / elevate airport beacon	
K-5	Expand the Main apron	$1,900,000

[3] Ibid
[4] Id.
[5] Id.

Table 12-5-F1. Future Transportation System Improvements

Project #	Project Description	Estimated Cost
K-6	Establish a non-precision GPS approach	
K-7	Construct a taxiway extension from the north end of the parallel taxiway	
K-8	Install taxiway reflective edge markers	
L-1	Port of Siuslaw Gateway	
L-2	Maintain Federal Navigation Channel	$822,000
L-3	Rehabilitate Old Town Warf	$1,030,000
L-4	Dredge East and West Moorage Basins	$154,000
L-5	Rehabilitate East Moorage Basin	$265,000
L-6	Establish downriver boat launch facility	$665,000
L-7	Install infrastructure in Port Industrial Park	$1,172,000
M-1	Adopt Transit Plan	$0
M-2	Continuation of Taxi Voucher Program	
M-3	Initiation of Shopper Shuttle	
M-4	Initiation of a General Public Transit Route in Conjunction with Shopper Shuttle	$57,935
N-1	Feasibility Study and Improvements to Rail Overpass on Highway 126 at Cushman	$50,000
N-2	Improved connections to passenger rail	$0
O-1	Feasibility Study for Extension of Natural Gas Pipeline to Florence area	$75,000
P-1	Improved Basic Telephone Service	
P-2a	Membership in Fiber South Consortium or its Successor	$0

*+ROW Costs
**$20,000 initially, then $2,000 per year

Table 12-5-B2. Prioritized Funding Needs

Project #	Project Description	Estimated Cost	Funding Source(s) Identified F,S,C,L,P*	Funding Approved (y/n)
Highest Priority Projects (no order within list) 1-5 Years				
A-4	Highway 101/126 Safety Improvements	$900,000	F,S	Y
A-7	Downtown Green and associated street improvements	$450,000	C,L	N, app submitted
A-6	Highway 101 Pilot Blocks	$110,000	S	N
B-1	Construction of Oak Street (37^{th} – 46^{th} Street)	$936,000	S,L	Y (Phase I)
	Cathodic Protection for the Siuslaw River Bridge		S	N
A-3b	Siuslaw Bridge Interpretive Waysides	$312,770	F,L	N, app submitted
M	Implementation of Transit Plan	$60,000	F	Y
L-2e	Completion of structures on the Boardwalk		F,S,P	N
O-1	Feasibility study for extension of natural gas pipeline north from Coos Bay to Florence	$75,000	S	N

Table 12-5-B2. Prioritized Funding Needs

Project #	Project Description	Estimated Cost	Funding Source(s) Identified F,S,C,L,P*	Funding Approved (y/n)
J-2	Completion of portions of the Estuary Trail	$125,000	F,S,L	N
I-2	Bike/ped lanes on Rhododendron Drive to Greentrees	$50,000	F,S	N
J-4	Preparation of Bicycle Master Plan		F,S,L	N
K-1-10	Complete airport Improvements	$1,900,000	F	Y
	Lighting of the Siuslaw River Bridge		S,L	N
N-1	Determine acceptable solution to the height/flooding problems in Cushman	$50,000	F,P	N
Total Projected Cost		**$4,968,770.00**		
Medium Priority Projects (no order within list) 5-15 Years				
A-2, B-2, K-1, A-3a	Gateway Projects	$75,000	F,S,L	N
B-6	Extension of Munsel Lake Road west to Oak St.	$240,000	S,C,L,P	N
B-5/H-3	Traffic signal at Hwy 101/Munsel Lake Road	$200,000	S,P	N
B-3	Extension of Spruce Street north of Munsel Lake Road	$900,000	P,L	N
B-1	Phase 2 of Oak Street extension	$936,000	S,L,P	N
B-1	Phase 3 of Oak Street extension	$936,000	S,L,P	N
C-2	Kingwood/9th Street improvements	$225,000	S,C,L	N
	Transit Plan implementation	$100,000 (est)	S,L,P	N
I-2	Extend bike/ped lanes on Rhody to Marine Manor	$50,000	F,S,L	N
I-4	Construct 12th Street bike/ped path	$90,000	F,S,L	N
	Implement West 9th Street network	$1,425,000	S,C,L,P	N
E-1	Construct passing lanes on Hwy 126		F,S	N
J-2	Replace culvert under Hwy 126, inc. provision for Estuary Trail		F,S	N
A-5a, A-5b	Construct Quince St. improvements	$440,000	F,S,L,P	N
D-1	Identify options for 12th Street/Oak/Kingwood connection	$50,000	S,C,L	N
Total Projected Cost		**$5,667,000.00**		
Long Range Priorities (no order in list) 15-25 Years				
	Add capacity to Siuslaw River Bridge		F,S	N
	Construct natural gas pipeline to Florence			N
I-1	Construct Heceta Beach Road bike/ped lanes	$150,000	F,S,L	N
I-2	Extend bike/ped lanes on Rhody to Sutton Lake area	$150,000	F,S,L	N
Total Projected Cost		**$1,090,000.00**		

*F-Federal, S-State, L-Local, P-Private

These tables need to be further broken down into a five year plan, and financing specifically targeted for completion of the proposed projects.

Historic, Current and Projected Funding

1. State/Federal

The *1999 Oregon Highway Plan* projects total state and federal highway revenues as follows:

Table 12-5-C-1a

Year	State	Federal	Total
1998	$346,983,057	$184,257,079	$531,240,136
1999	364,822,730	211,757,470	576,580,200
2000	369,977,182	217,371,205	587,348,387
2001	375,263,272	222,597,185	597,860,457
2002	381,364,362	227,419,252	608,783,614
2003	386,202,160	229,322,523	615,524,683
2004	392,805,296	279,526,785	672,332,081
2005	398,948,938	279,526,785	678,475,723
2006	405,115,216	279,526,785	684,642,001
2007	410,579,143	279,526,785	690,105,928
2008	415,577,315	279,526,785	695,104,100
2009	420,216,752	279,526,785	699,743,537
2010	424,528,797	334,432,142	758,960,939
2011	427,621,303	334,432,142	762,053,445
2012	431,120,636	334,432,142	765,552,778
2013	434,492,387	334,432,142	768,924,529
2014	437,387,939	334,432,142	771,820,081
2015	440,453,086	334,432,142	774,885,228
2016	442,803,615	400,318,571	843,122,186
2017	445,689,041	400,318,571	846,007,612
Total	**$8,151,952,226**	**$5,777,115,420**	**$13,929,067,646**

The main sources of these funds are state road user revenues and federal funds, primarily TEA-21 funds. State user revenues provide approximately 65% of transportation revenues for the state. Highway user revenues are distributed as follows: 60% state, 24% counties, 16% cities. TEA-21 will provide over $246 million annually for transportation in Oregon for fiscal years 1998-2003. After this, Congressional authorization is required for further funding.

The 1999 *Oregon Highway Plan* also presents a Feasible Needs Analysis as follows:

Table 12-5-C-1b

Program	Average Annual Investment Assuming no Inflation (millions)	20-year total investment assuming no inflation (millions)	Average Annual Investment Assuming 3.3% Inflation (millions)	20-year total investment assuming 3.3% inflation (millions)
Modernization	$339	$6,785	$471	$9,428
Preservation	172	3,436	239	4,774
Maintenance	159	3,180	221	4,419
Bridge	133	2,664	185	3,702
Safety	35	694	48	964
Operations	29	576	40	801
Special Programs	29	581	40	807
Construction support	67	1,339	93	1,861
Planning	30	590	41	820
Administration	8	160	11	222
Central Services Assessment	48	950	66	1,321
Total	**$1,048**	**$20,955**	**$1,456**	**$29,119**

2. Lane County funds

Revenue

County road funds are a combination of federal "timber" funds, federal aid, state fund exchange program, state highway user taxes and fees, interest and assorted other smaller sources. The passage of the Rural Schools and Community Self Determinations Act of 2000 has provided funding for road purposes greater than the levels anticipated under the previous Timber Receipt guarantee. Over the next 6 years, these funds should exceed the County operations, maintenance, preservation and modernization expenses identified in the Capital Improvement Plan (CIP) County funding strategy is to fund operations, maintenance and preservation costs of the County road system with user fees from the State Highway Fund, and to fund modernization and revenue sharing with 'timber' funds. County/City Road Partnership payments were decreased incrementally from $5.09 million in FY 96 to $2.5 million in FY 00, and are projected to remain at the $2.5 million level throughout the period of the CIP.

The excess revenues have allowed the County to create the Roads Capital Project Partnership Program for unfunded safety and modernization projects of importance to Lane County communities. The County may also accelerate the replacement of road culverts to restore fish passage in order to comply with the Endangered Species Act

listing the Coastal Coho and Spring Chinook as threatened species. Table 12-5-xxx shows historic and proposed general road fund revenue from FY 1998-99 to FY 2001-02.

Table 12-5-C-2a

Type of Fund	1998-99	1999-00	2000-01	2001-02
General Road Fund	$33,508,925	$35,550,744	$75,229,900	$77,420,771

The breakout of fund sources is shown below:

Table 12-5-C-2b

Source	1998-99 (000's)	1999-00 (000's)	2000-01 (000's)	2001-02 (000's)
Federal Timber Receipts	$15,532	$14,903	$14,620	$18,744
State Highway User Taxes & Fees	13,894	14,304	13,740	13,922
Federal Aid/Exchange Programs	2,678	1,498	3,216	1,120
Investment Earnings	2,592	2,136	1,900	2,000
Reserve Transfers	37,723	41,460	40,802	40,872
Miscellaneous	2,089	1,542	1,312	763
Total	**$74,508**	**$75,843**	**$75,230**	**$77,421**

Expenses

The draft '01 – '05 Lane County CIP projects expenses by program as follows:

Table 12-5-C-2c

Annual Totals by Category	FY 00-01	FY 01-02	FY 02-03	FY 03-04	FY 04-05	5-Year Total
Right-of-way	515,000	650,000	595,000	1,560,000	650,000	3,970,000
General Construction	11,740,000	6,550,000	2,400,000	12,600,000	9,500,000	42,790,000
Pavement Fund	2,300,000	2,300,000	2,300,000	2,300,000	2,300,000	11,500,000
Structures	2,125,000	905,000	1,860,000	0	0	4,890,000
Safety Improvements	635,000	625,000	125,000	125,000	0	1,510,000
Contingency	1,731,500	1,103,000	728,000	1,658,500	1,245,000	6,466,000
Subtotal – County Projects	19,046,500	12,133,000	8,008,000	18,243,500	13,695,000	71,126,000
Payments to other	2,800,000	2,500,000	2,500,000	2,500,000	2,500,000	17,875,000

Table 12-5-C-2c

Annual Totals by Category	FY 00-01	FY 01-02	FY 02-03	FY 03-04	FY 04-05	5-Year Total
Government Agencies						
Roads for Assisted Housing Projects	900,000	0	1,000,000	0	0	1,900,000
Community & Economic Development Fund	3,175,000					3,175,000
Subtotal Payments & Special Projects	$6,875,000	$2,500,000	$3,500,000	$2,500,000	$2,500,000	$17,875,000
Total	**25,921,500**	**14,633,000**	**11,508,000**	**20,743,500**	**16,195,000**	**89,001,000**

3. City of Florence

Table 12-5-C-3a below shows transportation revenues and expenditures in Florence from FY 96/97 to FY 01/02.

Table 12-5-C-3a. Transportation Funding

Revenue	FY 96/97	FY 97/98	FY 98/99	FY 99/00	FY 00/01	FY 01/02
Working Capital	$74,424	722,003	-81,842	54,784	230,000	260,000
Interest	30,646	13,735	10,797	4106	7500	10,000
State Highway User Fees	255,882	280,247	291,751	303,139	311,000	315,000
State Grant	0	235,493				
Lane Co. Economic	0	964,021				
Lane Co. Timber	231,780	297,184	0	110,411	110,000	115,000
ISTEA/TEA-21	0	0	85,748	0	27,000	34,000
9th St. Sidewalk	1040	372	587	443	400	2000
Oak Street Grant						936,000
Oak Street LID						577,000
Debt Proceeds	611,000	300,000	345,459			
Assessment Revenue	0	220,600				
General Fund transfer			0		65,000	30,000
SDCs	0	150,000	39,774	150,000	0	20,000

Table 12-5-C-3a. Transportation Funding

Revenue	FY 96/97	FY 97/98	FY 98/99	FY 99/00	FY 00/01	FY 01/02
Water fund transfers	0	0	0	0	0	20,000
Sewer fund transfers	0	0	0	0	0	
Street light fund transfers	1250	0	0	0	0	
State loan	0	0				
School District	0	0	0	15,000	139,000	0
Other	22,282	633	75	45,000	0	100
Total	$		$			

Table 12-5-C-3a indicates that funding received from the State Highway User Fund and from the County/City Road Partnership Program form the backbone of the City's transportation program. Special projects such as the construction of Kingwood or of Oak Street have been funded with special grant/loan programs that are project specific. State highway funds have been increasing gradually, while County timber funds were decreasing. However, the passage of the federal Rural Schools and Community Self Determination Act has not only stabilized County road funding, but has provided another source of special funds for capital projects.

Florence also occasionally participates in the State's Federal Aid/Exchange Program which provides an exchange of federal funds allocated to the City with state funds at $0.94 to the dollar. This allows use of funds without the very strict operational requirements attached to federal funding.

Capital projects can be financed by a Local Improvement District (LID), in which the cost of the project is determined, and allocated to abutting property owners on a benefitted area basis. The City often participates in the cost, thus reducing the assessments to property owners. Sidewalk construction/replacement is an example of a use of an LID. The construction of Spruce Street north of Munsel Lake Road could be done through an LID.

Transfers from System Development Charges (SDC) are revenues from a fee assessed on new development in the City to pay for upgrades to systems made necessary by the new growth. A portion of the sewer plant improvements was paid by the sewer SDCs, and the Oak Street construction will include some street SDCs for oversizing of the street.

Increased expenditures on staffing and capital projects have allowed the City to keep up with new construction needs and slowly meet maintenance needs. In the early 1990's, the City constructed 81 blocks of new street and overlaid or resurfaced over 100 blocks of existing streets. In the mid-90's, Kingwood was constructed to encourage economic development, following the downturn in timber and fisheries employment. Oak Street construction in 2001/2002 will meet present and future residential and commercial needs.

The charts following this section provide information about some of the funding programs available for transportation needs. The City is well aware of the need for grants and loans for special projects. Since 1996, the City has obtained, or for some 2001 projects, has applied for the following special grants/loans for transportation projects:

Table 12-5-C-3b

Grant/Loan Program	1996	1997	1998	1999	2000	2001
County Economic Development	1,080,000(G)					
State Economic Development	611,000(L) 249,514(G)					
Transportation & Growth Management				58,000(G)		112,000(G)
Local Street Networks					936,000(G)	
USDA Rural Development					24,000(G)	
Strategic Reserve Fund						22,042(G)
Nat'l Scenic Byways						312,770(A)(G)
County Capital Project Partnership						475,000(A)(G)

Note: Grant amounts followed by A have been applied for. All others have been approved.
G-grant, L-loan

4. Other Funding Sources

Airport Improvements
Federal Aeronautics Administration (FAA)
Economic Development (several sources)

Waterway Related Resources

US Army Corp of Engineers
US Coast Guard
US Economic Development Administration
US Environmental Protection Agency
National Marine Fisheries
National Oceanic and Atmospheric Administration (NOAA)

Table 12-5-G-2. Summary of Transportation Funding Programs: Federal Sources

Program Name and Description	Potential for Florence
ISTEA/TEA-21 ISTEA-21 is designed to provide flexibility in funding transportation projects. TEA-21 established several funding programs including the: (1) National Highway System, (2) Interstate Program; (3) Surface Transportation Program; (4) Congestion Management and Air Quality Improvements Program; and (5) National Scenic Byways Program.	As a grant/transfer program, TEA-21 provides opportunities to fund selected projects meeting the program's funding criteria. As with all grants, cost to local residents are low, political acceptability is high, and financial capacity and stability are less predictable than for many local funding sources. Florence should coordinate with the ODOT Region 2 planner, and the Lane Council of Governments to identify projects that are suitable for funding under TEA.-21
Surface Transportation Program (STP) The Surface Transportation Program was authorized by Title I of the ISTEA. The STP funds are allocated to the State and suballocated to cities and counties on a formula basis by the Transportation Commission. STP funds may be used for any road that is not functionally classified as a local or rural minor collector and must be included in the Transportation Improvement Program to receive STP funds.	Each eligible city is suballocated a portion of the State's STP funds. Cities can propose projects through their regional ODOT offices. The project sponsor (County, City, or State) must request inclusion of the project in the annual Transportation Improvement Program. The STP provides opportunities to fund selected projects that meet program criteria. Florence should coordinate with the ODOT Region 2 planner, and the Lane Council of Governments to identify projects that are suitable for funding under ISTEA.
Transportation Enhancement Program The ISTEA includes provisions that require the State to set aside a portion of its Surface Transportation Program (STP) funds for projects that will enhance the cultural and environmental value of the State's transportation system. Eligible transportation enhancement projects must be directly related to the intermodal transportation system. This program funds enhancements including pedestrian and bicycle facilities; preservation of abandoned railway corridors; landscaping and other scenic beautification; control and removal of outdoor advertising; acquisition of scenic easements and scenic or historic sites; scenic or historic highway programs; historic preservation; rehabilitation and operation of historic transportation buildings, structures, or facilities; archaeological planning and research; and mitigation of water pollution due to highway runoff.	Enhancement project applications are submitted to the applicant's ODOT Region Manager. Proposed projects are then screened and prioritized by the Transportation Enhancement Committee. Approved projects receive funding under the State's transportation enhancement activities program. Transportation enhancement projects are selected as part of the State Transportation Improvement Program (STIP) development. This program provides opportunities to fund selected projects that meet program criteria. Florence may be able to secure funds through this program for the Downtown Enhancement Program and Bikeway Modifications. Florence should coordinate with the ODOT Region 2 planner, and the Lane Council of Governments to identify projects that are suitable for funding under ISTEA.
Highway Enhancement System (HES) The FHWA Highway Enhancement System Program provides funding for safety improvement projects on public roads. Safety improvement projects may occur on any public road and must be sponsored by a county or city. To be eligible for Federal aid, a project should be part	The HES provides opportunities to fund selected projects that meet program criteria. The Highway 101/126 intersection appears to be eligible for HES funds. Florence should coordinate with the ODOT Region 2 planner, and the Lane Council of Governments to identify projects that are suitable for funding under ISTEA.

