CHAPTER 2
North Bethany Subarea Plan of the Bethany Community Plan

I. INTRODUCTION

The North Bethany Subarea Plan applies to land north of NW Springville Road with the exception of the Arbor Oaks Subarea. This chapter provides background and an overview of the Subarea's community planning principles and goals, describes the relevant maps, and prescribes general and neighborhood design elements. Where applicable, the Subarea Plan identifies the plan amendment procedure and criteria for proposing changes to the Subarea Plan.

II. AREA OF DESCRIPTION

The North Bethany Subarea is located north of Highway 26 in northeast Washington County. The eastern boundary of the Subarea is the Washington-Multnomah County line. The Subarea is bounded on the west and north by the floodplain associated with Rock Creek and Abbey Creek. Rural agricultural lands are the predominant land uses to the north, east, and west. The southern boundary is NW Springville Road, with the other Bethany Community Plan Subareas to the south.

North Bethany is nestled near the base of the Tualatin Mountains. The area's most prominent geographic feature is a ridge that runs from east to west across the center of the Subarea. Three tributaries to Abbey Creek begin in the Subarea north of the ridge. South of the ridge, Bethany Creek flows from the eastern boundary parallel to NW Springville Road until reaching NW Joss Avenue, at which point the creek flows under NW Springville Road. The elevation along the ridge and the gently sloping hills to the north and south draw the eye toward vistas of the Tualatin Valley.

At the time the Subarea was brought within the Urban Growth Boundary (UGB), and until new urban development begins, the predominant land uses consist of five to ten acre rural lots. An exception to the rural land use is the PCC Rock Creek Campus which has an Institutional plan designation. Predominant land use designations in the Subarea are residential of varying densities, with a mix of other ancillary land uses for commercial and institutional purposes.

III. BACKGROUND, PLANNING PROCESS, COMMUNITY DESIGN GOALS & PLAN AMENDMENTS

A. UGB Expansions

In 1992, Metro expanded the UGB to include much of the PCC Rock Creek Campus. In 1999 and 2002, Metro expanded the UGB to include the other land that is within the North Bethany Subarea, as well as an additional portion of the PCC Rock Creek Campus. (Approximately fifty acres of the PCC Rock Creek Campus remains outside the UGB). The 2002 expansion brought the remainder of the North Bethany Subarea within the UGB. The state Land Conservation and Development Commission (LCDC) acknowledged the expansion in July 2003 (augmenting the North Bethany expansion area to nearly 800 acres). An appeal and litigation of the 2003 acknowledgment was settled in September 2005 and the North Bethany Subarea was ultimately acknowledged by LCDC. The County assumed the long-term service provider role from Beaverton in 2004.

The Arbor Oaks subdivision area was part of the 2002 UGB expansion. However, the master plan for Arbor Oaks (Casefile 00-601-M) was approved prior to completion of the North Bethany planning process and has led to separation of this area into the Arbor Oaks Subarea.

B. PCC Rock Creek Campus

Although the majority of the PCC Rock Creek Campus was inside the UGB prior to the subject area expansion, the campus was considered throughout the planning process as an integral component of the planned community. The campus is included in the North Bethany Subarea Plan as a distinct neighborhood, with consideration given to addressing important planning objectives for the community as a whole. Relevant objectives include those related to access to the campus, circulation within the campus and its connectivity to the adjacent neighborhoods.

C. Planning Process

The North Bethany Subarea Plan is the culmination of a three-year planning process. Beginning in 2006, the County worked with a team of consultants, the public, and a technical advisory committee and stakeholder work group to develop conceptual and illustrative plans for the UGB expansion area. The planning process established a vision and framework for how new development should occur in the North Bethany area, including land use designations, transportation, stormwater, parks and open space networks, affordable housing and infrastructure funding. An illustrative plan showed how the concept could be configured at the neighborhood level. The North Bethany Subarea Plan implements the land use and transportation related elements of the Concept Plan, as adopted in Policy 43 of the Comprehensive Framework Plan for the Urban Area.

At the core of the North Bethany Subarea is a focal point that is planned for a mix of land uses. The designation of this mixed-use area is consistent with the Metro 2040 designation as a Main Street. Section V, Area of Special Concern (ASC) Road Corridor 2 identifies design standards that are specific to development within the designated 2040 Main Street boundary. The North Bethany Funding Strategy and North Bethany Affordable Housing Program implement non-land use aspects of the plans. In addition, local service providers, such as Tualatin Hills Park & Recreation District (THPRD) and Clean Water Services (CWS), have incorporated North Bethany infrastructure and public service requirements into their respective adopted plans.

D. Community Design Goals

The Community Planning work for North Bethany represents an innovative approach for the County and its partner service provider agencies. As compared with the 1983 community plans, the North Bethany Subarea was planned and designed to be a more complete community, with better provision and integration of urban services and amenities. While some degree of flexibility remains, the North Bethany Subarea Plan is a more detailed level of planning, specifically with respect to the design of the public realm. Integrating this level of community planning with urban service facility planning results in a greater degree of certainty for the community, for developers, and for service providers who must provide necessary infrastructure.

Early in the planning process, the Board of Commissioners established a vision for North Bethany to be a distinct community, yet well-integrated into the existing, larger Bethany community. The vision for North Bethany incorporates:

- High standards for integrating comprehensive plans for urban services such as parks and stormwater management;
- Comprehensive design approach that integrates neighborhoods with open space;
- Variety of housing choices for a range of affordability levels; and
- Community Design Features and Focal Points (e.g., civic space, parks, small neighborhood commercial sites, schools, etc.), that are connected to one another, to adjacent points of interest, and to neighborhoods via multimodal access routes.

Five design goals form the basis of the North Bethany Subarea Plan. The design goals are complemented by a growth management policy that ensures public facilities and services and urban infrastructure are provided and financed in an equitable and feasible manner.

1. ***Integration with Greater Bethany.*** The North Bethany urban area is integrated into the existing, larger Bethany community.

The amenities and services in North Bethany are complementary to other subareas in the Bethany Community Plan, as indicated by the scale, type and location of amenities and services. Land uses, densities, and design treatments north of NW Springville Road promote a good transition between existing Bethany and North Bethany. The vehicular, pedestrian and bicycle connections between North Bethany and the surrounding area are direct, convenient, and contribute to safety. The plan provides connections to, and compatible land uses near, the PCC Rock Creek campus and the Arbor Oaks Subarea. Land uses are arranged to lessen adverse impacts to adjacent rural uses.

2. ***A Community of Distinction.*** North Bethany is distinguished by its variety and affordability of housing options, mix of uses, walkable streets, nearby schools, community gathering places and focal points, multimodal transportation connections, variety of green spaces, and family-friendly character.

The plan promotes quality urban design and calls for different land use designations and densities and a mix of building types within each neighborhood. The plan provides opportunities for affordable housing by incorporating a range of residential land use designations that allow a variety of housing sizes and

types. In addition, the North Bethany Affordable Housing Program identifies strategies to promote affordable housing in North Bethany.

Residential development is organized into clearly identifiable neighborhoods that are compact and pedestrian-friendly, with a mix of uses where appropriate. The plan shows land use designations which are arranged along a gradation of densities, providing more intense uses near central locations (e.g., parks and commercial areas), gradually stepping down toward the least intense uses along natural resource areas and rural edges.

The designs of the Subarea and each of its neighborhoods are organized around centers that serve as focal points. For example, the primary focal point for the Subarea is a pedestrian-scale Main Street Area in the Central Neighborhood, featuring a large community park surrounded by high density housing and a mix of commercial uses. In turn, each of the neighborhoods surrounding the Central Neighborhood is organized around a smaller-scale focal point, consisting of a neighborhood park and a small neighborhood commercial site. As a result, all areas of the community are located within a short walk of the Main Street Area or a neighborhood commercial site. Schools will also serve as neighborhood Design Features.