Table 12-5-G-2. Summary of Transportation Funding Programs: Federal Sources

Program Name and Description	Potential for Florence
of either the annual element of a Regional Transportation Plan or the annual listing of rural projects by ODOT, although they do not have to be part of the approved State Highway Improvement Program to receive HES funding.	
Timber Receipts (USFS) The U.S. Forest Service and Bureau of Land Management share revenue from timber receipts with counties in Oregon. The share of forest revenues is no longer directly tied to the level of timber harvests. The outlook for forest revenues is a gradual decline due to the "spotted owl compromise" under which counties are guaranteed revenues on a schedule set by Congress that gradually reduces the total amount of payments to Lane County over the next decade to about $25 million annually.	U.S. Forest Service revenues have permitted Lane County to make significant capital improvements to its road system. Forest revenues determine how many capital improvements Lane County can participate in. With respect to Florence, timber revenues get mixed in with other sources to the Lane County Road Fund. The County Road Fund provides shared revenue to the City of Florence and can be used to fund maintenance and improvements on County roads within the Florence UGB. There should be little debate about continuing to use this source of funding.
Community Development Block Grants (CDBG) Community Development Block Grants (CDBG) are administered by the Department of Housing and Urban Development (HUD) and could potentially be used for transportation improvements in eligible areas.	CDBG has the potential to provide funding for eligible projects, but, the prospects for increased municipal revenues from CDBG are limited. Long-term stability of this source is uncertain. Cities have traditionally used CDBG funds for projects other than transportation. Although CDBG funds could be used for transportation, the City may have other priorities for this funding source. Overall potential of this source for transportation funding is low.

Table 12-5-G-3 Summary of Transportation Funding Programs: State Sources

Program Name and Description	Potential for Florence
State Highway Fund The State Highway Fund is composed of gas taxes, vehicle registration fees, and weight-mile taxes assessed on freight carriers. In 1994, the state gas tax was $0.24 per gallon. Vehicle registration fees were $15 annually. Revenues are divided as follows: 15.57 percent to cities, 24.38 percent to counties, and 60.05 percent to the State Highway Division. The city share of the State Highway Fund is allocated based on population.	Florence has received an average of about $247,000 annually from this source in recent years. Revenues from this source are relatively stable, but, because the State Highway Fund is not indexed for inflation, the relative share could decrease if taxes are not increased. The per capita allocation of State Highway Fund revenues will probably not increase significantly. The City should continue to use this source to fund street maintenance and other projects.
Special Public Works Funds (SPWF) The State of Oregon allocates a portion of revenues from the state lottery for economic development. The Oregon Economic Development Department provides grants and loans through the SPWF program to construct, improve and repair infrastructure to support local economic development and create new jobs. The SPWF provides a maximum grant of $500,000 for projects that help create a minimum of 50 jobs.	Cities and counties can use SPWF funds for transportation projects. These funds may be available for the Downtown Enhancement Program and other projects that support local economic development, such as developing infrastructure in office or industrial parks. As with all grant programs, stability and long-term potential of this source is uncertain. Florence should contact LCOG or OEDD to pursue funds through this source.
Transportation Access Changes The most familiar form of a transportation access charge is a bridge or highway toll. Transportation access charges are most appropriate for high-speed, limited access corridors; service in high-demand corridors; and bypass facilities to avoid congested areas. Congestion pricing, where drivers are charged electronically for the trips they make based on location and time of day, is the most efficient policy for dealing with urban congestion. It not only generates revenue for maintenance and improvements, but also decreases congestion and the need for capital improvements by increasing the cost of trips during peak periods. The Oregon Revised Statues allow ODOT to construct toll bridges to connect state highways and improve safety and capacity. The Statutes also allow private development of toll bridges. State authority for congestion pricing does not exist: new legislation would be required.	Toll roads are relatively uncommon in Oregon and would not receive public support unless the benefits (improved access, safety, or decreased travel times) were clearly perceived by users. Despite its clear benefits, congestion pricing will be a tough sell in Florence. Congestion pricing, if Florence chooses to pursue it, should cover all major roads and be viewed first as a congestion management strategy, and only secondarily as a revenue source.
Bikeway Projects ORS 366.514 requires at least one percent of the State Highway Fund received by the Highway Division, counties and cities be expended for the development of footpaths and bikeways. The Highway Division	The bikeway program provides opportunities to fund bicycle and pedestrian projects that meet program criteria. However, 1% of Florence's share of the State Highway Fund, around $2,000?3,000, will not meet the $330,000 bikelane modification costs identified in

Table 12-5-G-3 Summary of Transportation Funding Programs: State Sources

Program Name and Description	Potential for Florence
administers the bicycle funds, handles bikeway planning, design, engineering and construction, and provides technical assistance and advice to local governments concerning bikeways.	Table 12-5-G2. The City should work with the ODOT Region 2 Planner to identify projects that are suitable for funding under this program.
Immediate Opportunity Fund The Immediate Opportunity Fund is intended to support economic development in Oregon by providing road improvements where they will assure job development opportunities by influencing the location or retention of a firm or economic development. The fund may be used only when other sources of funding are unavailable or insufficient, and is restricted to job retention and committed job creation opportunities. To be eligible, a project must require an immediate commitment of road construction funds to address an actual transportation problem. The applicant must show that the location decision of a firm or development depends on those transportation improvements, and the jobs created by the development must be "primary" jobs such as manufacturing, distribution, or service jobs.	The fund is financed at $5 million per year to a maximum of $40 million through Fiscal Year 1996. The maximum amount available for a single project is $500,000 or 10 percent of the annual program level. Matching funds are required by the Oregon Transportation Commission, and may be provided by either public or private sources. Donations of right-of-way can be considered to be part of the match. Preference is given to project proposals offering a match of 50 percent or more.The Immediate Opportunity Fund program provides opportunities to fund selected capacity increasing projects that aid in business retention or development. The City should contact their local OEDD representative to determine if they are eligible for grants under this program.

Source: Compiled by ECONorthwest

If additional revenue sources are needed, Table 12-5-G4 shows the range of possibilities that the City could consider. A "local option" gas tax may be politically attractive because it places some of the burden on non-residents. In the last ten years, however, five cities sought voter approval of a local gas tax but only one succeeded--Woodburn. Local gas taxes are typically opposed with claims it will chase tourists away and force local gasoline dealers to close. A $.01 or $.02 per gallon gas tax may generate about $100,000 in annual revenue. We do not have enough information to make an accurate estimate. A local option gas tax would require citywide voter approval.

Table 12-5-G-4 Transportation Improvement Funding Programs: Local Sources

Program Name and Description	Potential for Florence
Special Assessments / Local Improvement Districts Special assessments are charges levied on property owners for neighborhood public facilities and services, with each property assessed a portion of total project cost. They are commonly used for such public works projects as street paving, drainage, parking facilities, and sewer lines. The justification for such levies is that many of these public works activities provide services to or directly enhance the value of nearby land, thereby providing direct and/or financial benefit to its owners. Local Improvement Districts (LIDs) are a variation on special assessments designed to fund improvements that have local benefits. Through a local improvement district (LID), streets or other transportation improvements are constructed and a fee is assessed to adjacent property owners. The City of Florence has used LIDs to fund capital improvement projects.	Special assessments require property owners pay assessments for transportation infrastructure. If based on trip generation rates, this approach is somewhat equitable; however, individuals have different transportation needs and habits. Designing a fee structure that recognizes these differences would be difficult to administer. With respect to LIDs, as long as the projects directly benefit the local residents, LIDs are a relatively equitable means of funding transportation improvements. Florence should continue to use special assessments to finance transportation improvements wherever property owner support appears possible. Projects that appear to most benefit property owners are street extensions and connections, and the Downtown Enhancement Program.
System Development Charges (Impact Fees) System Development Charges (SDCs) are fees paid by land developers intended to reflect the increased capital costs incurred by a municipality or utility as a result of a development. Development charges are calculated to include the costs of impacts on adjacent areas or services, such as increased school enrollment, parks and recreation use, or traffic congestion. Numerous Oregon cities and counties presently use SDCs to fund transportation capacity improvements. SDCs are authorized and limited by ORS 223.297 - 223.314. The City of Florence has generated over $190,000 between FY90 and FY94 from street system development charges.	The basic principle for setting a transportation SDC is to charge each new development its proportional share of the cost of constructing enough new road and other system improvements to accommodate traffic from all new development causing the need for improvement. The financial capacity of a system development charge depends on the volume of development and the amount of the SDC. Fees are seldom set to recover the full cost of developing off-site road capacity to accommodate the new development. Florence should continue to use transportation impact fees to finance transportation improvements, particularly street extensions and connections that allow properties to develop.
Local Gas Tax A local gas tax is assessed at the pump and added to existing state and federal taxes. Tillamook and The Dalles are two Oregon cities that have a local gas tax. Multnomah and Washington Counties also have gas taxes.	
Street Utility Fee Most city residents pay water and sewer utility fees. Street user fees apply the same concepts to city streets. A fee would be assessed to all businesses and households in the city for use of streets based on the	Florence could expect from $105,254 to $131,568 in revenue from a street user fee of $2.00 per month for residences. With 2,741 residences in 1990 the residential share would be $65,784 (12 x 2 x 2,741), and the commercial share would probably produce

Table 12-5-G-4 Transportation Improvement Funding Programs: Local Sources

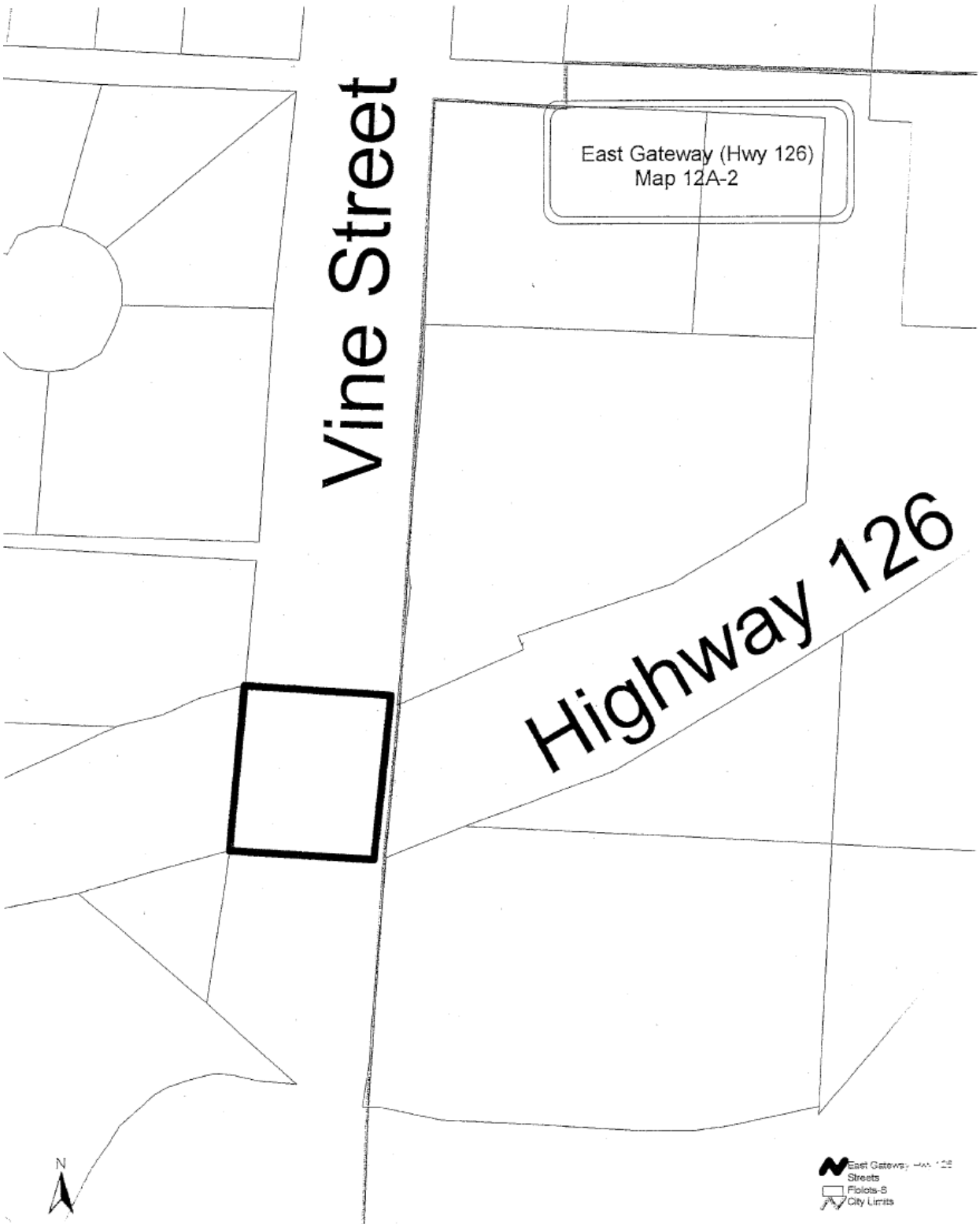
Program Name and Description	Potential for Florence
amount of use typically generated by a particular use. For example, a single-family residence might, on average, generate 10 vehicle trips per day compared to 130 trips per 1000 square feet of floor area for retail uses. Therefore, the retail use would be assessed a higher fee based on higher use. Street service fees differ from water and sewer fees because usage cannot be easily monitored. Street user fees are typically used to pay for maintenance more than for capital projects. A street utility fee currently generates about $1.3 million annually in Medford. The amount of the fee is based on the type of land use which relates to trip generation. Single-family residences pay $2.00 per month in Medford. In Ashland, a fee of $1.60 per month generates $200,000 per year.	between 60 to 100 percent of the amount paid by residential properties, or $39,470-$65,784. They could be expected to increase at a rate comparable to population in Florence. Street utility fees could provide a stable revenue stream for the City. This is a relatively equitable approach that assesses fees based on trip generation. Implementing a Street Utility Fee would require voter approval, and political support for a Street Utility Fee would probably be low.
Property Taxes Local property taxes could be used to fund transportation. The City policy, however, has been to use property taxes to fund public safety.	In Oregon and Florence, Ballot Measure 5 places a $15 per $1,000 in assessed value ceiling on property taxes. The potential for using property tax revenues for transportation purposes is limited in Florence more by the need for voter approval than by Ballot Measure 5.
Revenue Bonds Revenue Bonds are bonds whose debt service is financed by user charges, such as service charges, tolls, admissions fees, and rents. If revenues from user charges are not sufficient to meet the debt service payments, the issuer generally is not legally obligated to levy taxes to avoid default, unless they are also backed by the full faith and credit of the issuing governmental unit. In that case, they are called indirect general obligation bonds. Revenue bonds could be secured by a local gas tax, street utility fee, or other transportation-related stable revenue stream.	The City could sell revenue bonds using one of several income streams pledged to repay the bonds. Bond underwriters analyze the reliability of the revenue stream when rating the bonds and assigning an interest rate. The City should use or develop an income stream that is indexed to transportation facility use before using revenue bonds to fund transportation projects.
General Obligation Bonds General obligation (GO) bonds are financed by all taxpayers of the issuing governmental unit, which must pay the interest and principal on the debt as they come due. Municipal bonds are GO bonds issued by a local governmental subdivision, such as a city, and are secured by the full faith and credit of the issuing municipality. Oregon law requires GO bonds to be authorized by popular vote. The Oregon Bond Manual states that "In Oregon, a GO pledge means that all unrestricted resources of the issuer may be used to meet debt service, including an unlimited property tax on	The financial capacity of bonds would vary with each issuance. GO bonds provide a mechanism to raise millions of dollars for transportation projects. The City of Salem has used GO bonds for street maintenance. GO bonds are repaid with revenues generated from property taxes. Revenues used to repay bonds are not based on impacts to the transportation system and are less equitable than other funding mechanisms. Voters must approve GO bonds. GO bonds have had mixed

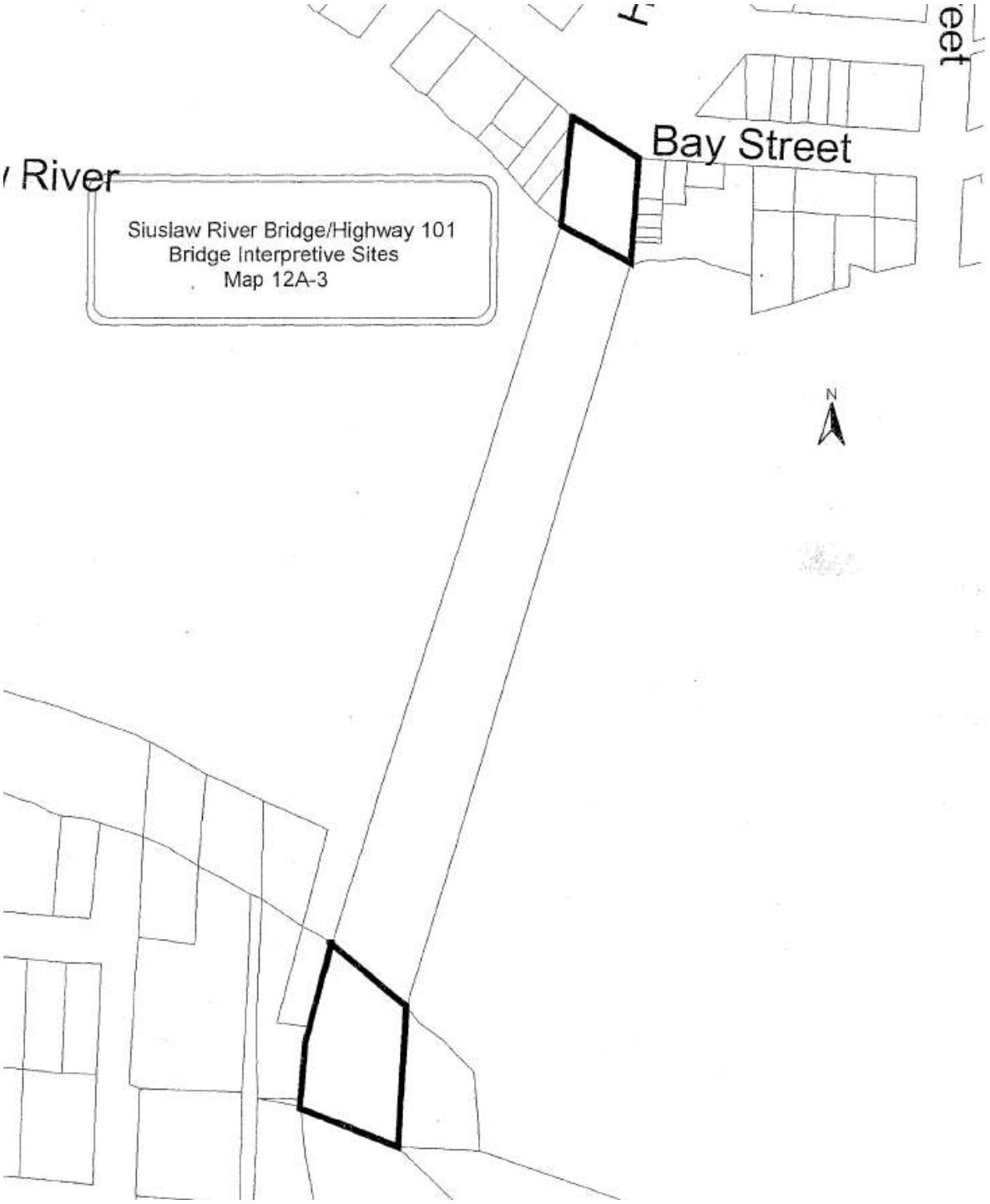
Table 12-5-G-4 Transportation Improvement Funding Programs: Local Sources