Public spaces and the relationship between public spaces and private areas are important features of North Bethany as these are aspects of the community that, once developed, will become the fabric of the county to be inherited by citizens. Commercial locations are sited for success, with good visibility and easy access that supports the idea of planning for commercial opportunities as they become viable. North Bethany's neighborhoods are inter-connected by streets and pedestrian and bike routes. Civic sites and public spaces are prominently sited to reinforce their important and functional role in the community. Parks and green spaces are provided in the form of neighborhood, community, and linear parks and off-street trails.

3. ***Transportation Choices.*** Multimodal choices for walking, biking, driving and transit are connected and integrated with North Bethany's design and the larger transportation system.

The plan includes a network of streets that serve a variety of options, such as through-travel on the arterial and collector streets and local access to community destinations on neighborhood routes and local streets. There is a connected pattern of blocks and streets that disperses traffic throughout the Subarea, provides access for emergency service providers, avoids or minimizes impacts to natural areas, and contributes to a walkable community. Design elements and requirements for street improvements provide an opportunity for a safe, high quality pedestrian and bicycling experience with convenient access to key destinations, including schools and parks. While transit service is limited at this time to bus stops at the PCC campus and along NW Springville Road, the street network, development standards, and land uses have been designed to support future transit service to North Bethany. The connections of the North Bethany street network with those of greater Bethany and the surrounding areas are situated to minimize additional traffic impacts on existing neighborhoods.

4. ***Integration of Urban and Natural Areas.*** A variety of parks, trails, protected open spaces and water quality facilities will result in a coordinated system that is integrated with the urban fabric.

The planning process prioritized public spaces such as parks and trails as a key element in creating the range of amenities found in complete communities. The design concept for the Subarea Plan is a landform-based design that takes advantage of existing natural features for the location of vantage

points, orientation of streets, and drainage of stormwater. The community parks and park block elements form an axis along the existing ridge. This predominant open space feature is complemented by neighborhood parks, trails, and community gathering areas, each of which are located and sized in relation to the surrounding natural and designed landscapes.

The overarching Tualatin Hills Park & Recreation District (THPRD) design objectives that guided the placement of parks and trails are:

- An interconnected network of trails that links destinations throughout the community.
- An integration of park sites and trails with natural areas, where practicable.
- Increase visibility and accessibility of public parks by locating them so that they are adjacent to or accessible from other public areas such as streets and trails. Park sites shall not be largely hidden behind buildings.

The two community parks anchor the west and east ends of the park blocks. Together, these features provide a fundamental framework for the organization of the Subarea neighborhoods. The western community park will be approximately 12 to 13 acres in size, and will have a minimum of 2.72 acres of active park space. A 15-acre community park anchors the eastern end of the park blocks.
Six neighborhood parks range in size and type from 1.5 to 2 acres. All residences in the North Bethany Subarea are within a short walk of a park.

The pedestrian trails and connections define and integrate the neighborhoods with the natural areas. In many cases, pedestrian accessways and/or streets are designed to connect with a natural area such that the access and/or the natural area is visible from the public right-of-way. This is distinctly different than many areas of the county where parks and trails are not pre-planned, which often results in natural areas that are hidden in tracts behind private home lots.

A large portion of the subarea boundary consists of floodplain and vegetated corridors. These areas provide a natural buffer between the urban uses in the North Bethany Subarea and adjacent rural uses. They also provide opportunities to establish a trail system to provide recreational opportunities to residents. Efforts shall be made to establish trails and connections to natural areas and rural views while reducing conflicts between urban and rural uses.

The subarea's protected natural resource areas are consistent with the County's 1983 adopted and acknowledged Goal 5 program as well as the 2005 Tualatin Basin Partners Goal 5 Program. In addition, a Goal 5 post-acknowledgement plan amendment (PAPA) was conducted in order to address wetlands, open spaces, and to refine the wildlife habitat designation along Bethany Creek. The subarea plan supports habitat-friendly design and development practices, including site design and on-site stormwater management practices. In addition to on-site stormwater management, stormwater will be managed at the street level, through regional stormwater facilities and with the protection of natural resource areas that assist in flood management (such as drainage hazard areas and wetlands). Stormwater quantity and quality facilities are consistent with CWS standards while parks are consistent with THPRD standards.

5. ***A Livable Long-Term Future.*** The North Bethany Concept Plan will plan for long-term livability of the area, including consideration of future growth.

The planning horizon for the North Bethany Subarea Plan is 20-30 years, with build-out projected at roughly 18 years under robust market conditions. Given the long-term range for the establishment of this community, the Subarea Plan was developed while keeping in mind a number of factors that contribute to enduring livability. These include issues related to provision of urban services and amenities, economic viability, well-designed neighborhoods, sustainable treatment of natural resource systems, impacts to existing service systems, the rural/urban interface, the potential for future urban expansion in adjacent areas, and the greater Washington County transportation system.

E. Plan Amendments

Amendments to the North Bethany Subarea Plan shall demonstrate compliance with the provisions of the Comprehensive Framework Plan for the Urban Area (CFP) and the Transportation Plan. Applicable review criteria are identified in Policy 1 of the CFP and Policy 22 of the Transportation Plan.

IV. DESCRIPTIONS OF NORTH BETHANY SUBAREA PLAN & MAPS

The North Bethany Subarea Plan is comprised of several plans, maps, and figures that are described below. These plans and maps are referenced throughout the North Bethany Subarea Design Elements and the Neighborhood Design Elements (see Section V and Section VI, respectively). The plans and maps are in Section VII.

Four of the North Bethany Subarea Plan maps are designated as official regulatory maps for the locations of principal features of the subarea: the Land Use Designations Map; the Primary Streets Map; the Parks, Trails and Pedestrian Connections Map; and the Significant Natural and Cultural Resources Map (SNR Map). These official regulatory maps are the sole maps that control the principal features they reference. The official regulatory maps and other North Bethany maps may also include other data that is present only for informational purposes. For example, the Primary Streets Map may also contain data about the Significant Natural Resources (SNRs), but the location of those resources is regulated by the SNR Map, and not by the Primary Streets Map.

A. Land Use Designations Map

This map shows plan designations (land use districts) for all land in the North Bethany Subarea Plan.

Many of the boundaries between Plan designations are defined by existing and planned features such as the centerlines of streets, powerline rights-of-way, and the future school sites. When the alignment of a planned street is modified through the development review or plan amendment process, the adjacent plan designation(s) will shift to reflect the changed alignment. Adjustments through the development review process are permitted through the provisions of General Design Element 10.c, and Community Development Code (CDC) Section 390-26.

The Land Use Designations Map is the official regulatory map for the location of land use designations in the North Bethany Subarea Plan. Changes to the map's land use designations shall be made through a

plan amendment. A plan amendment is not required for adjustments to the Land Use Designations Map; such adjustments are permitted through the development review process described above.
When other North Bethany Subarea Plan maps are amended to ensure consistency with the Land Use Designations Map, such amendments may be accomplished administratively outside of the ordinance and plan amendment process.

B. Neighborhood Plans

There are six Neighborhood Plans that correspond with each of the six North Bethany neighborhoods. Each Neighborhood Plan depicts a preferred development pattern and local street layout, incorporating elements from the Subarea plans and maps along with application of the CDC. The required elements of a Neighborhood Plan's preferred development pattern are addressed in other elements of the North Bethany Subarea Plan, such as ASC requirements, General Design Elements and Neighborhood Design Elements.

The non-primary street alignments shown on the Neighborhood Plan Maps demonstrate one possible solution for local circulation and street connectivity. These streets provide important connections within the North Bethany Subarea and with the surrounding area. These streets are integrally connected with the Features and Focal Points so vistas along the streets terminate at and emphasize these existing and future community service uses and neighborhood amenities. Along Primary and non-Primary streets, vistas and sight lines terminate at specific locations. These locations are marked as a Feature or Focal Point Landmark symbol to indicate the importance of architectural features on buildings or the importance of landscaping at those locations. Many of these locations are also candidates for community service uses due to their high visibility.

C. Primary Streets Map

This map shows streets that comprise the base template of the Subarea Plan.