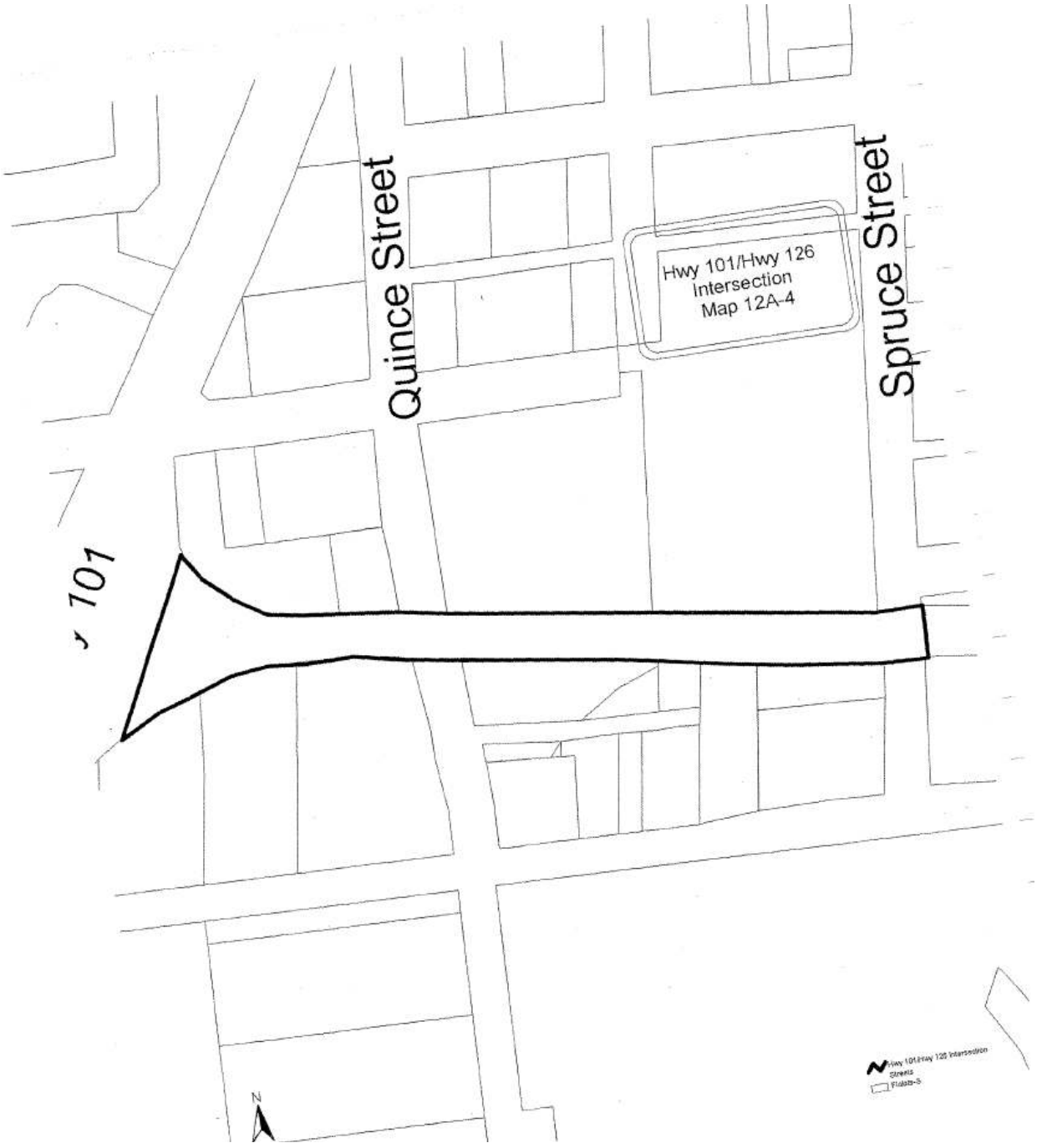
Program Name and Description	Potential for Florence
all taxable property within the district." GO bonds have the added benefit of falling outside the Measure 5 tax limitation.	results in recent elections.
Developer Installed Improvements Developer installed improvements are financed either by development related conditional off-site improvements or through system development charges based on the number of vehicles generated by a new development.	The financial capacity of development installed improvements is based on proportional amount of transportation improvements which the city desires to be funded through new development. A system development charge ordinance would need to meet State system development charge guidelines for being fair and equitable, and be voted on by the City of Florence planning commission and city council.

Source: Compiled by ECONorthwest


th Street
n Street
13th Street
12th Street
Upas Street
11th Street
Quince Street
Spruce Street
Tamarack Street
10th Street
Vine Street
9th Street
Quince Street
Highway 101/126
Enhancement Program
Map 12A-1
N

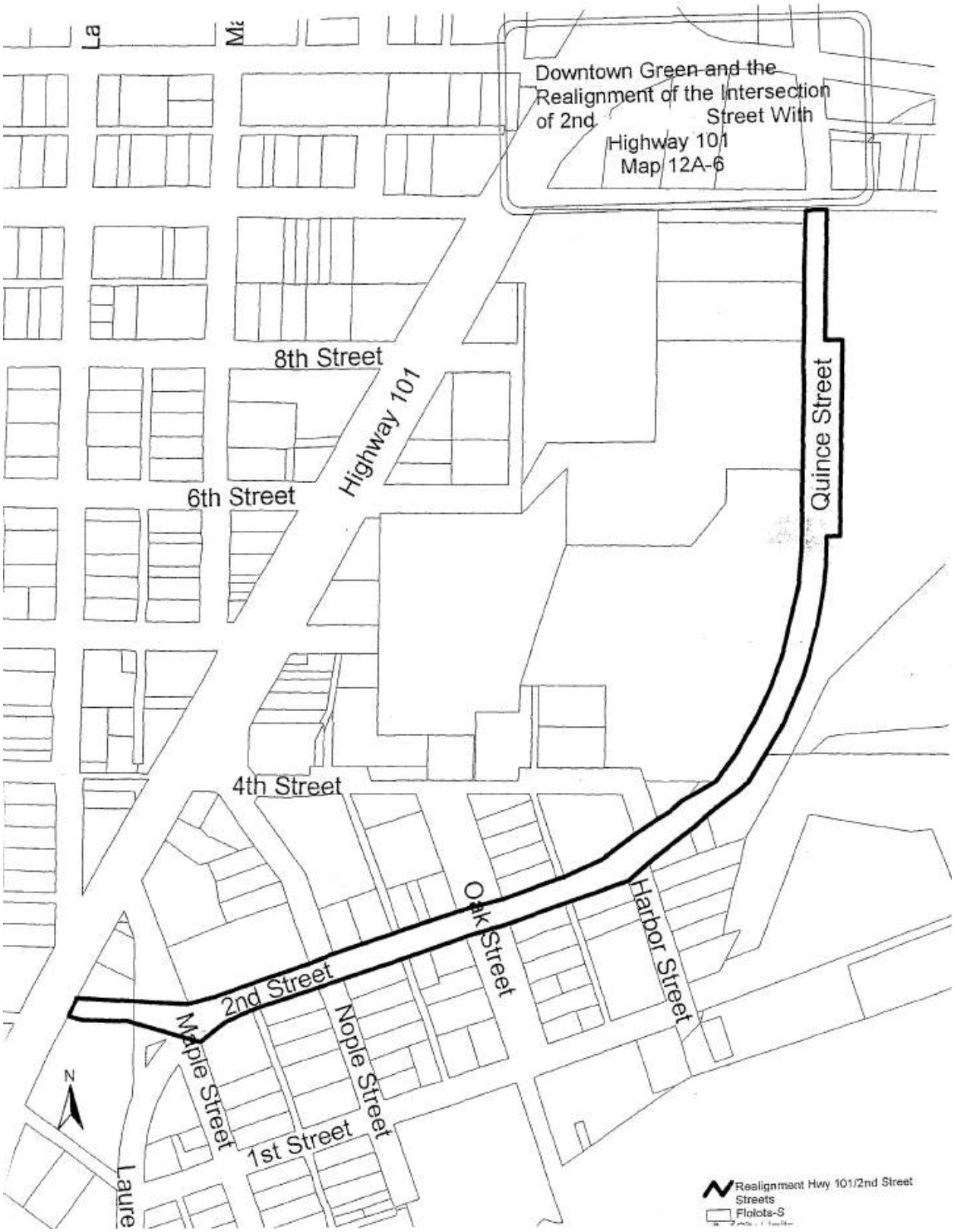

East Gateway (Hwy 126)
Map 12A-2
Vine Street
Highway 126
N
Streets
City Limits

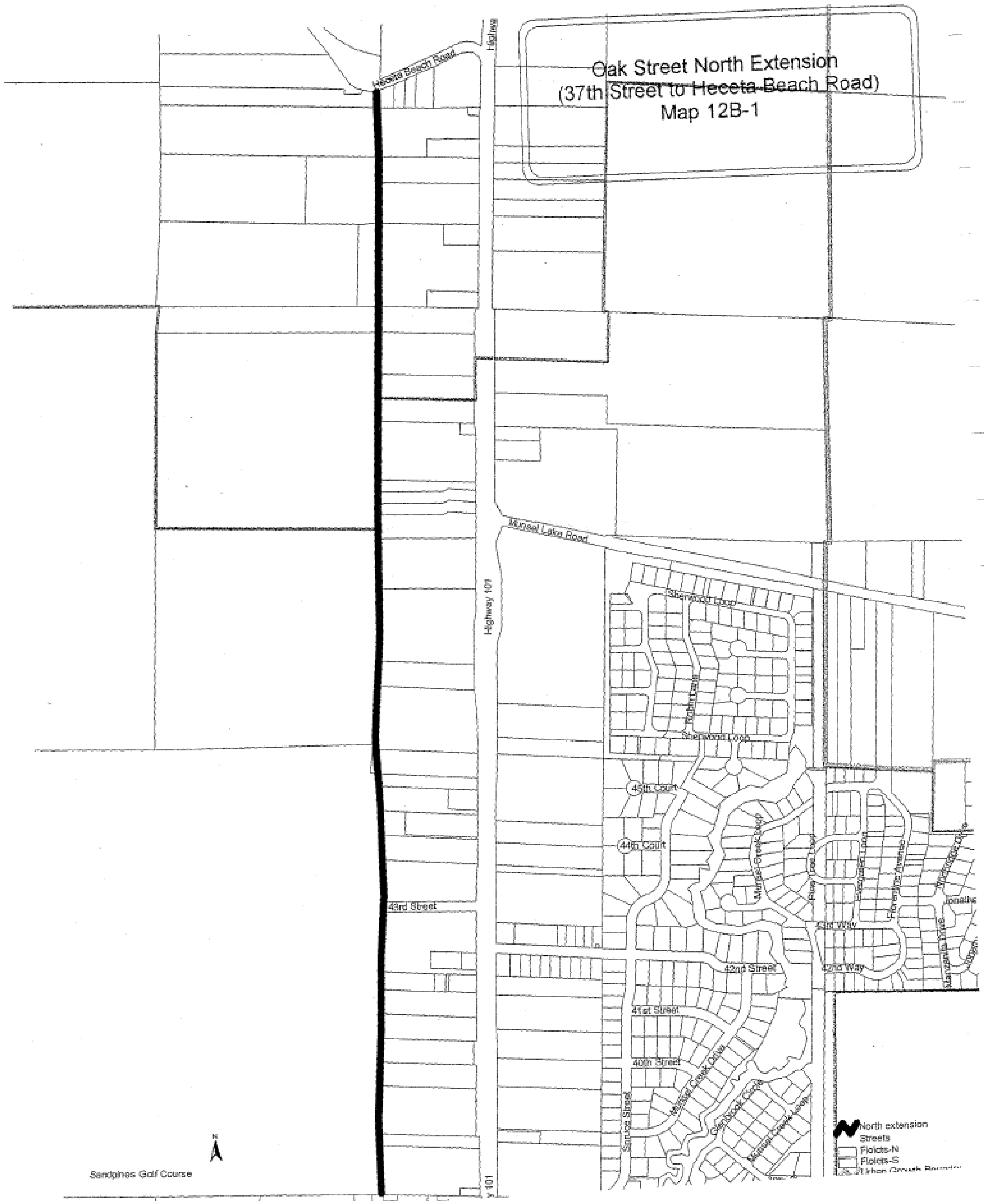

Bay Street
River
Siuslaw River Bridge/Highway 101
Bridge Interpretive Sites
Map 12A-3
N


Quince Street
Spruce Street
Hwy 101/Hwy 126
Intersection
Map 12A-4
N

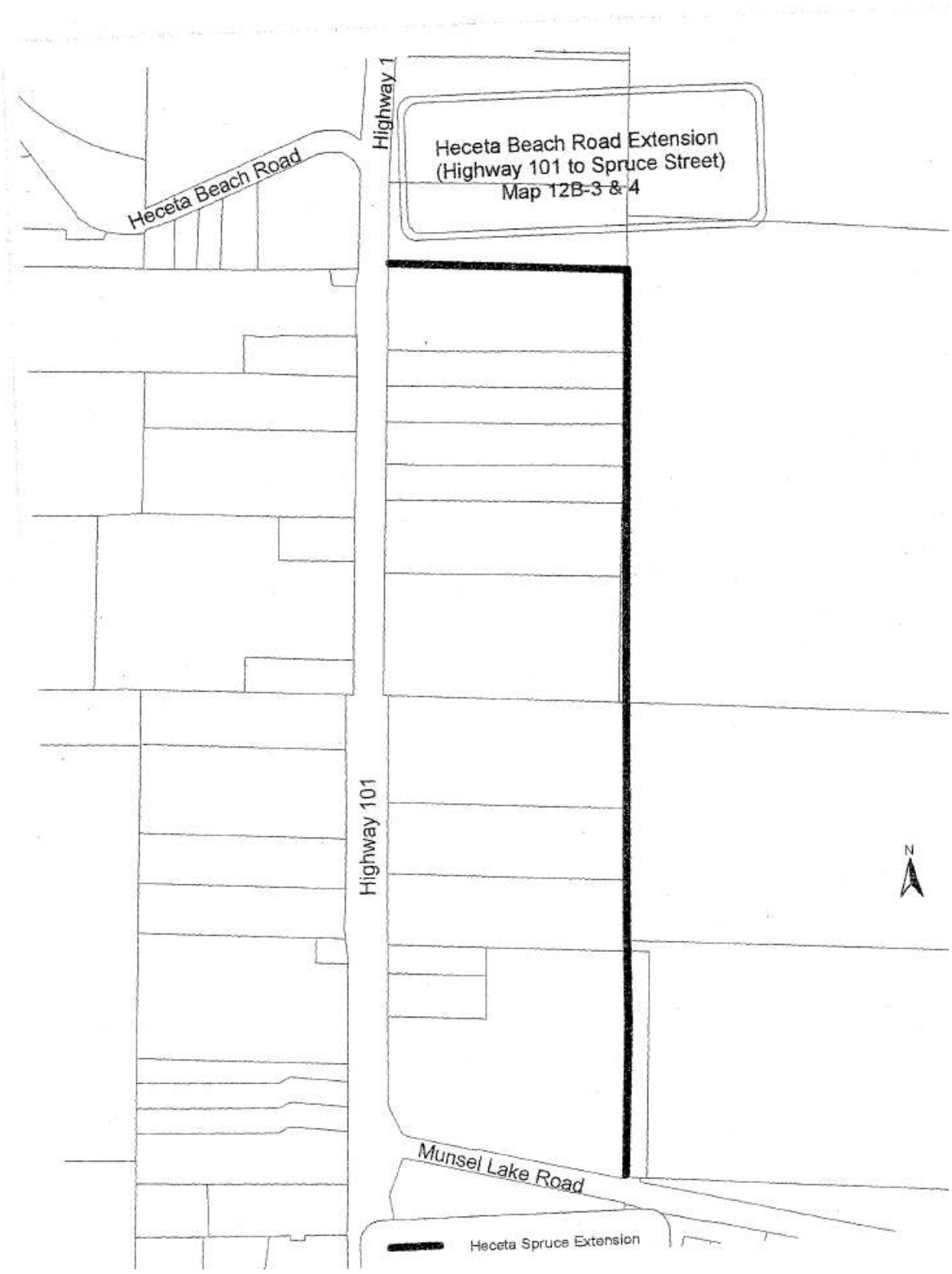

12th Street
Quince Street Improvements
Map 12A-5
Quince Street
N


Highway 101 Pedestrian
Crossing Pilot Project
Map 12A-6
8th Street
Highway 101
6th Street
N
Hwy 101 Pedestrian Crossing
Streets
Flelots-S
City Limits