The Primary Streets provide the fundamental framework and basis for the design of and circulation within the Subarea. Primary Streets include those streets identified on the Functional Classification System Map in Policy 10 of the Washington County Transportation System Plan. In addition, two local streets in the Northeastern Neighborhood are identified as Primary Streets because they establish the northern and southern boundaries of the Beaverton School District site at the eastern boundary.

Most existing streets are Primary Streets that are located within current rights-of-way. These existing streets are incorporated into the planned Primary Street network to improve efficiencies for future development.

Modifications to the planned alignments of the Primary Streets are permitted through the development review process or through a plan amendment. Permitted modifications are defined in the General Design Elements and Areas of Special Concern. The design intent for each Primary Street is described in the applicable Neighborhood Design Elements.

The Primary Streets Map is the official regulatory map for the location of Primary Streets in the North Bethany Subarea Plan. Changes to the mapped location of the center line of a Primary Street shall be made through a plan amendment. A plan amendment is not required for modifications to the planned alignments of Primary Streets that are permitted through the development review process described above.

When other North Bethany Subarea Plan maps are amended to ensure consistency with the Primary Streets Map, such amendments may be accomplished administratively outside of the ordinance and plan amendment process.

D. Core Design Elements Map

Core Design Elements shall be implemented by all development. Noted elements include Gateways, Design Features, the Main Street Area, small neighborhood commercial sites, Fixed Parks and locations for Neighborhood Parks. The actual location of the Neighborhood Parks may shift within the candidate areas shown on the Parks, Trails and Pedestrian Connections Map. Requirements for these elements are described in the General Design Elements and the respective Neighborhood Design Elements (Sections V and VI, respectively).

E. Parks, Trails and Pedestrian Connections Map

This map shows the location of all planned community and neighborhood park locations, off-street trails, and on-street pedestrian routes that are required to be provided in the North Bethany Subarea. Community parks and the Park Blocks are shown as Fixed Parks. Neighborhood park locations are flexible within the geographic areas noted on the map. Refer to the General Design Elements for location criteria for each neighborhood park.

The final location and configuration of all parks and trails will be determined by THPRD, either prior to or as part of the development review process. The site determination process will provide the opportunity for THPRD to make incremental acquisition arrangements for park and trail properties throughout the Subarea.

While specific park and trail locations will be determined by THPRD, the General and Neighborhood Design Elements define the acreage and intended design parameters for each park site and trail alignment. The preferred Neighborhood Park locations are shown on the Core Design Elements Map and the Neighborhood Plans. In addition, two ASCs provide guidance for the Bethany Creek trail corridor (ASC 7) and the Northeast Neighborhood linear park (ASC 8).

In several instances, trail connections rely upon on-street pedestrian routes (i.e., sidewalks) to establish a connected and continuous trail network. Where these on-street segments follow required Primary Streets, trail connections are more certain. There is less certainty where the on-street segments follow non-Primary Streets. A connection is still required, however, its exact location and format (i.e., on-street or off-street) will be determined through the development review process. The non-Primary Streets shown in the Neighborhood Plans illustrate a preferred design outcome and are intended as guidance for future development. Special attention must therefore be given to assure adequate trail connections are obtained in order to provide a complete trail system.

The Parks, Trails and Pedestrian Connections Map is the official regulatory map for the location of parks, trails and pedestrian connections in the North Bethany Subarea Plan. Changes to the mapped location of these facilities shall be made through a plan amendment. A plan amendment is not required for adjustments to the location of these facilities that are permitted through the development review process as described above.

When other North Bethany Subarea Plan maps are amended to ensure consistency with the Parks, Trails and Pedestrian Connections Map, such amendments may be accomplished administratively outside of the ordinance and plan amendment process.

F. Significant Natural & Cultural Resources Map

The generalized location of Goal 5 designations in the North Bethany Subarea that were identified prior to the 2002 UGB expansion for the North Bethany Subarea are shown on the SNR Maps for Chapter 2 of the Bethany Community Plan. Through the concept planning process for the North Bethany Subarea, these designations were also refined in conjunction with the development of a Local Wetland Inventory (LWI). The LWI identified Locally Significant Wetlands, which are wetland areas that are important for reasons related to location, size, quality and/or function. The LWI received approval from the Department of State Lands, and CWS is responsible for reviewing development proposals for compliance with the LWI.

Significant resources were identified through the application of statewide Land Use Planning Goal 5. When the plan was adopted, the SNR Map included in Chapter 2 showed the general locations of three types of Goal 5 resources: Water Area and Wetlands, Water Area and Wetlands & Fish and Wildlife Habitat, and Open Space. (Note that not all jurisdictional wetland areas are defined as significant pursuant to Goal 5 and therefore, not all jurisdictional wetland areas are shown on the map; the depictions are limited to those wetlands in the North Bethany Subarea that were determined to be significant.)

The wetland boundaries depicted on the SNR Map represent preliminary planning level information. More refined and precise on-site delineations of the wetland areas and vegetated corridors will be provided through the development review process and it is expected that the boundaries shown on the SNR Map will be adjusted accordingly. Delineation of the ultimate site boundaries for these features will be coordinated with the County and CWS and shall take into account all applicable regulations and Plan requirements.

Open Space resources shown on the SNR Map include generalized locations for future parks and off-street trails, as well as existing features such as powerline rights-of-way, an existing cemetery and school ball fields and playgrounds. The ball fields and playgrounds for future schools will be designated as Open Space when they have been constructed.

In 2024, the County completed an update of its Goal 5 program for Riparian Wildlife Habitat and Upland Wildlife Habitat under Oregon Administrative Records (OAR) Chapter 660, Division 23 rules and in compliance with Title 13 of Metro's Urban Growth Management Functional Plan (UGMFP). The resulting program is implemented by the CDC. The design elements of this community plan related to these categories of natural resources were therefore removed or modified, as they are no longer applicable.

The 2024 Goal 5 program update replaced the County's 1983 inventory for the SNR categories, Water Areas and Wetlands and Water Areas and Wetlands and Fish and Wildlife Habitat, with the categories Riparian Wildlife Habitat Class I and II from Metro's Regionally Significant Fish and Wildlife Habitat Inventory Map. It also included updates to the County's SNR category Wildlife Habitat and added areas of Metro Upland Wildlife Habitat from the Metro Inventory Map. Volume IA of the Resource Document includes the updated inventory methodology and inventory maps.

No changes were made to the location of resources on the North Bethany SNR Map, since North Bethany's inventory was completed more recently than Metro's Title 13 inventory. The only change to North Bethany's SNR Map was to rename the category Water Areas and Wetlands and Fish and Wildlife Habitat to Riparian Wildlife Habitat to match the new naming convention.

The SNR Map, included as part of this community plan, is the official regulatory map for the location of Goal 5 Riparian and Upland Wildlife Habitat resources in the North Bethany Subarea Plan. The Riparian and Upland Wildlife Habitat together comprise the Significant Habitat. Changes to the mapped Significant Habitat boundary shall be made through a plan amendment. A plan amendment is not required for map refinements, corrections, or adjustments (such as adjustments to Locally Significant Wetland boundaries and to school ball fields and playgrounds) that are permitted through the development review process described above.

When other North Bethany Subarea Plan maps are amended to ensure consistency with the Significant Natural and Cultural Resources Map, such amendments may be accomplished administratively outside of the ordinance and plan amendment process.

G. Street Design Plan

The Street Design Plan keys planned streets to specific cross section design types that have been developed for the North Bethany Subarea. The Street Design Plan also references the type of street tree that shall be planted for each street. The Subarea Plan prescribes a street design approach for North Bethany that includes pedestrian and bicycle amenities, responds to a particular street's setting within the overall plan, addresses County engineering concerns about public streets, provides enhanced street landscaping, and incorporates Low Impact Development Approaches (LIDA) consistent with Clean Water Services' North Bethany Drainage Master Plan. These design approaches are generally arranged by street type and are implemented through the following Subarea documents:

a) Typical Street Design Cross Sections (Section VII.A)
b) Neighborhood-Specific Street Tree Program (Section VII.B)
c) Areas of Special Concern criteria for identified street corridors (Section V.B)

Typical Street Design Cross Sections

The Street Design Cross Sections are conceptual drawings that illustrate the width dimensions of the required street features inclusive of sidewalks. The cross-section designs include an abbreviated identifier that is keyed to the Street Design Plan and Street Tree tables.