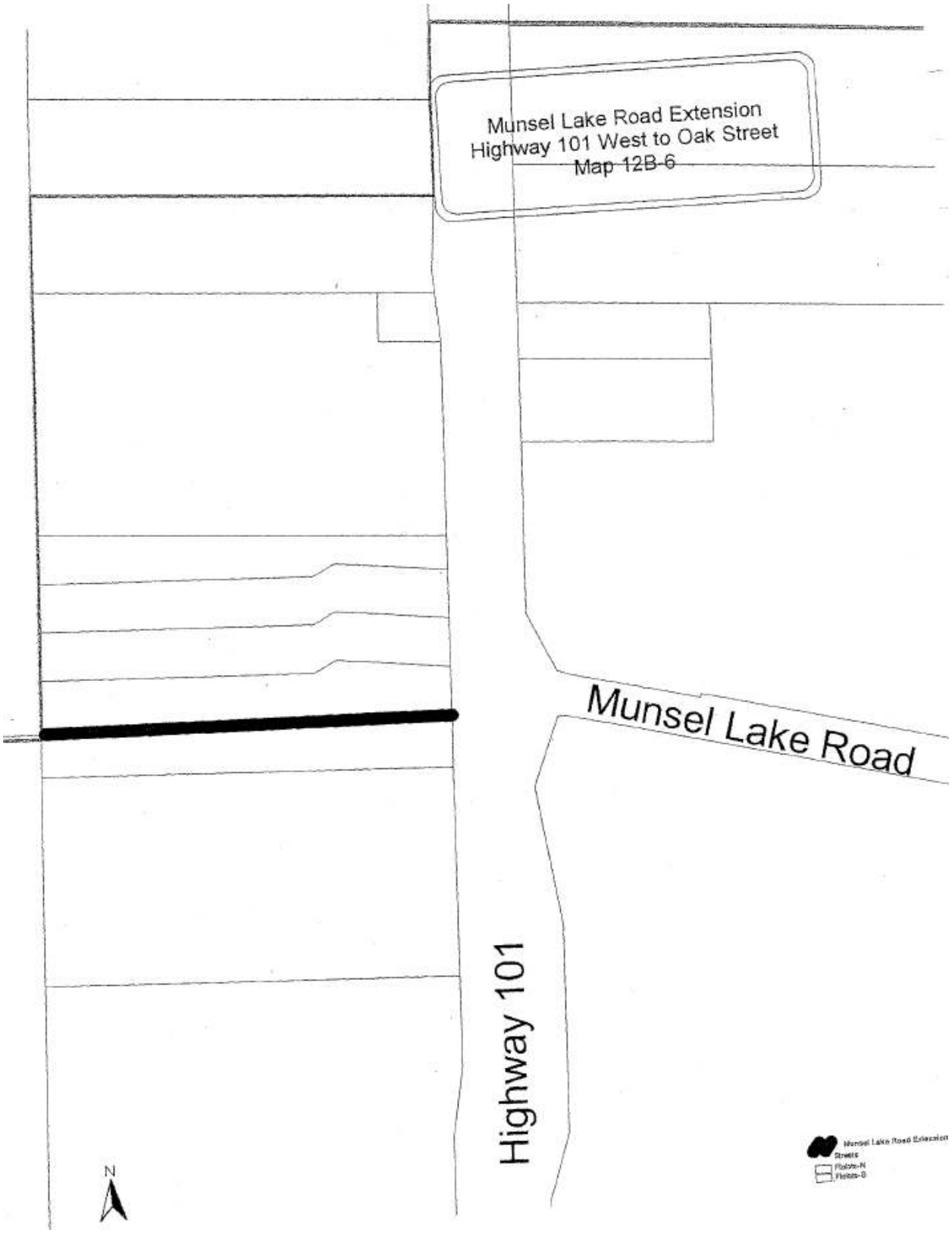

Downtown Green and the Realignment of the Intersection of 2nd Street With Highway 101
Map 12A-6
8th Street
6th Street
Highway 101
Quince Street
4th Street
2nd Street
Oak Street
Harbor Street
Maple Street
Nople Street
1st Street
N
Realignment Hwy 101/2nd Street
Streets

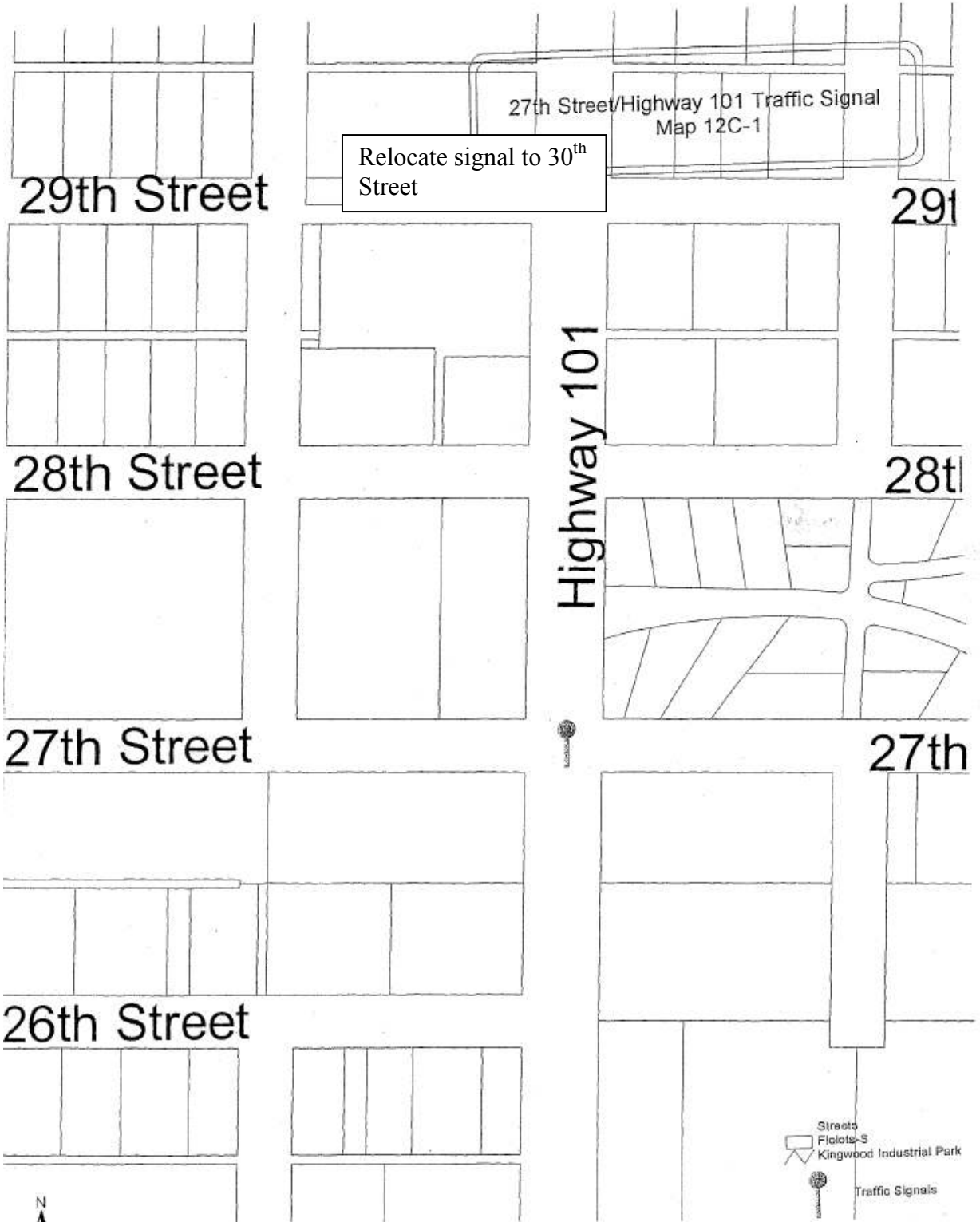

Oak Street North Extension
(37th Street to Heceta Beach Road)
Map 12B-1
Heceta Beach Road
Munsel Lake Road
Highway 101
Sherwood Loop
45th Court
44th Court
43rd Street
42nd Street
41st Street
40th Street
Spruce Street
43rd Way
42nd Way
Sandpines Golf Course
North extension
Streets

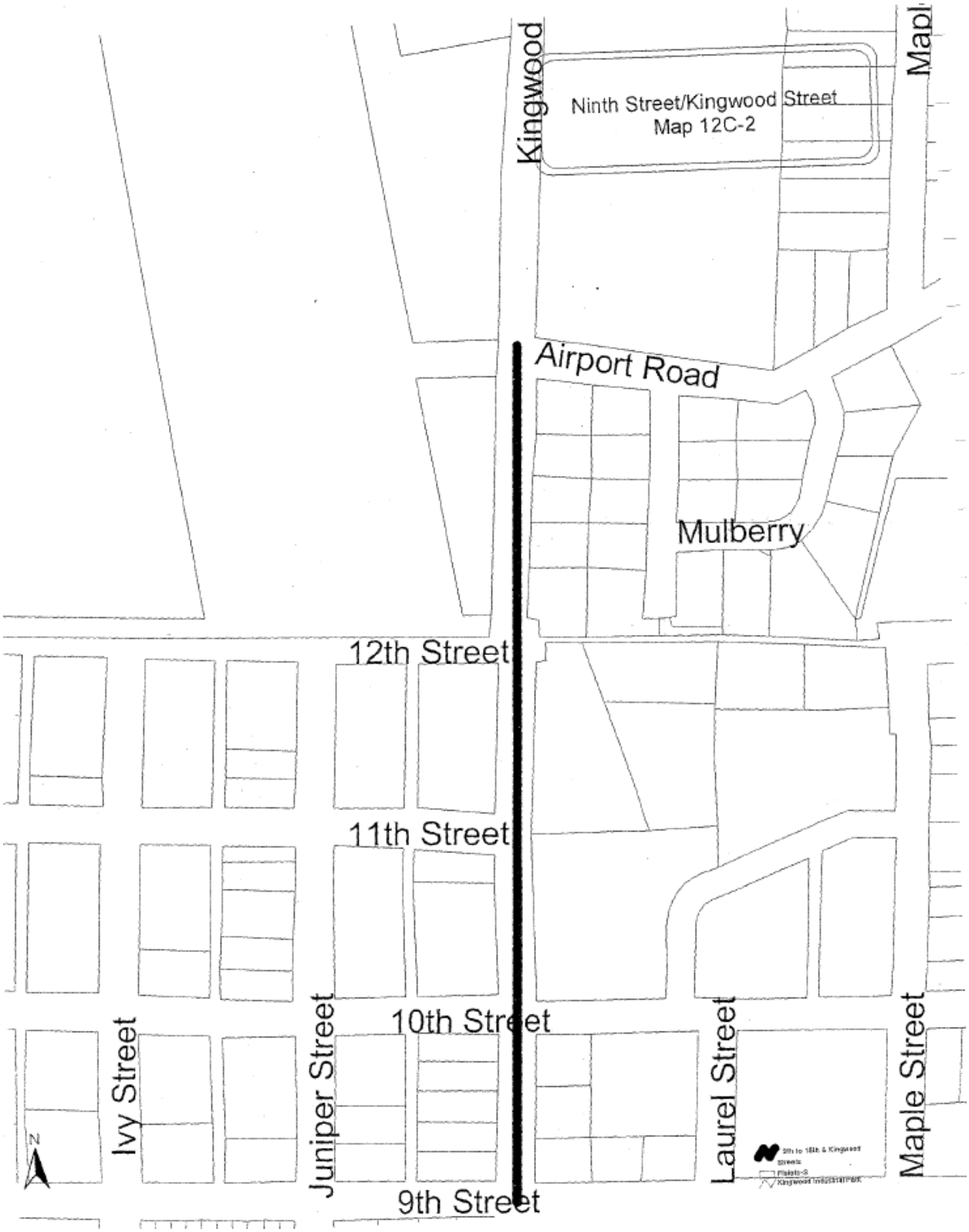

North Highway 101 Gateway
Map 12B-2
Heceta Beach Road
Highway 101
N
N 101 Gateway
Streets
Flolots-N
Flolots-S
Urban Growth Boundary
City Limits


Heceta Beach Road
Highway 1
Heceta Beach Road Extension
(Highway 101 to Spruce Street)
Map 12B-3 & 4
Highway 101
N
Munsel Lake Road
Heceta Spruce Extension


Munsel Lake Road
Highway 101 Traffic Signal
Map 12B-5
Munsel Lake Road
Highway 101
N
Streets
Flolots-N
Flolots-S
Urban Growth Boundry
City Limits
Traffic Signals

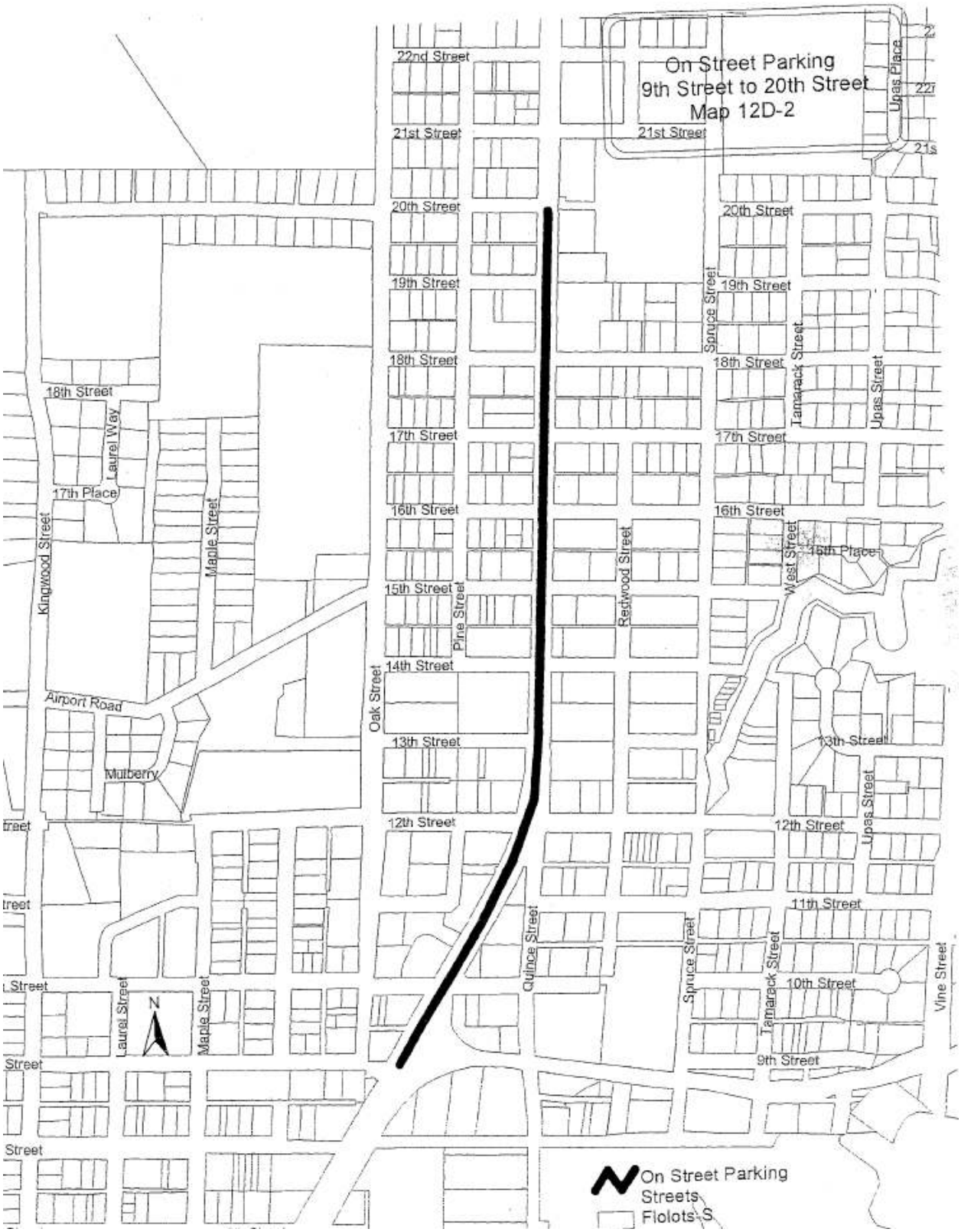

Munsel Lake Road Extension
Highway 101 West to Oak Street
Map 12B-6
Munsel Lake Road
Highway 101
N

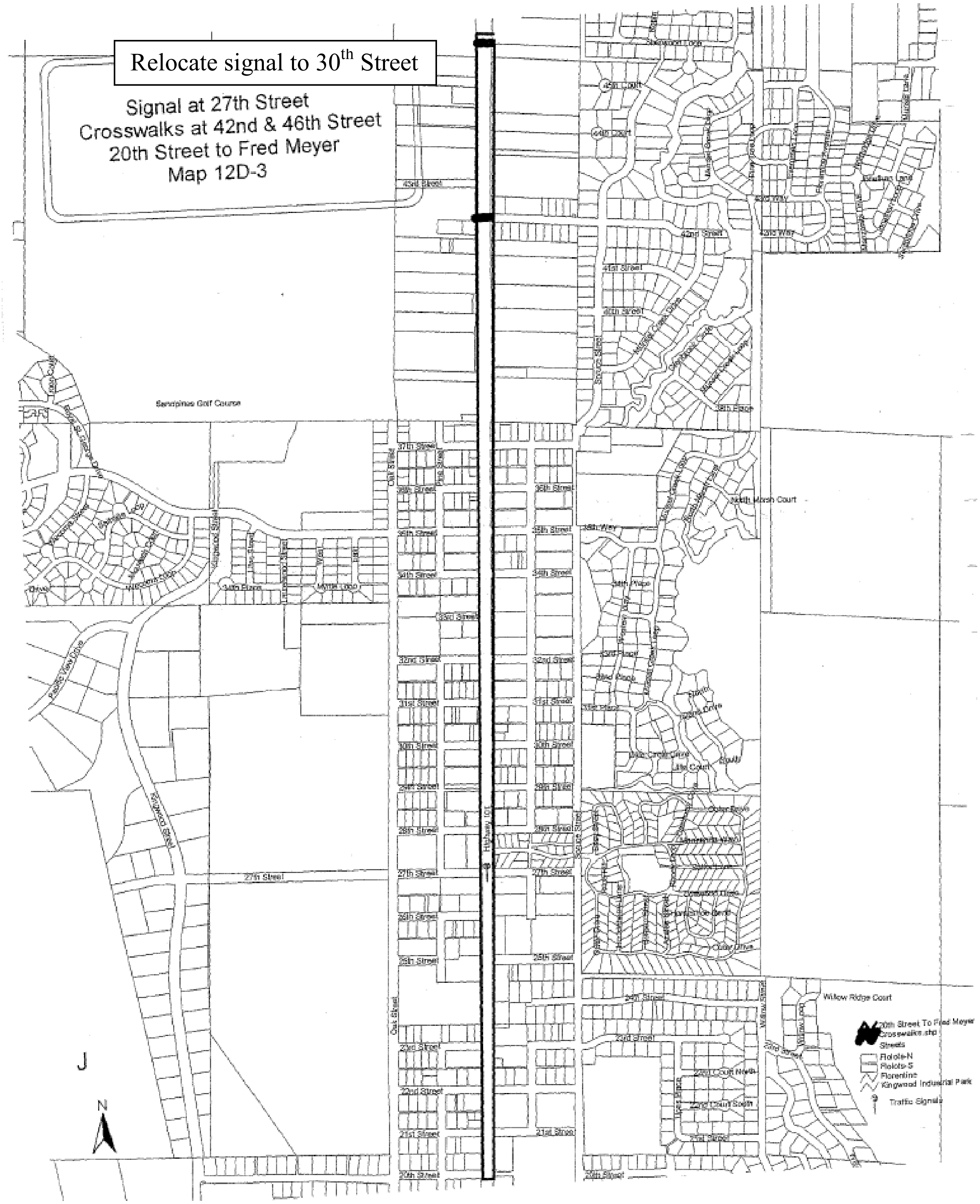

27th Street/Highway 101 Traffic Signal
Map 12C-1
Relocate signal to 30th Street
29th Street
28th Street
27th Street
26th Street
Highway 101
Streets
Kingwood Industrial Park
Traffic Signals
N


Kingwood
Ninth Street/Kingwood Street
Map 12C-2
Mapl
Airport Road
Mulberry
12th Street
11th Street
10th Street
9th Street
Ivy Street
Juniper Street
Laurel Street
Maple Street
N

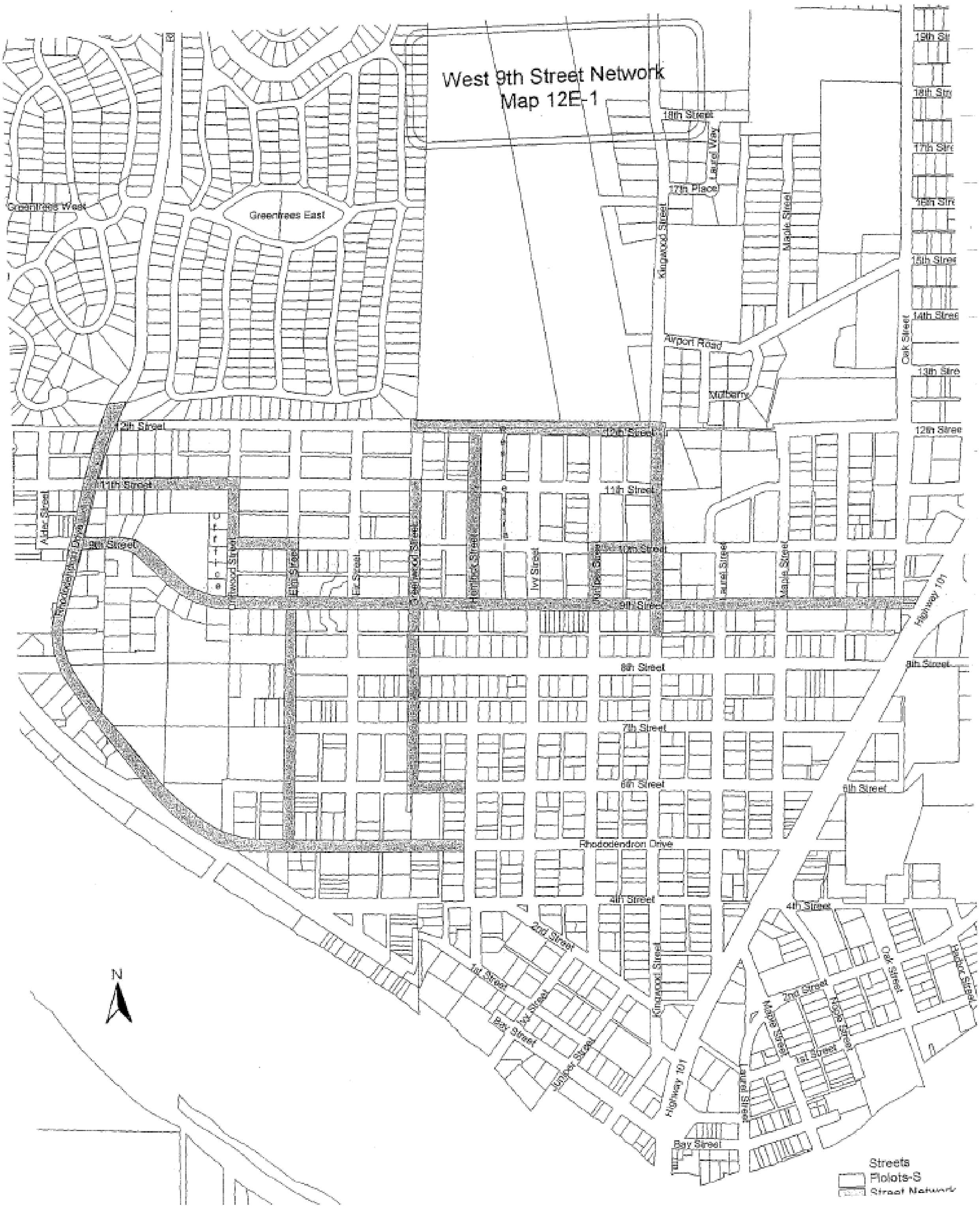

Oak Street Connection
(15th Street to 21st Street)
Map 12D-1
22nd Street
21st Street
20th Street
19th Street
18th Street
17th Street
16th Street
15th Street
14th Street
N
Maple Street
Pine Street
Redwood Street


Safety Improvements
to Crosswalks
Map 12D-2
22nd Street
21st Street
20th Street
19th Street
18th Street
17th Street
16th Street
15th Street
14th Street
13th Street
12th Street
11th Street
10th Street
9th Street
18th Street
17th Place
Laurel Way
Kingwood Street
Maple Street
Airport Road
Mulberry
Laurel Street
Maple Street
Oak Street
Pine Street
Redwood Street
Quince Street
Spruce Street
Tamarack Street
Upas Street
West Street
16th Place
Vine Street
N

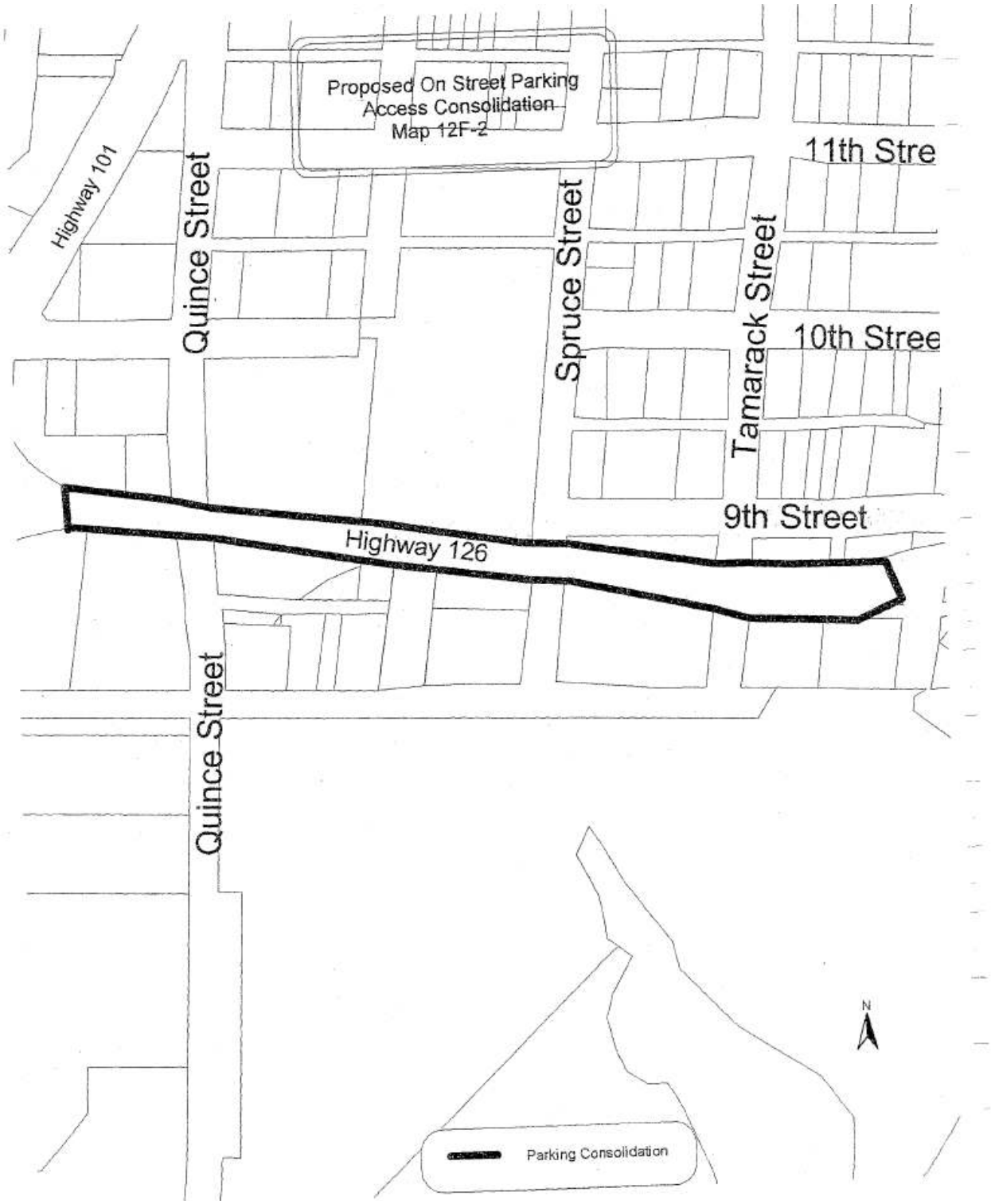

On Street Parking
9th Street to 20th Street
Map 12D-2
22nd Street
21st Street
20th Street
19th Street
18th Street
17th Street
16th Street
15th Street
14th Street
13th Street
12th Street
11th Street
10th Street
9th Street
Upas Place
Spruce Street
Tamarack Street
Upas Street
West Street
Redwood Street
Pine Street
Oak Street
Quince Street
Vine Street
Maple Street
Laurel Street
Laurel Way
Kingwood Street
Airport Road
Mulberry
17th Place
16th Place
N
On Street Parking
Streets


Relocate signal to 30th Street
Signal at 27th Street
Crosswalks at 42nd & 46th Street
20th Street to Fred Meyer
Map 12D-3
Sandpines Golf Course
27th Street
Willow Ridge Court
20th Street To Fred Meyer
Traffic Signals
N


Highway 101 Between
42nd and 46th Street
Map 12D-4
Munsel Lake Road
Highway 101
Sherwood Loop
Robin Lane
Sherwood Loop
45th Court
44th Court
Munsel Creek Loop
Pine Tree Loop
43rd Street
43rd Way
42nd Street
42nd Way
41st Street
40th Street
Munsel Creek Drive
Spruce Street
Glenbrook Circle
Munsel Creek Loop
101 42nd to 46th Streets Fields-N
N

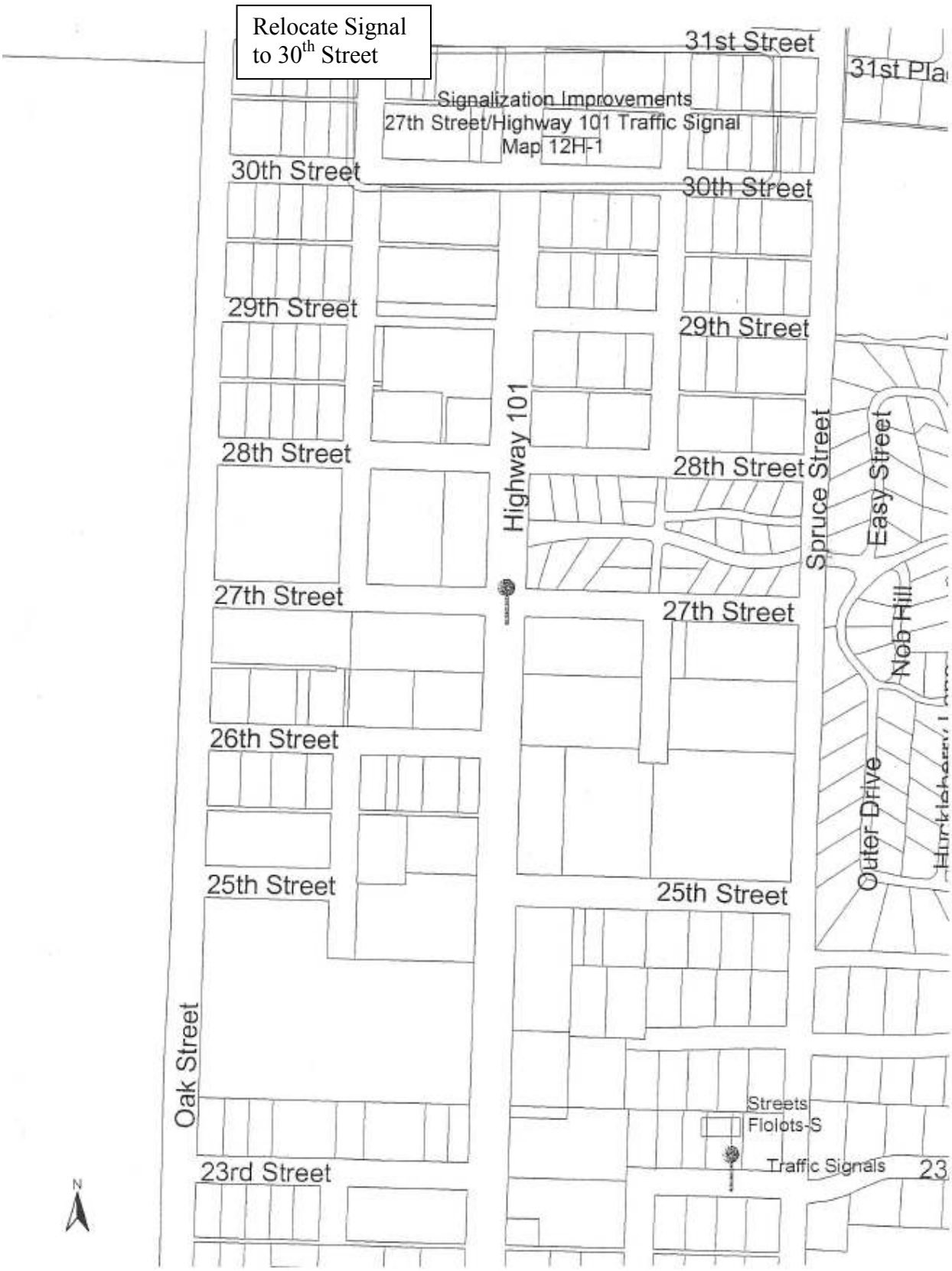

West 9th Street Network
Map 12E-1
Greentrees West
Greentrees East
18th Street
17th Place
Laurel Way
Kingwood Street
Maple Street
Airport Road
Mulberry
Oak Street
19th Street
18th Street
17th Street
16th Street
15th Street
14th Street
13th Street
12th Street
11th Street
10th Street
9th Street
8th Street
7th Street
6th Street
4th Street
2nd Street
1st Street
Bay Street
Alder Street
Rhododendron Drive
Driftwood Street
Elm Street
Fir Street
Greenwood Street
Hemlock Street
Ivy Street
Juniper Street
Laurel Street
Highway 101
Harbor Street
N
Streets
Plolots-S
Street Network


Highway 126 Access Plan
Map 12F-1
20th Street
19th Street
18th Street
17th Street
16th Street
15th Place
13th Street
12th Street
11th Street
10th Street
9th Street
Highway 126
Spruce Street
Tamarack Street
Quince Street
Redwood Street
Pine Street
West Street
Vine Street
Willow Street
West Park Drive
Willow Loop
Pine Court
Primrose Lane
Kyle Street
Kyle Court
Coastal Highlands Drive
Yew Street
Yew Court
Yew Court North
Zebrawood Court
Zebrawood Street
Martin Street
Access Consolidation
Streets
Coastal Highlands
Primrose Lane


Proposed On Street Parking
Access Consolidation
Map 12F-2
Highway 101
Quince Street
Spruce Street
Tamarack Street
11th Stre
10th Stree
9th Street
Highway 126
Quince Street
N
Parking Consolidation


12th Street
Rhododendron Drive Improvements
Left Turn Lane
Map 12G-4
Alder Court
11th Street
Alder Street
Rhododendron Drive
9th Street
N

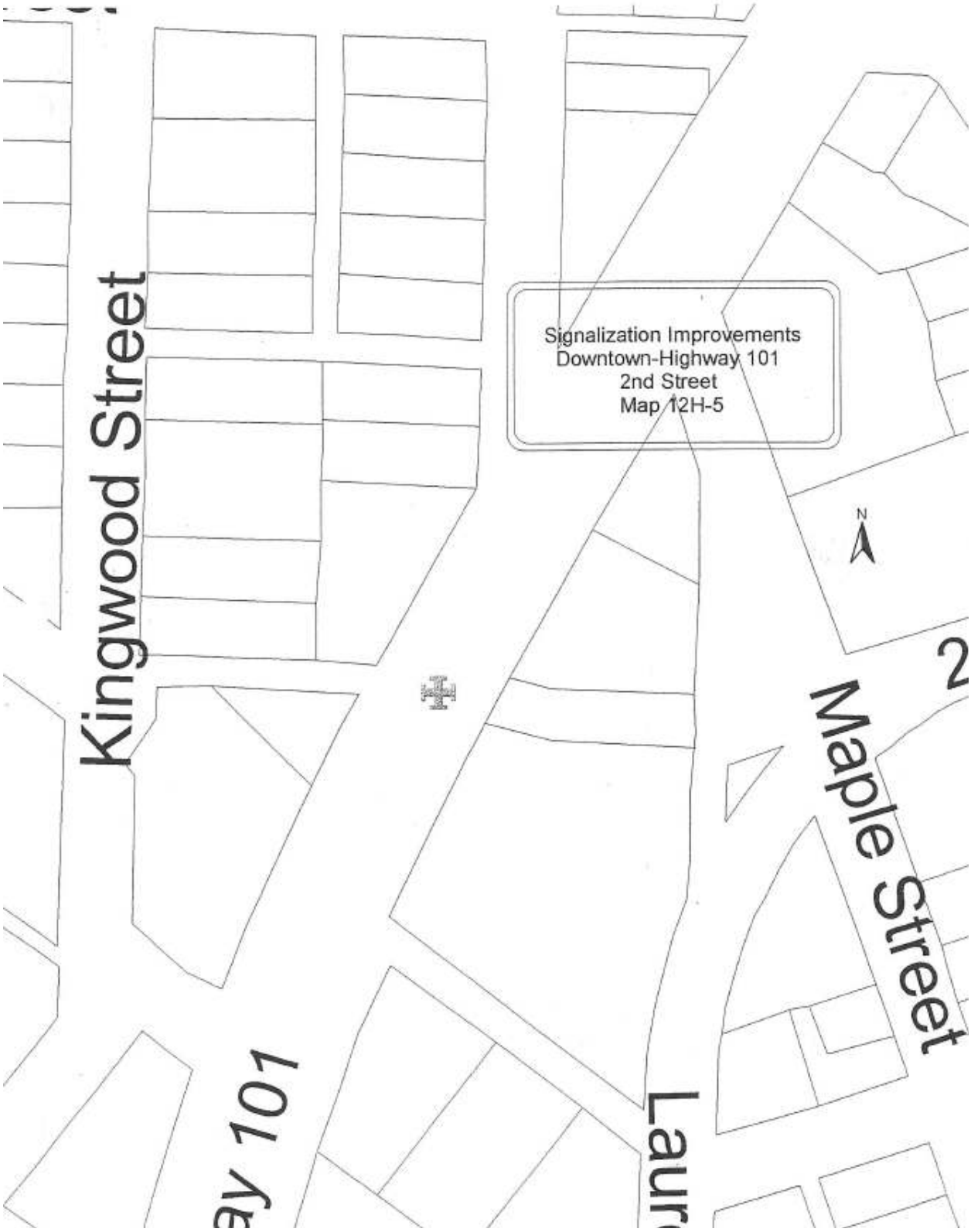

Rhododendron Drive Improvements
Left Turn Lane
Map 12G-4
Otah Court
Siano
35th Street
Myeena Loop
endron Drive
N
35th Street Left Turn
Streets
FloIots-N
FloIots-S