Features within the street cross sections include the sidewalk, planter strip/LIDA features, bicycle lanes, parking lanes, travel lanes and planted or paved medians. These drawings are intended to address street design only; existing County standards regarding materials and construction shall continue to apply, including the provisions in the General Design Elements. All street designs are subject to County Engineer approval.

Neighborhood-Specific Street Tree Program

A street tree program was developed for all streets in the North Bethany Subarea. Street trees are identified by neighborhood for each collector, neighborhood route, and local street. The exception to

the sub-classification based upon neighborhood is the more broad-based “Arterial” system which supersedes the neighborhood districts.

The street trees for each neighborhood are identified and described in the following tables found in Section VII.

Table 1: The North Bethany Street Tree List corresponds with the nomenclature of street tree type provided in the Street Design Plan and lists the individual tree species and cultivars. Individual species have been selected and allocated according to tree size, scale, median width, street hierarchy and design intent. Where appropriate, the selected species shall be compatible with Low Impact Development Approaches (LIDA) features.

Table 2: The North Bethany Street Tree Guide lists the descriptions of the individual species and the intended effect created by their growth characteristics. Species are selected to be compatible with LIDA features.

The Long Range Planning Manager may approve a substitute street tree species for trees in Tables 1 or 2 when a tree is unavailable due to disease or insufficient supply. A substitute tree shall be consistent with the characteristics of the replaced species (e.g., mature height and size/shape of canopy cover) and also intended effect. The substitute tree shall also be compatible with LIDA features, where appropriate.

H. Special Setbacks Map

The Special Setbacks Map identifies two areas where there are specific setback requirements which may be different from the setbacks of the underlying land use designation. Along the Park Blocks, the build-to requirements create a more urban pedestrian streetscape and accommodate space for any on-site stormwater management through the use of low impact development approaches. Along the north side of the linear park in the Northeast Neighborhood, reduced yard requirements are permitted since the linear park establishes a setback from the street (Road A).

I. Special Frontages Map

The Special Frontages Map identifies key streetscapes where building façade enhancements and landscaping are specified in order to improve the pedestrian environment and visual interest along major streets, parks, powerline corridors and trails, and at community gateways.

J. Community Service Use Map

The Community Service Use Map identifies suitable locations for community service uses (CSUs) as provided in the Community Development Code (CDC). CSUs are neighborhood-scale public and quasi-public uses and/or gathering spaces that are necessary components of a complete community. The sites for CSUs are located in residential land use districts. The locations were identified through the concept planning process and were selected based on one or more of the following characteristics: Gateway locations; proximity to schools, parks and other public spaces located adjacent to land use districts where shared parking opportunities exist, and smaller sites that due to size and shape may pose challenges in developing future residential subdivisions. Development standards for the CSUs are included in the Subarea Plan's General Design Elements and CDC Section 390.

The Community Service Use Map functions similarly to an overlay, and allows CSUs at the identified locations as an alternative to residential development. Changes to the mapped locations of CSUs shall require a plan amendment, except as noted below.

The majority of the mapped CSU locations are adjacent to planned Primary Streets. Modifications to the planned alignment of Primary Streets are permitted through the development review process or through a plan amendment. Permitted modifications to the planned alignment of Primary Streets are defined in General Design Element 10, and in Areas of Special Concern. When the alignment of a planned Primary Street is modified through the development review or plan amendment process, the adjacent CSU location(s) will shift to retain their size and their adjacent relationship to the modified Primary Street alignment. A plan amendment is not required for this type of adjustment to CSU location(s).

While the Community Service Use Map provides locational flexibility, it does not include an implementing mechanism to ensure that CSUs will develop at any of the mapped locations. To encourage the development of CSUs at the locations shown on the Community Service Use Map, CSU development incentives have been included in CDC Section 390. To track the effectiveness of these incentives, staff from the Long Range Planning Section will conduct a status check of CSU development at 5-year intervals for 20 years after the FD-20 District has been removed from the North Bethany Subarea. If a CSU is converted to another use, staff may elect to conduct a status check at that time to determine if changes are needed to help ensure the provision of CSUs in North Bethany.

1. Evaluation of the Development of Community Service Uses

At each of the intervals specified above in Subsection 1., the status check shall evaluate the following:

a. The number and location of mapped CSU sites that have been developed with residences;
b. The number and location of mapped CSU sites that have been developed with CSUs, including the number of CSUs developed with or without the use of the CDC incentive;
c. The number of developed CSU sites by neighborhood; and
d. The type of developed CSUs.

2. Evaluation of Incentive Standards

At each of the intervals specified above in Subsection 1:

a. If fewer than 25% of the mapped CSU sites have been developed in each of the Subarea's neighborhoods, the incentive provisions and criteria for CSUs shall be maintained; or
b. If any type of development (residential, CSU, or both) has occurred on 25% or more of the mapped CSU sites in any Subarea neighborhood or within the Subarea as a whole, Long Range Planning staff shall convene a North Bethany stakeholder workgroup to examine if one of the actions described below in Subsection (1), (2) or (3) is needed. The recommendations of the stakeholder workgroup shall be presented to the Board of Commissioners for review. At the election of the Board, it may direct staff to file an ordinance to consider amendments to the North Bethany Subarea Plan and/or the CDC to address criteria related to the provision of community service uses in the North Bethany Subarea. The stakeholder workgroup shall be composed of individuals representing

development interests, North Bethany residents, North Bethany property owners, CPO 7, and County staff.

(1) If one or fewer of the mapped CSU sites have been developed with a CSU in any Subarea neighborhood, then adoption of other measures to ensure provision of CSUs may be warranted;

(2) If five or fewer of the mapped CSU sites have been developed with CSUs in the Subarea as a whole, then adoption of other measures to ensure provision of CSUs may be warranted; or

(3) If more than five of the mapped sites have been developed with a CSU (and especially if the incentives in CDC Section 390 were not utilized for the CSU development), then removal of the CSU incentives may be warranted.

K. Density Restricted Lands Map

The Density Restricted Lands Map identifies lands that have natural constraints in the form of wetlands, fish and wildlife habitat, estimated CWS vegetated corridors, open space, slopes greater than 25%, floodplains, and drainage hazard areas. These are important natural areas where development is precluded. These lands are given underlying land use designations. However, residential density was not assumed for these lands and not accounted for as buildable lands in the Title 11 concept planning process. Therefore, density transfers from density restricted lands are not allowed in North Bethany and development in density restricted lands is prohibited, except when permitted by provisions of this Community Plan and the CDC. The Density Restricted Lands Map is intended to identify areas where residential development and density transfer are prohibited, with the exception of slopes greater than 25% that are located outside of the Natural Features Buffer on the Urban/Rural Edge Map. Development on slopes greater than 25% that are located outside of the Natural Features Buffer may be permitted if all CDC requirements are met, including the requirements of CDC Section 410 (Grading and Drainage).

L. Landslide Inventory & Landslide Study Area Maps

The County contracted with the Oregon Department of Geology and Mineral Industries (DOGAMI) to apply new technology in the identification of potential landslide hazard areas in the vicinity of the North Bethany Subarea.

The DOGAMI analysis and maps are the basis for the Landslide Inventory Map and the Landslide Study Area Maps. The Landslide Study Area Maps identify areas in the North Bethany Subarea Plan where an engineering geology report is required as part of a development application. The report will determine if site conditions require special design or construction standards to address conditions and if an additional report is required at the building permit stage. The County will maintain map notations and a record of site-specific reports. Applicable review criteria are found under CDC Section 410 (Grading and Drainage).