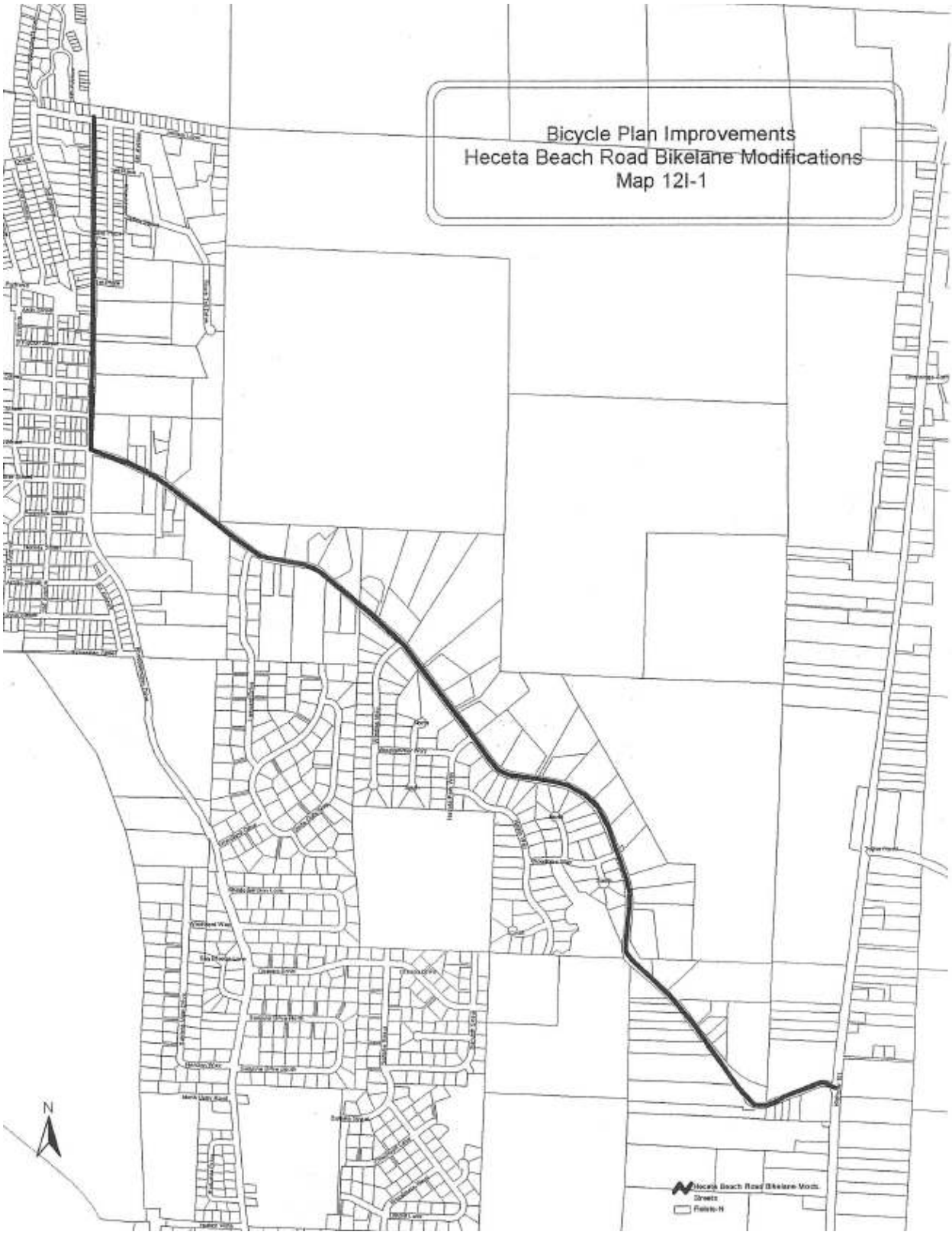

Relocate Signal to 30th Street
31st Street
31st Pla
Signalization Improvements
27th Street/Highway 101 Traffic Signal
Map 12H-1
30th Street
30th Street
29th Street
29th Street
Highway 101
28th Street
28th Street
Spruce Street
Easy Street
27th Street
27th Street
Nob Hill
26th Street
Outer Drive
25th Street
25th Street
Oak Street
Streets
Flolots-S
Traffic Signals
23rd Street
23
N

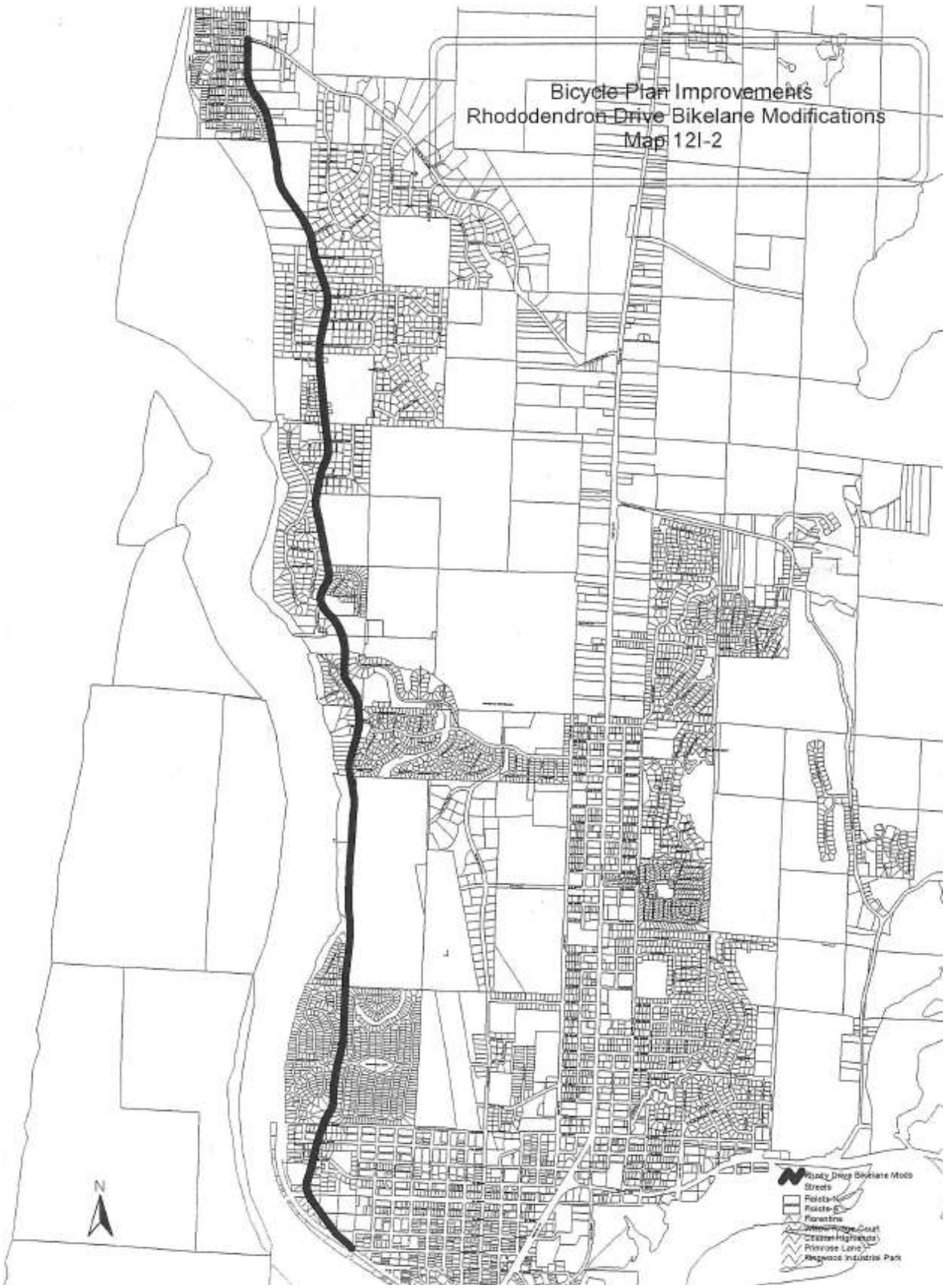

Signalization Improvements
Heceta Beach Road/Highway 101 Traffic Signal
Map 12H-2
Heceta Beach Road
Highway 101
Heceta Improvement
Change of Entrance
Traffic Signal


Signalization Improvements
Munsel Lake Road/Highway 101 Traffic Signal
Map 12H-3
Munsel Lake Road
Highway 101
N
Streets
Flolots-N
Traffic Signals


Signalization Improvements
46th Street/Highway 101 Traffic Signal
Map 12H-4
Highway 101
45t
44th C
N
Streets
Flolots-N
Traffic Signals
43rd Street

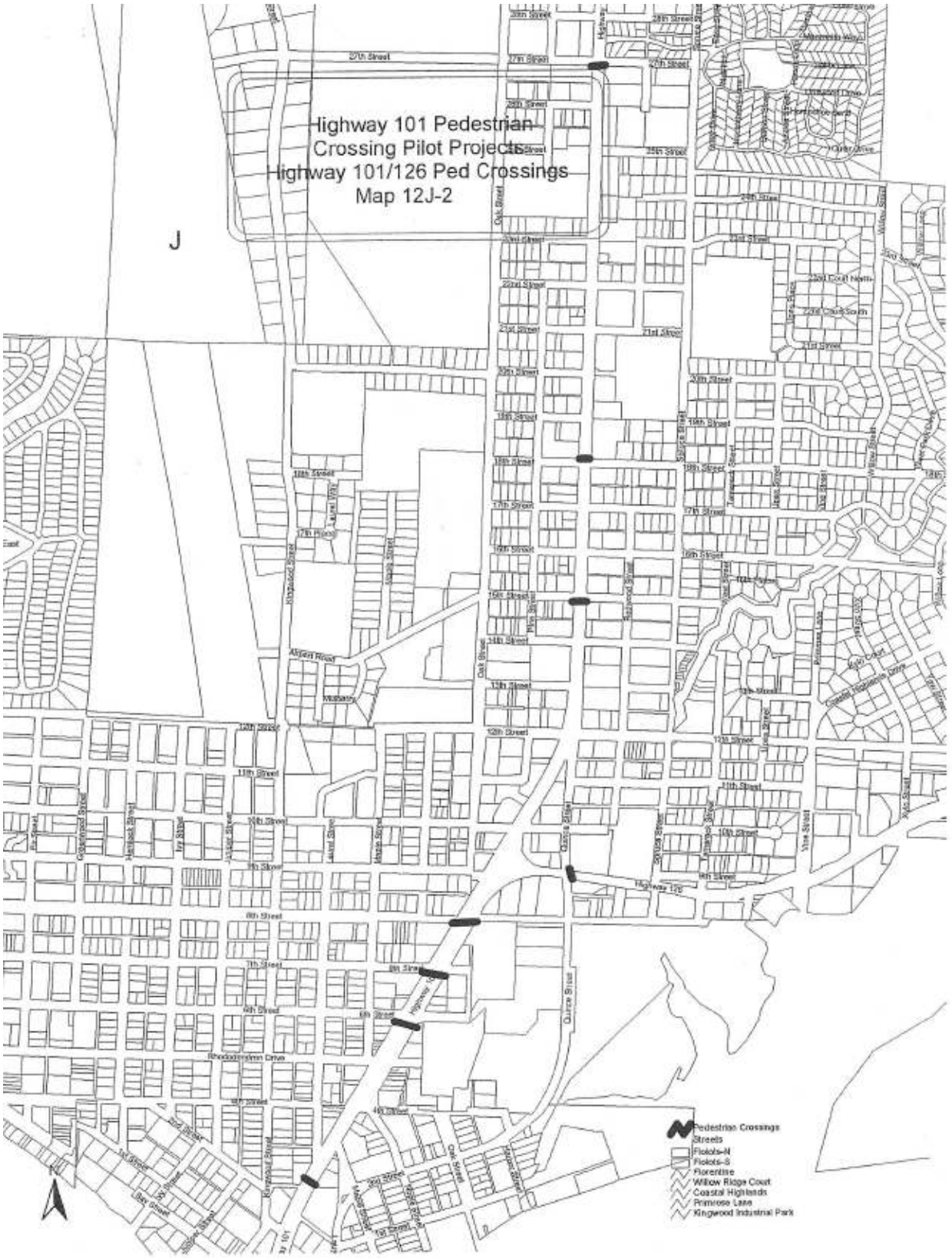

Signalization Improvements
Downtown-Highway 101
2nd Street
Map 12H-5
Kingwood Street
Maple Street
N

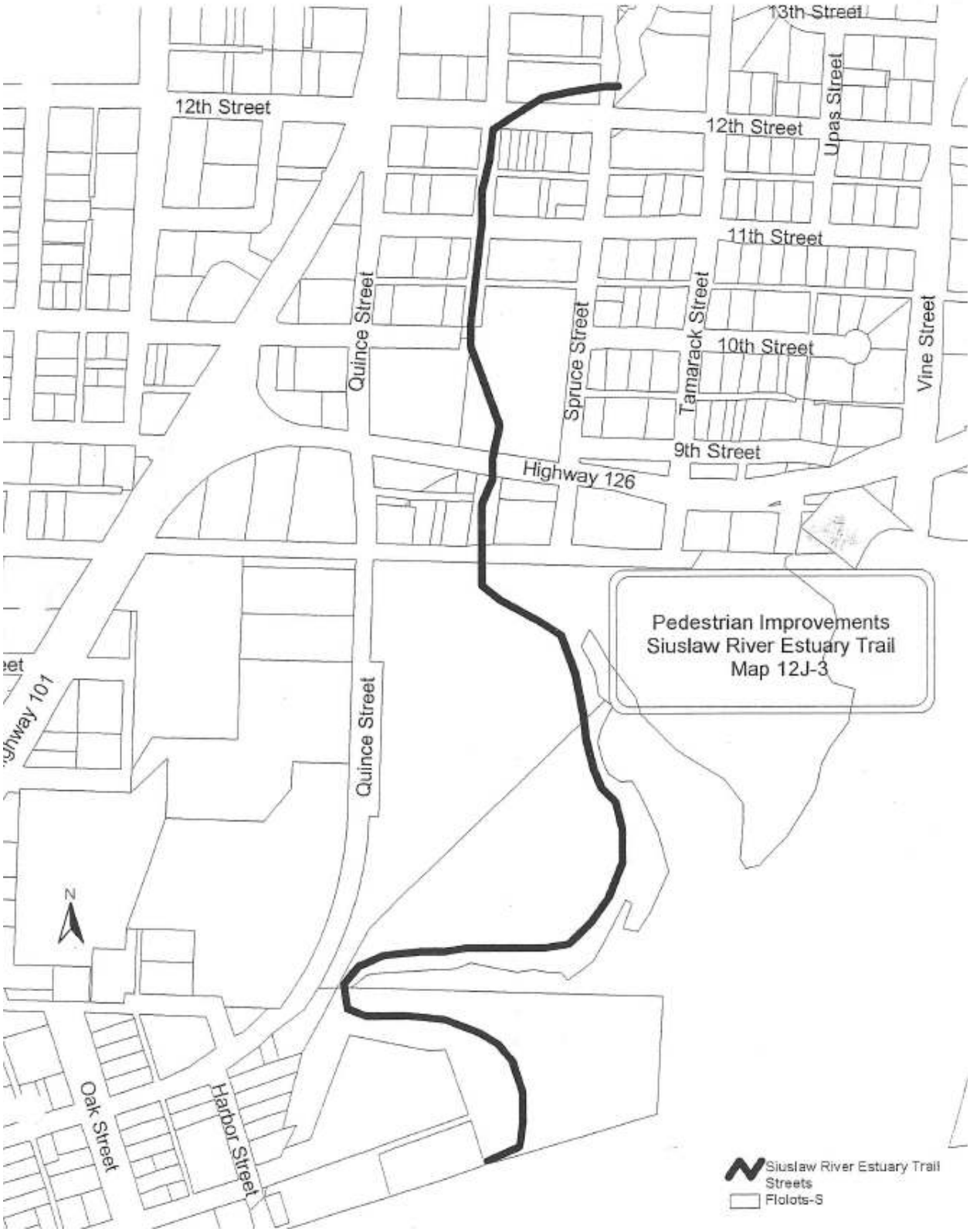

Bicycle Plan Improvements
Heceta Beach Road Bikelane Modifications
Map 12I-1
N


Bicycle Plan Improvements
Rhododendron Drive Bikelane Modifications
Map 12I-2
N
Rhody Drive Bikelane Mods
Streets
Primrose Lane
Ridgewood Industrial Park


Bicycle Plan Improvements
Munsel Lake Road/North Fork
Bikelane Modifications
Map 12I-3
Munsel Lake Road/N. Fork Road
Streets
Flolots-N
Flolots-S
Florentine