M. Urban/Rural Edge Map

The Urban/Rural Edge Map depicts the North Bethany Subarea boundaries that are adjacent to agricultural lands outside the UGB. The map identifies the locations of three buffer types that are applicable to development: Fence-Only Buffer, Natural Features Buffer with Fencing, and Vegetation Buffer with Fencing. Development standards for the buffers are included in General Design Element 2 and CDC Section 390. The requirements for the urban/rural edge are provided to comply with Condition

No. 6 of Metro Ordinance No. 02-987A. The purpose of the condition is to ensure that new development is compatible with adjacent agricultural practices.

N. Areas Eligible for a Density Bonus in the R-6 NB District Map

This map shows the location of properties that are designated R-6 NB and are eligible to receive a density bonus when the applicable standards in the CDC are met. The maximum density permitted under the density bonus is nine units per acre.

V. NORTH BETHANY SUBAREA DESIGN ELEMENTS

All development shall be consistent with the following design elements and ASC requirements.

A. General Design Elements

1. Floodplains, drainage hazard areas, streams and their tributaries, and riparian wooded areas, steep slopes, scenic features, power line easements, and rights-of-way are preserved and protected by being designated as a SNR Area and/or Density Restricted Lands. In the design of new development, these areas shall be interconnected with the park and open space system and the stormwater and water quality management system consistent with the requirements and standards for CWS and THPRD.

2. To promote compatibility between agricultural activities on adjacent rural land and new urban development in the North Bethany Subarea, new development shall comply with the following requirements:

    a. For land in the Natural Features Buffer with Fencing on the Urban/Rural Edge Map, no development is permitted, including alteration of existing vegetation, except as permitted by CDC Sections 390-19.2 and 19.4; and
    b. The standards of CDC Section 390-19, including recording a waiver of the right to remonstrate against customarily accepted farm or forestry practices on nearby rural land.

3. Removal of trees located within a SNR must follow the permitting requirements provided within the CDC.

4. Noise reduction measures shall be incorporated into all new residential structures adjacent to arterials and collectors. Examples include double-pane windows. Sound walls are not required.

5. Parks, Trails and Pedestrian Connections

    a. On-street and off-street trails and pedestrian connections shall be provided consistent with the routes shown on the Parks, Trails and Pedestrian Connections Map. Off-street trails shall be provided consistent with THPRD standards and any North Bethany design elements and Areas of Special Concern. When an applicant proposes to use off-street trails to meet CDC Section 408 standards, those trails are encouraged to be designed to meet accessway or greenway standards (see CDC Section 408-9). The specific design of off-street trails shall

consider whether the trail has a neighborhood circulation function and incorporate accessway or greenway elements as appropriate.

b. Each neighborhood park shall have a direct pedestrian and bicycle connection to the nearest segment of the off-street trail network. The connection may be provided through an off-street trail, Primary Street or local street. In addition, pedestrian connections to perimeter and regional trails shall be provided consistent with any applicable Neighborhood Design Elements.

c. New development shall provide for pedestrian/bicycle pathways for public access through or along the development and connect adjacent developments and/or commercial areas, schools, public transit, and park and recreation sites. Pedestrian scale outdoor lighting shall be provided pursuant to the requirements of CDC Section 408-9.8.

d. Off-street trail crossings on arterials and collectors shall be at the locations shown on the Parks, Trails and Pedestrian Connections Map.

e. A 1.5 to 2-acre neighborhood park shall be located in each neighborhood, with the exception of the College Neighborhood. Each park shall be located within the geographic area depicted on the Parks, Trails and Pedestrian Connections Map. Public street frontage shall be provided along at least 50% of the park perimeter. Frontage along other public spaces (such as trails or natural areas) may count toward up to half of the 50% public street frontage requirement. Building orientation and frontages shall be consistent with General Design Element 8.

6. Residential development is encouraged to provide a variety of lot widths, side yard setbacks, building types and street fronting building façades to avoid monotonous streetscapes and result in a variety of unit sizes.

7. For designated areas along the Park Blocks and Northeast Neighborhood Linear Park, development shall follow special "build-to" setbacks as described below. Relevant street segments are identified on the Special Setbacks Map. In the event there is a conflict between these build-to standards and the setback standard of the primary district, the build-to setbacks described below shall control.

Build-to Setbacks Subject to Special Setbacks Map

	Build-to Setbacks			
Yard Area	**R-15 NB**	**R-24 NB**	**R-25+ NB**	**NCC NB**
Front Yard	5 to 15 ft.*	5 to 15 ft.*	5 to 15 ft.*	0-15 ft.*
Street Side Yard	8 ft.	8 ft.	8 ft.	0-5 ft.
Rear Yard	12 ft.	12 ft.	12 ft.	0-5 ft.

** Porches and other covered or enclosed entryways and architectural features such as balconies and bay windows may extend beyond the build-to line.*

8. Special Frontages

For locations throughout the Subarea Plan where buildings are adjacent to highly visible and/or pedestrian-oriented public spaces, special façade, building orientation and/or frontage treatments are required. The following Special Frontage categories describe requirements that shall be

applied in accordance with the Special Frontages Map, which identifies locations where each category applies.

Category A or C requirements apply to lots adjacent to future neighborhood park sites, depending on the specific park location and configuration. Since these sites have yet to be determined, they are not indicated on the Special Frontages Map.

Where articulated façades are required, the building façade facing the public space shall exhibit at least three of the following details:

- a minimum of three fully-trimmed windows and/or doors
- a patio, balcony or covered porch
- a bay window with its own roof element
- a minimum of two types of siding treatment
- at least one break in the roof line or the addition of a dormer
- a minimum two-foot long jog in the façade that requires a break in the roof

a. Special Frontage Category A

Category A requirements apply primarily to buildings on lots that have frontage on pedestrian-oriented streets and streets that are adjacent to parks, as indicated on the Special Frontages Map. For buildings on lots adjacent to Category A frontage areas, façades oriented to the public space shall be articulated as specified above. In addition, at least 50% of the Category A lots in a given subdivision phase shall have buildings with front orientation to the public space. Site-obscuring fences and walls adjacent to the public space shall not exceed four feet in height. Chain-link fences are not permitted.

b. Special Frontage Category B

Category B requirements apply primarily to buildings on lots adjacent to major streets and Gateways, as indicated on the Special Frontages Map. For all buildings on lots adjacent to Category B frontage areas, façades oriented to the public space shall be articulated as specified above.

Except for multifamily and commercial development, for the Category B frontage that runs the length of Road A in between the two powerline corridors, a masonry wall shall be constructed just outside the right-of-way boundary on each side of the road. The wall may be a combination wall/fence, provided the masonry portion comprises the base and the total combined height does not exceed six feet. Any non-masonry portion of the fence shall be transparent and constructed of durable material. Chain-link fences are not permitted.

c. Special Frontage Category C

Category C requirements apply primarily to buildings on lots adjacent to powerline corridors and trails, as indicated on the Special Frontages Map. In addition, Category C requirements apply to lots that are immediately adjacent to a neighborhood park (i.e., not separated by a street); as described above these are not necessarily noted on the Special Frontages Map. For all buildings on

lots adjacent to Category C frontage areas, façades oriented to the public space shall be articulated as specified above. Site-obscuring fences and walls adjacent to the public space shall not exceed four feet in height.

9. Buildings that are identified on the Core Design Elements Map as a Design Feature shall be located on the site to make the building visible from the neighborhood. Design Feature buildings shall be designed and located to provide a terminated vista for the sight lines shown by the orientation arrows on the Neighborhood Plan Maps.

10. Circulation
    a. New development shall connect the Primary Street system using CDC Sections 390-22.3 and 408 regarding standards for Local Street Connectivity lands along with applicable requirements of this plan such as ASC 6, Northeast Neighborhood Local Street Circulation.
    b. Access onto arterials and collectors may be limited consistent with applicable Areas of Special Concern requirements, which in some cases will require developments to have shared/consolidated access points to these streets. Access to these streets shall be limited to the locations shown on the Primary Streets Map, subject to compliance with the applicable ASC Road Corridors and County sight distance requirements. Additional access points may be provided onto arterials and collectors when they meet the access spacing standards or a modification to the access spacing standards is approved.
    c. New development shall dedicate right-of-way for new streets and extensions and alignments of existing streets as indicated on Washington County's Transportation Plan and the Primary Streets Map. New development shall also be subject during development review to CDC Article V standards that implement the North Bethany Subarea growth management policy.
        1. Modifications to the planned alignments of the Primary Streets are permitted through the development review process as described in Table A, or through the plan amendment requirements of Transportation Plan Policy 22.

Table A: Modifications to the Alignment of Primary Streets

Review Process	Review Standards
Type II Planned Development	The planned centerline may move up to 75 feet when the standards in Section 2 below are met.
Type II Development Review	The planned centerline may move within a specified Primary Street corridor when the standards in Section 3 below are met.
Type III Planned Development	The planned centerline may move more than 75 feet when the standards in Section 4 below are met.

        2. The planned centerline of a Primary Street may move up to75 feet when the following criteria are met:
            (a) The proposed alignment will not cause the alignment of any part of the total length of the subject Primary Street to move on another property unless that property owner provides written consent approving the proposed alignment on

his/her property. Without the written consent of an affected property owner, the proposed alignment shall be reviewed as a plan amendment and meet the requirements of Transportation Plan Policy 22;

(b) The realigned Primary Street continues to connect to the same Primary Street(s) shown on the Primary Streets Map;

(c) The proposed alignment provides a similar degree of connectivity to existing and planned streets. Where a future Primary Street is shown to be direct (including its connection to another Primary Street) it shall remain direct. Where a Primary Street is shown to be circuitous, it shall remain circuitous;

(d) The proposed alignment maintains the planned functional classification of new and existing streets in the surrounding area;

(e) The location of land use districts shall not shift; and

(f) The proposed alignment continues to comply with requirements of the North Bethany Subarea Plan that are applicable to the existing planned alignment, including but not limited to Areas of Special Concern (ASC); Neighborhood Design Elements; the Parks, Trails and Pedestrian Connections Map; and the Special Frontages Map.

3. The planned centerline of a Primary Street may move within a specified corridor when:

(a) The Primary Street corridor is adopted by an ASC; and

(b) The proposed location meets the requirements of the ASC.

4. The planned centerline of a Primary Street may move more than 75 feet when the following criteria are met:

(a) The proposed alignment will not cause the alignment of any part of the total length of the subject Primary Street to move on another property unless that property owner provides written consent approving the proposed alignment on his/her property. Without the written consent of an affected property owner, the proposed alignment shall be reviewed as a plan amendment and meet the requirements of Transportation Plan Policy 22;

(b) The realigned Primary Street continues to connect to the same Primary Street(s) shown on the Primary Streets Map;

(c) The proposed alignment provides a similar degree of connectivity to existing and planned streets. Where a future Primary Street is shown to be direct (including its connection to another Primary Street) it shall remain direct. Where a Primary Street is shown to be circuitous, it shall remain circuitous;

(d) When the centerline of the subject Primary Street forms the boundary between land use districts, the boundary of those land use districts may move with the realigned street's centerline provided the change does not:

(1) Result in a decrease to the minimum density allowed on the affected site; or

(2) Result in an increase to the maximum density allowed on the affected site that is greater than 5%.

(e) The proposed alignment maintains the planned functional classification of new and existing streets in the surrounding area; and

(f) The proposed alignment continues to comply with requirements of the North Bethany Subarea Plan that are applicable to the existing planned alignment, including but not limited to Areas of Special Concern; Neighborhood Design Elements; the Parks, Trails and Pedestrian Connections Map; and the Special Frontages Map.

11. Streets shall be constructed consistent with the Street Cross Sections, as depicted on the Street Design Plan. Street Cross Sections are included in Section VII. These drawings are intended to address street design only; existing County standards regarding materials and construction shall continue to apply, including the provisions in a. through g. below. All street designs are subject to County Engineer approval.

    a. Any curb bump-outs at intersections shall be designed for truck turning movements. Curb bump-outs are appropriate places for LIDA.
    b. Cement-treated subgrade may be allowed for any street classification within the Subarea.
    c. Where LIDA is adjacent to on-street parking, access from the sidewalk to parked vehicles shall be provided; for instance through curb-tight sidewalks with tree wells in lieu of a continuous planter strip, pedestrian crossings over swales, or an approximately one-foot pedestrian vehicle access zone adjacent to the curb.
    d. In the case of the Park Blocks, the couplet street surfaces shall be sloped to drain toward the center median. Street trees along the Park Blocks shall be planted along both sides of each couplet as shown in the cross section, for a total of four rows of street trees.
    e. Local streets need not be crowned and may be constructed to slope toward one side or the other in order to facilitate a site-specific design for street drainage.
    f. Right-of-way width for collector streets may vary as noted in the CL-1 cross-section, depending on how the drainage and LIDA features for the area are designed.
    g. Site-specific designs (including water quality treatment for streets) will be determined at the site design stage in coordination with the County Engineer and CWS. The size and location of the LIDA features may vary depending on the detailed drainage plan for an area. Technical details for the LIDA features are found in CWS Design and Construction Standards.

12. New development shall provide street trees consistent with the Street Design Plan. Street tree tables are included in Section VII.

13. In order to provide and maintain road landscaping in North Bethany:

    a. Property owners shall provide and maintain landscaping (including street trees) between the curb and property line along all roads adjacent to their property. Subdivision developments along Arterials and Collectors shall provide maintenance through the formation of a Home Owners Association, per the applicable CDC requirements for the North Bethany Subarea.

b. Landscaped medians in Arterials and Collectors shall utilize plant materials that require a low to medium level of maintenance as identified by the County Engineer.

c. Gateways and Arterial and Collector medians shall be ultimately maintained by one or more Maintenance Local Improvement Districts (MLIDs), per the applicable CDC requirements for the North Bethany Subarea. The MLID(s) shall include most, if not all, of the North Bethany Subarea.

d. New development shall provide landscaping and maintenance consistent with the provisions of the North Bethany Subarea Plan and applicable CDC requirements for the North Bethany Subarea.

14. New development shall be consistent with the North Bethany Drainage Master Plan, unless otherwise approved by CWS.

15. New development located in a potential landslide study area shall comply with any applicable requirements of the CDC Code and Chapter 14.12 of the Washington County Code.

16. Residential development with curbside mail delivery shall provide centralized or grouped mail boxes that are installed prior to the occupancy of the first dwelling unit.

17. New development shall provide street lighting along all streets consistent with County illumination standards. Lighting levels shall assume at least a medium level of pedestrian use as defined in the County illumination standards. A uniform lighting system shall be provided in each neighborhood identified on the Neighborhoods Map, except for the following streets:

    a. Road A
    b. NW Kaiser Road
    c. North side of NW Springville Road
    d. East side of NW 185th Avenue

    A uniform lighting fixture and pole shall be provided for streets a. through d. above. The lighting fixture and pole shall be the Westbrooke design as identified on the Portland General Electric (PGE) approved list or a similar lighting fixture and pole as approved by the County Engineer.

18. The exterior lighting of new development shall be “dark sky friendly.”

19. Where a plaza is provided, vehicular use of the plaza is prohibited.

20. Residential development shall maintain a density transect where density transitions gradually from high to low. The largest concentration of density is located along the Park Blocks, the community parks and in and around the Main Street Area. In addition to locating the highest densities in these areas, higher densities are also located adjacent to neighborhood commercial designations. Density decreases towards the North Bethany Subarea boundary, with lowest densities along the urban/rural edge and adjacent to Springville Road.

21. The design of identified Gateways shall include features that promote a common community identity such as entryway monumentation, lighting, landscaping and artwork. Applicable Neighborhood Plans include specific illustrative plans for each Gateway.

22. Residential Density Bonus Provisions
Unique to the North Bethany Subarea Plan is its provisions for a density bonus, which were developed to allow a limited number of additional dwelling units in the Subarea. These provisions are also intended to:

    a. Provide for more housing variety;
    b. Allow denser housing in the Main Street Area through the provision of additional multifamily dwelling units in the R-25+ NB District; and
    c. Bridge gaps in the density ranges in North Bethany's land use districts.
    d. In the R-6 NB District, land eligible for a density bonus is designated by the Areas Eligible for a Density Bonus in the R-6 NB District map. Approximately 35 acres of land in the R-6 NB District is eligible for a density bonus.