Bicycle Plan Improvements
Extension of Munsel Creek Bikepath
Map 12I-4
Extension Munsel Creek Bikepath
Streets
Floiets-N
Floiets-S
Florentine
Willow Ridge Court

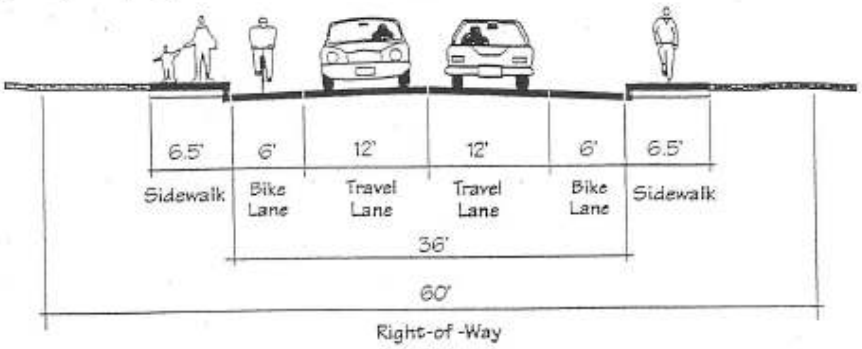

Highway 101 Pedestrian
Crossing Pilot Projects
Highway 101/126 Ped Crossings
Map 12J-2
J
Pedestrian Crossings
Streets
Florists-N
Florists-S
Florentine
Willow Ridge Court
Coastal Highlands
Primrose Lane
Kingwood Industrial Park


13th Street
12th Street
12th Street
Upas Street
11th Street
Quince Street
Spruce Street
Tamarack Street
10th Street
Vine Street
9th Street
Highway 126
Pedestrian Improvements
Siuslaw River Estuary Trail
Map 12J-3
Quince Street
Oak Street
Harbor Street
N
Siuslaw River Estuary Trail
Streets
Flolots-S

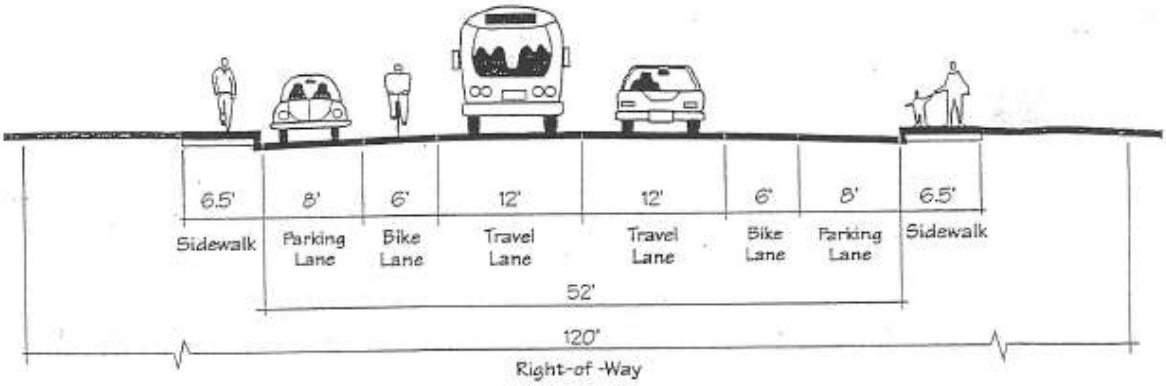

Pedestrian Improvements
Public Access to Public Lands
North of Sandpines and West
of Fred Meyers
Map 12J-4
Munsel Lake Road
Highway 101
45th Court
44th Court
43rd Street
41st Street
40th Street
Spruce Street
Sandpines Golf Course
N
37th Street
Oak Street
Pine Street
36th Street
36th Street
Public Access to Public Lands

Arterials

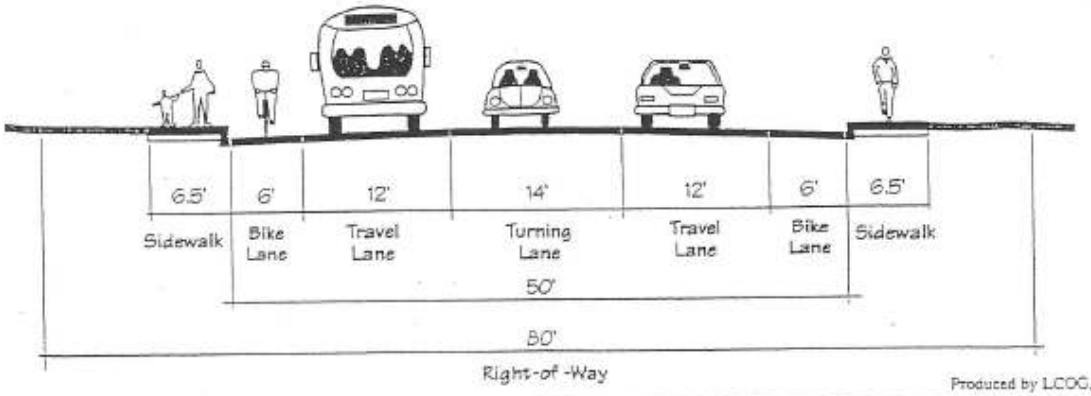
Minimum (no parking)



Maximum (on-street parking allowed)



Typical (with center turn lane)



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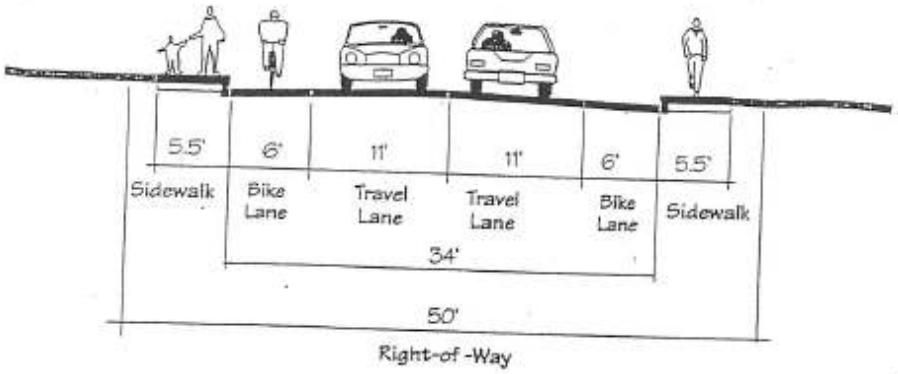
Transportation System Plan

Figure - 1

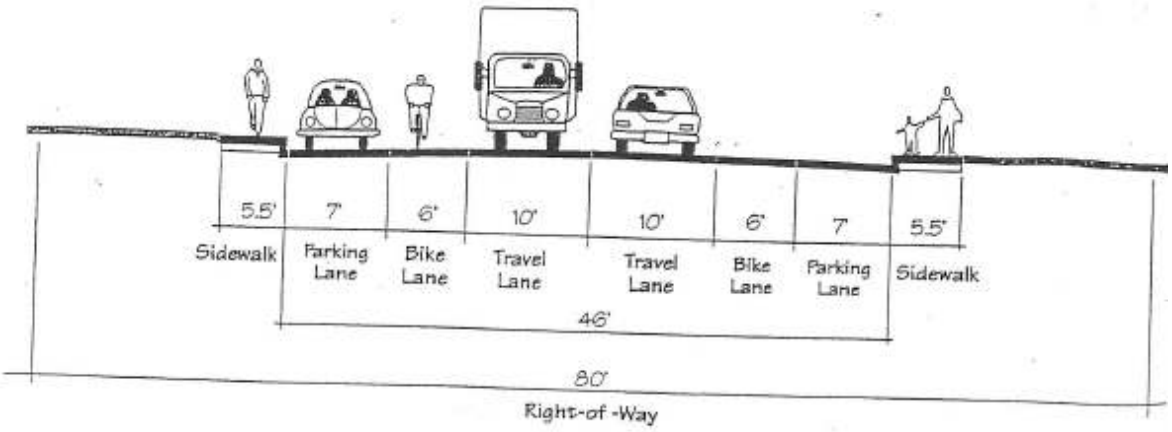
Proposed Street Standards

Major Collectors

Minimum (with bike lanes and no parking)



Maximum (with bike lanes and on-street parking allowed)



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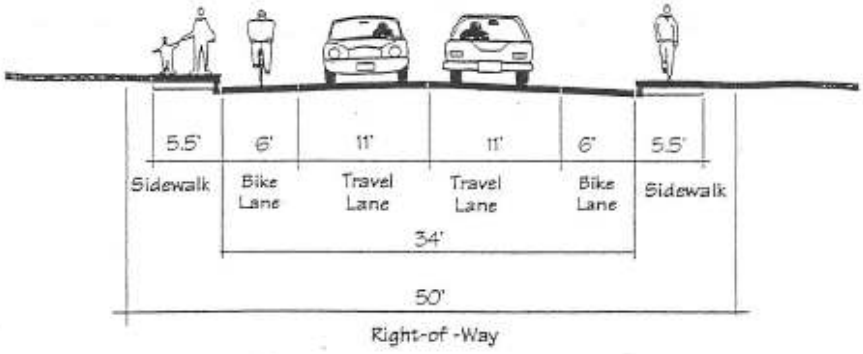
Transportation System Plan

Figure - 2

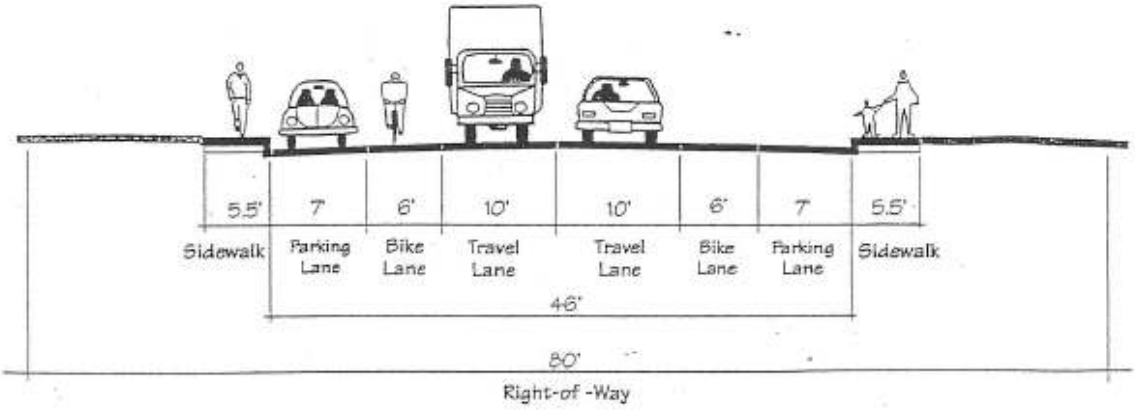
Proposed Street Standards

Minor Collectors

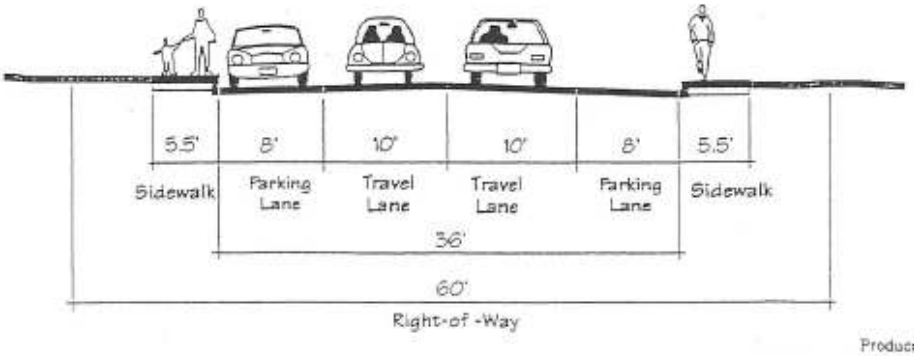
Minimum (with bike lanes* and no parking)



Maximum (with bike lanes* and on-street parking allowed)



Typical (without bike lanes)



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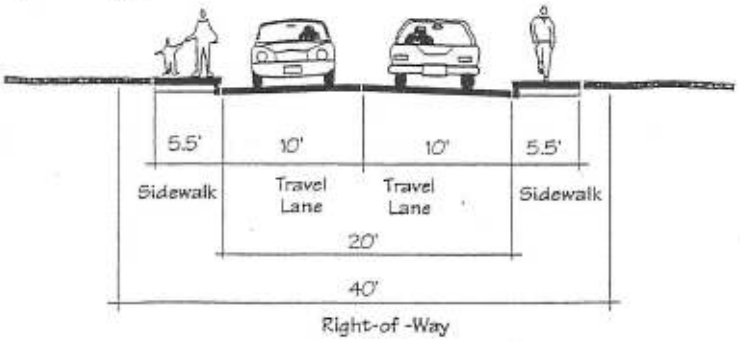
*bike lanes required only if identified in bicycle plan

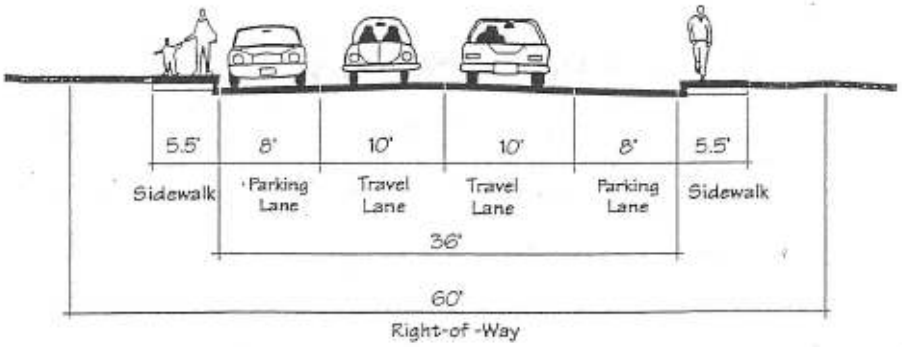
Transportation System Plan
Figure - 3
Proposed Street Standards

Local Streets

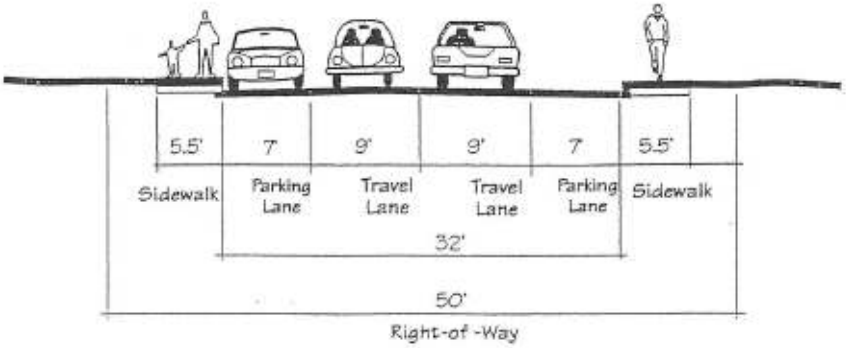
Minimum (no parking)



Maximum (on-street parking)



Typical (on-street parking)



Produced by LCOG, &

Transportation Syster

Figure - 4

Proposed Street Standards

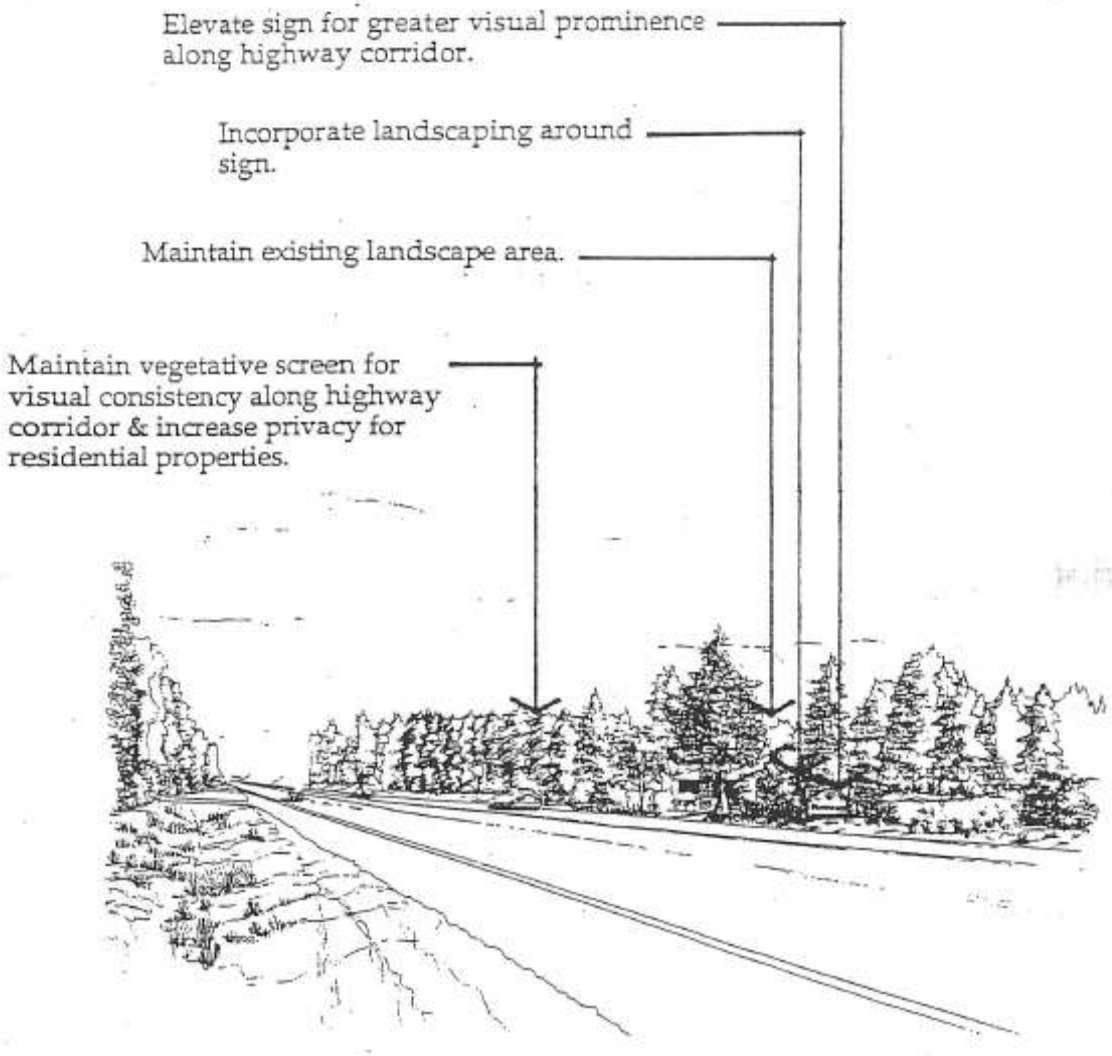


FIGURE 9 – Highway 101 - View southwest to sign location.