B. Areas of Special Concern

The following Areas of Special Concern (ASC) apply to those areas in the Subarea Plan that call for special treatment or attention. Each ASC is identified on the Area of Special Concern Map in Section VII. Design for each of the ASC Road Corridors shall be consistent with the applicable cross-section concepts included in Section VII, including enhanced landscaping, on-street parking where indicated, and LIDA features.

ASC Road Corridor 1A – Road A: NW Springville Road to NW Kaiser Road
Road A, between NW Springville Road and NW Kaiser Road, is intended to function as an urban collector street, with the design elements shown in cross-section drawing CL-1. Unless review at the land development stage indicates corner vision (CDC Section 418-3) or sight distance issues (CDC Section 501-8.5F), access to this section of Road A from Primary Streets shown on the Primary Streets Map and non-Primary Streets shown on the Neighborhood Plan Maps shall be allowed. Turn restrictions at these allowed accesses may be required as part of the land development review process. Additional access locations shall be consistent with the collector access spacing requirements of CDC Section 501-8.5. All access locations are subject to approval by the County Engineer.

ASC Road Corridor 1B – Road A: NW Kaiser Road to western North Bethany Subarea Plan Boundary
Road A, between NW Kaiser Road and the western boundary of the Subarea Plan, is intended to function as an urban collector street. It shall incorporate the North Bethany cross-section design elements while acknowledging the potential for future development in Urban Reserve land to the west, between the North Bethany boundary and NW 185th Avenue.

Considering the probability of additional urbanization between NW 185th Avenue and west of the North Bethany Subarea Plan, and the recognition that the road could carry a volume at the higher end expected for a collector street, the following design requirements (consistent with those requirements shown in cross-section CL-1) shall apply in ASC 1B:

1. Right-of-way shall be 37 to 39 feet from centerline with a total width of 74 to 78 feet.

2. Unless review at the land development stage indicates corner vision (CDC Section 418-3) or sight distance issues (CDC Section 501-8.5F), access to Road A from Primary Streets shown on the Primary Streets Map shall be allowed. Turn restrictions at these allowed accesses may be required as part of the land development review process. Additional access locations shall be consistent with the arterial access spacing requirements of CDC Section 501-8.5. Arterial access spacing standards are retained in order to recognize that future traffic volumes on this collector may be relatively high, and to minimize the need to remove portions of the planted median to accommodate potential turn lanes associated with additional access points.

3. In Subareas 1B.1, 1B.2 and 1B.3 of this ASC, one access from each Subarea to Road A, which does not meet the arterial access spacing standards, may be considered through CDC Article V standards for an Access Management Plan subject to meeting the following criteria:
   a. The applicant has demonstrated through CDC Section 408-6 standards that it is impracticable to provide access to a Subarea from a street other than Road A as shown on the applicable Neighborhood Plan.
   b. Only one access from Road A to each Subarea shall be allowed.
   c. Turn restrictions may be required to address roadway capacity, safety and operation issues and maintain the continuity of Road A's center landscape median.
   d. CDC standards for corner vision and sight distance are met.

ASC Road Corridor 2 – North Bethany Main Street, including a central segment of NW Kaiser Road

The requirements of ASC Road Corridor 2 address a central segment of NW Kaiser Road, and the North Bethany Main Street designation on each side of the road.

1. NW Kaiser Road within the Main Street

The segment of NW Kaiser Road between NW Brugger Road and Road A will bisect North Bethany's Main Street area, which is the portion of the planning area that is planned for the most intensive land uses. While NW Kaiser Road is designated as an Arterial on the Functional Classification Maps in the Transportation Plan, special design considerations that are not typically associated with arterial streets will apply. These considerations shall include the following:

- Unless review at the land development stage indicates corner vision (CDC Section 418-3) or sight distance issues (CDC Section 501-8.5F), access to NW Kaiser Road from Primary Streets shown on the Primary Streets Map and non-Primary Streets shown on the Neighborhood Plan Maps shall be allowed. Turn restrictions on these allowed accesses may be required as part of the land development review process. Additional accesses shall be consistent with the arterial access spacing requirements of CDC Section 501-8.5.
- For the NW Kaiser Road segment north of NW Brugger Road and south of Road A, street design and on-street parking shall be provided consistent with the Main Street design concept drawing shown in the AR-1b cross-section shown in Section VII.
- Local street connections to NW Kaiser Road may be allowed as direct connections to NW Kaiser Road if determined to be acceptable by the County Engineer.
- A reduced design-speed may be incorporated in the street design through the corridor as determined to be appropriate considering the level of access, land uses and traffic

characteristics. The County Engineer shall determine the appropriate design speed. Posted speed shall be determined in accordance with state law.

- A transit plaza shall be considered along this corridor.

2. North Bethany Main Street

The North Bethany Main Street is a planned mixed-use area intended to serve as a focal point of the North Bethany community. The Main Street area is located on both sides of NW Kaiser Road, between NW Brugger Road and Road A, as shown on the North Bethany Subarea Areas of Special Concern Map and illustrated in Figure 1. The Main Street is intended to have a building scale and form that reflects its role as a pedestrian-oriented center, with mixed-use buildings, high density housing, retail uses and services to serve the entire community, and a strong relationship to the adjacent future Park Blocks and East Community Park. The Main Street is also intended to have an attractive streetscape design, with on-street parking and urban design features that create a unique sense of place.

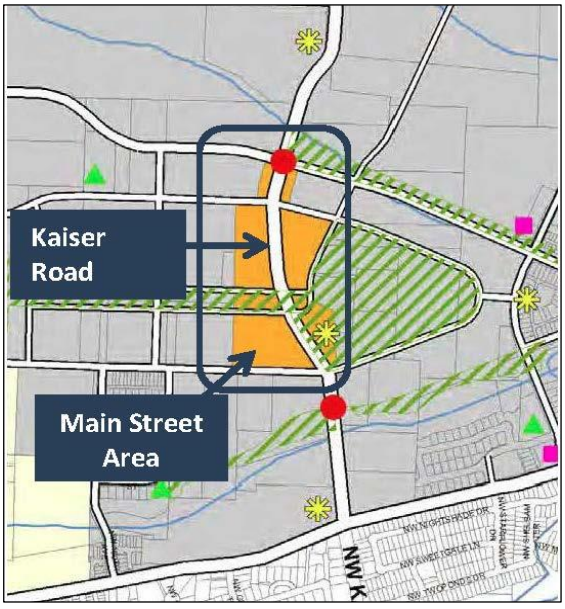


Figure 1 - Location of the Main Street Area

Subsection a. below describes the Urban Design Plan for the Main Street, while Subsection b. describes the design standards that apply to the development of private property and to Kaiser Road street furnishings in the area. Subsection c. provides illustrative cross sections to show how some of these design elements will relate to the planned design of NW Kaiser Road within the Main Street area.

a. Urban Design Plan for the Main Street

An Urban Design Plan (UDP) has been developed to promote a Main Street design that prioritizes pedestrian and bicycle environments and provides attractive and quality design, both for the public realm (streets and sidewalks) and for private development. Wide sidewalks, bike lanes, and attractive streetscapes will create safe and comfortable spaces for pedestrians and bicyclists. The design of private development should support a pedestrian-friendly environment by providing plenty of interest and activity at the sidewalk. The UDP recommendations have been incorporated into ASC 2 as design standards for future development within the Main Street area.

While pedestrians and bicyclists are the priority in the Main Street area, parking and vehicle driveway access must also be provided. In order to balance pedestrian-friendly design with the needs of vehicles, the design standards are based upon the organizing framework of Active Use Streets. This framework identifies high-priority walking streets as “Active Use Streets” and targets the most pedestrian-oriented design elements to those streets, while accommodating vehicle access onto development sites from lower-priority streets.