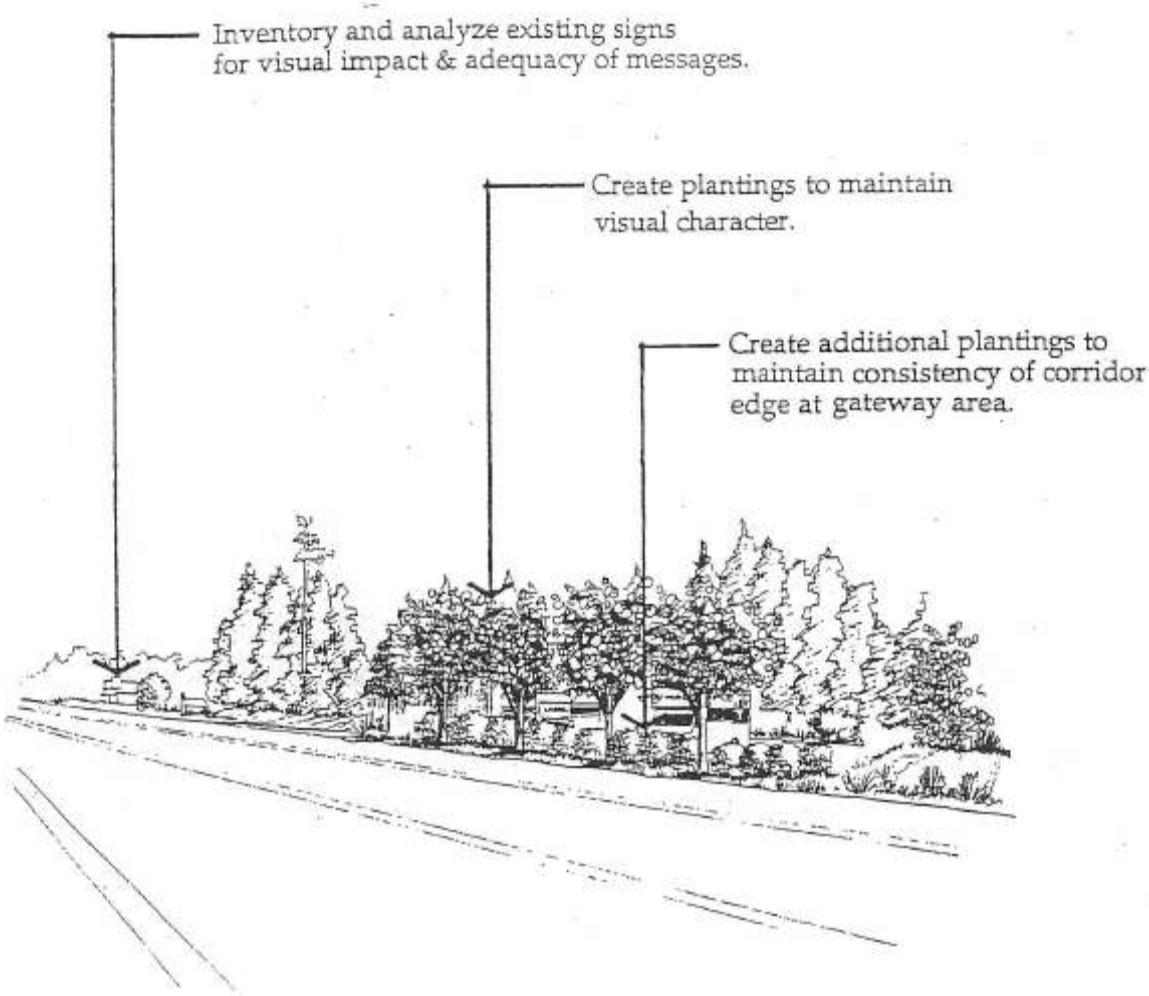


FIGURE 11 – Highway 101 - View northeast to auto-oriented commercial development.

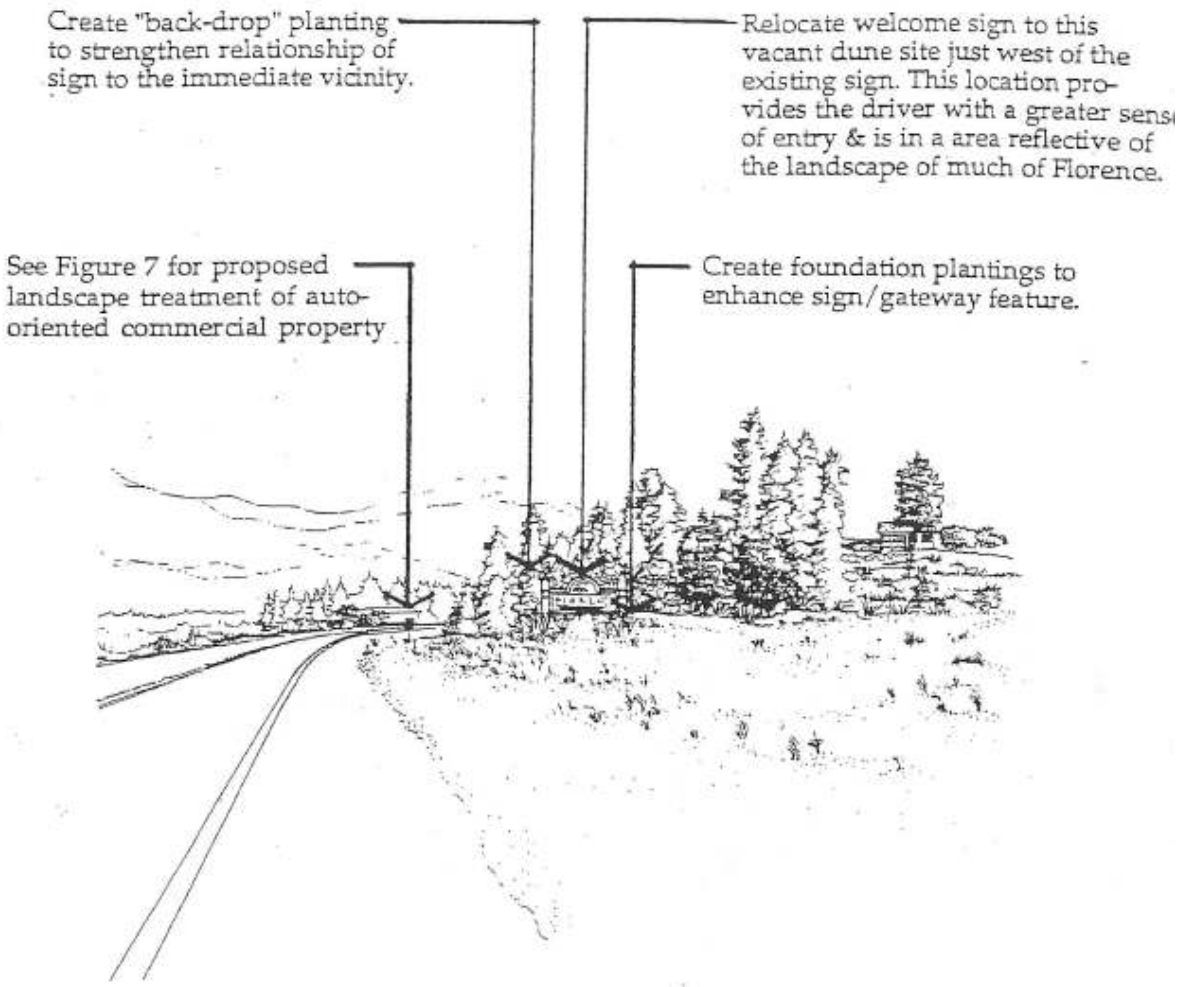


FIGURE 6 – Highway 126 - View northwest to proposed sign location.

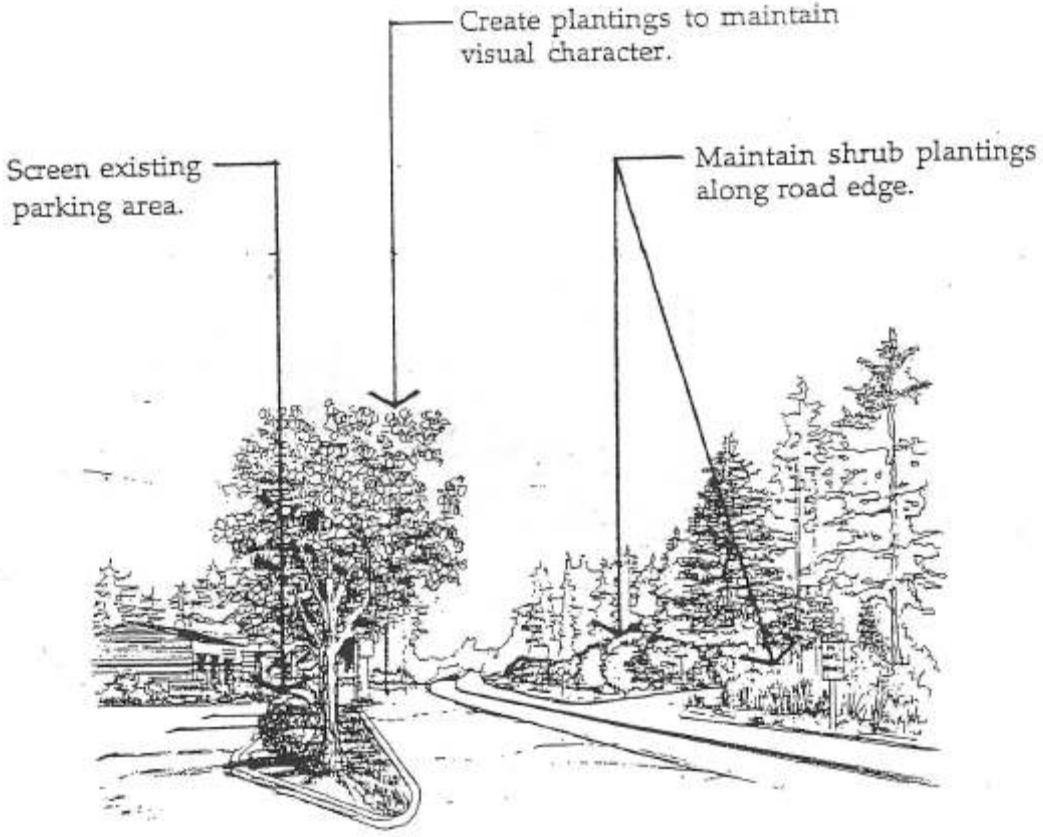


FIGURE 7 – Highway 126 - View southeast to auto-oriented commercial development.

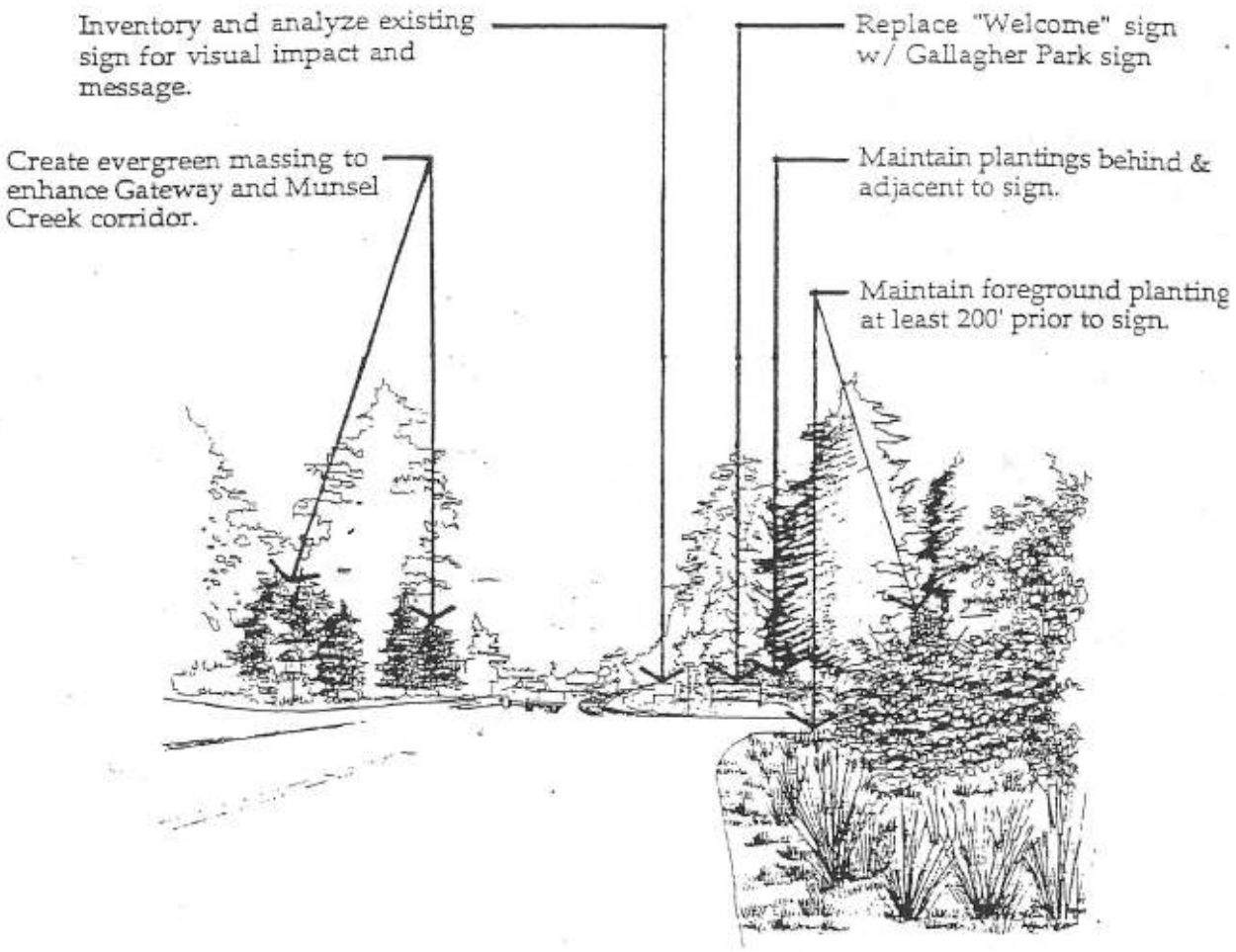


FIGURE 8 – Highway 126 - View west to intersection of Tamarack St. and Highway 126

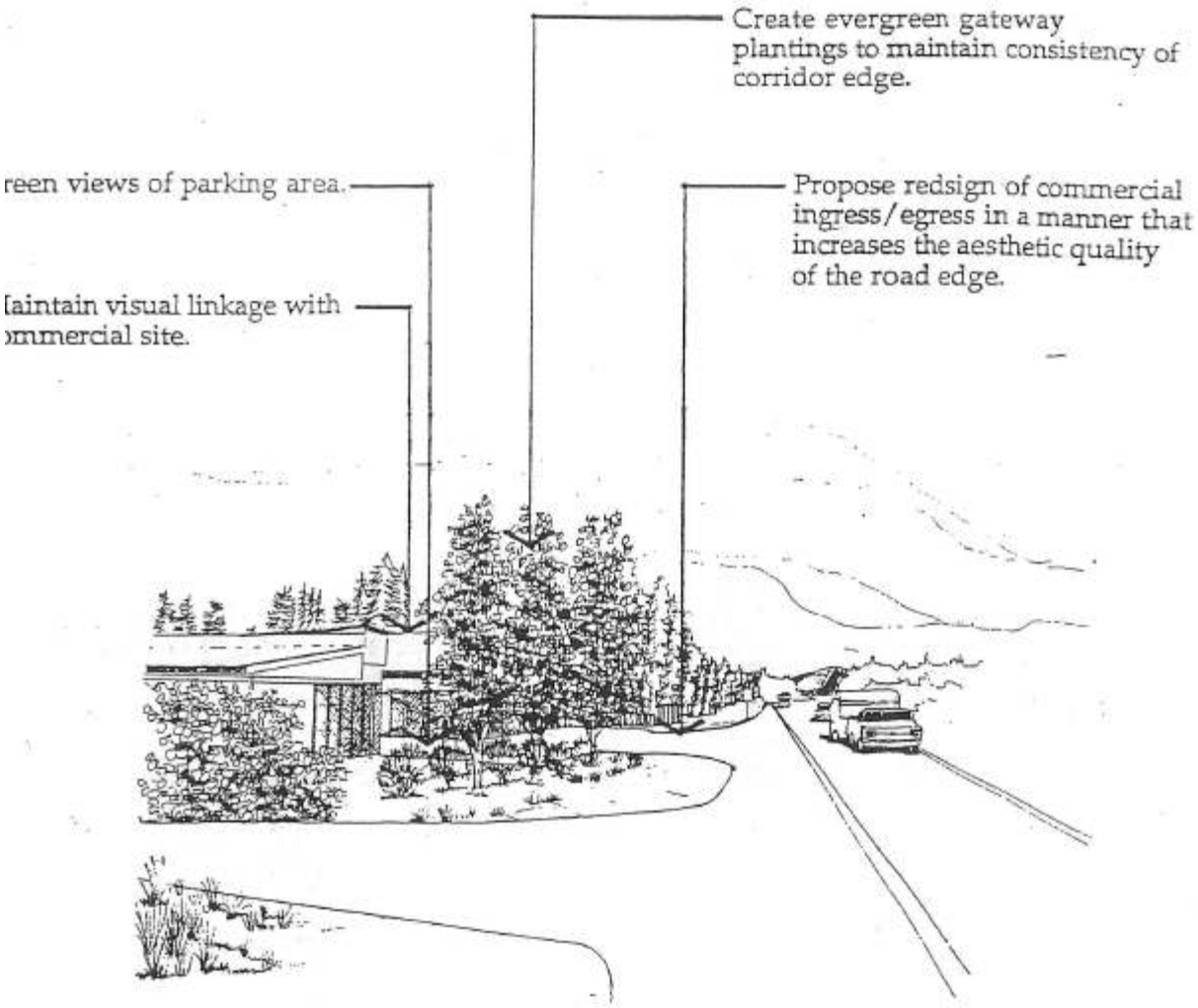


FIGURE 10 – Highway 101 - View northwest to auto-oriented commercial development.