Specific streets within the Main Street area are designated as "Active Use Streets," as shown in Figure 2. Development along Active Use Streets is subject to additional design standards that are described in more detail in Section b., Main Street Design Standards and Applicability, which is located below.

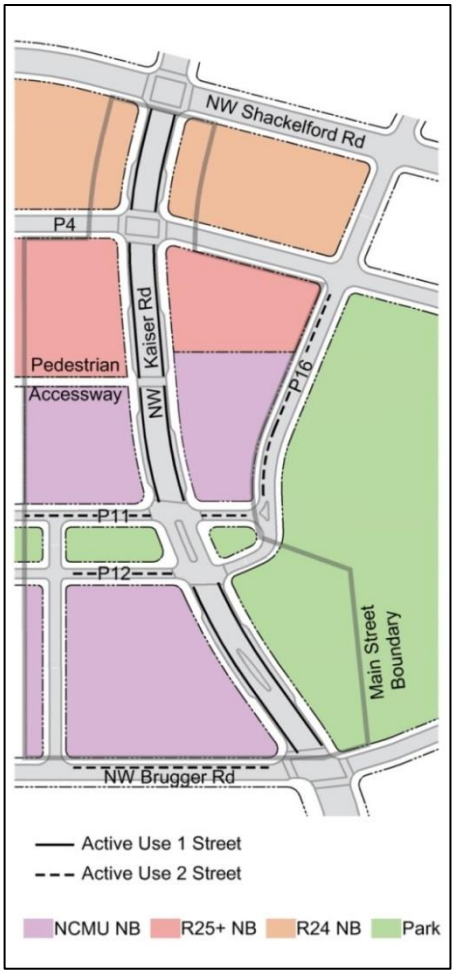


Figure 2 - Active Use Streets

(1) Active Use 1 Street Elements

NW Kaiser Road is the key walking street for North Bethany and is designated as the sole Active Use 1 Street. Development along the Active Use 1 Street frontage (Kaiser Road) is expected to be more "urban" in character than on other streets within the Main Street area, and must be sited and designed to support pedestrian-friendly development. Features include:

- Buildings that:
  - are close to sidewalks
  - occupy most of the street frontage
  - have high transparency (windows and doors)
  - have required articulation
  - have weather protection along sidewalks
- Vehicle parking located behind buildings
- No driveway accesses from NW Kaiser Road into abutting properties

(2) Active Use 2 Street Elements

The Active Use 2 Street designation applies to the block of NW Brugger Road that is within the Main Street, and to segments of Primary Streets P11, P12 and P16 that are adjacent to the Park Blocks and the East Community Park. The Active Use 2 Streets have many of the pedestrian-friendly features of Active Use 1 Streets, but with more relaxed requirements. Features include:

- Buildings that:
  - are close to sidewalks
  - occupy a moderate amount of street frontage
  - have moderate building transparency and weather protection
  - have required articulation
- Vehicle parking located behind or to the side of buildings
- Limited driveway accesses into abutting properties

(3) Non-Designated Streets

The remaining Primary Streets within the Main Street area do not have an Active Use Streets designation, but will still have some applicable design standards such as:

- Required building articulation
- Some required building transparency
- Vehicle driveway accesses into abutting properties are allowed

(4) East-West Pedestrian Accessway

A segment of the east-west pedestrian accessway mapped on the Park, Trails, and Pedestrian Connections Map is an essential pedestrian access point for the Main Street. This accessway segment is located within the Main Street on the west side of Kaiser Road, and runs along the north side of property designated as Neighborhood Commercial Mixed-Use (NCMU NB). Features of the NCMU NB frontage on the south side of this accessway include:

- Building requirements for:
  - setbacks
  - articulation
  - transparency

The UDP for the Main Street resulted in the development of the design standards described in the following section. These design standards, which apply to land development and Kaiser Road street furnishings in the Main Street area, are intended to promote a Main Street design that prioritizes pedestrian and bicycle environments and provides attractive and quality design for both the public realm (streets and sidewalks) and private development.

b. Main Street Design Standards and Applicability

The Main Street area includes three land use districts, which are depicted in Figure 3. The Neighborhood Commercial Mixed-Use District (NCMU NB) will accommodate a variety of retail and commercial uses, as well as multifamily housing on upper floors; the Residential 25+ NB District (R-25+ NB) will provide areas for multifamily attached housing at a residential density of 20 to 25 units per acre and up to 50 units per acre in certain circumstances; and the Residential 24 NB District (R-24 NB) will accommodate single-family attached and multifamily housing at a residential density of 19 to 24 units per acre. CDC Section 390, North Bethany Subarea Overlay District, provides information about the intent and purpose, permitted uses, and dimensional requirements of these land use districts.

The following design standards, described in more detail below, apply to development of properties with an NCMU NB designation, and to Kaiser Road-facing building elevations on properties with R-24 NB and R-25+ NB designations:

(1) - Setbacks and Frontage Occupancy
(2) - Building Entrances and Orientation
(3) - Building Articulation
(4) - Transparency
(5) - Weather Protection
(9) - Street Furnishings

The following design standards, described in more detail below, apply solely to development of properties with an NCMU NB designation and to development at specific intersection corners, regardless of land use district:

(6) - Building Materials
(7) - Parking, Loading, and Vehicle Access
(8) - Emphasized Corners and Main Street Community Gateways

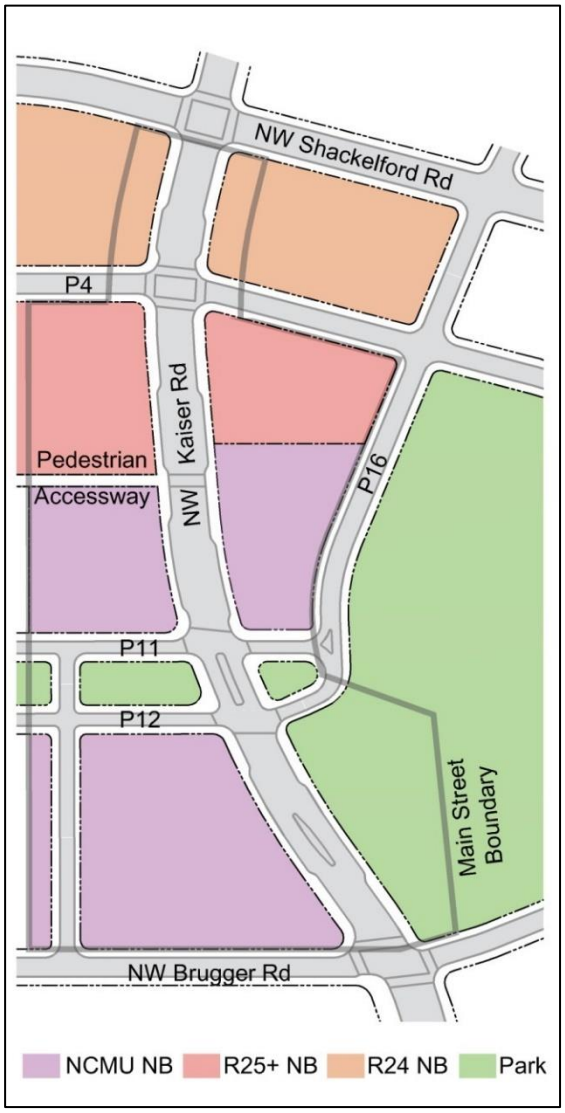


Figure 3 - Land Use Districts in the Main Street Area

Design Standards:

(1) Setbacks and Frontage Occupancy

Buildings adjacent to the sidewalk provide an engaging experience for pedestrians by allowing passersby to interact with building interiors physically through direct access to entrances, and visually by viewing building interiors through windows and other openings. Minimal building setbacks from the sidewalk help establish the sense of enclosure that creates more comfortable spaces for walking.

Frontage occupancy is the percent of a property's street frontage that is occupied by a building. Minimal setbacks and high frontage occupancy work together to establish a consistent street wall for designated Active Use Streets.

While buildings should be allowed to occupy the full site or block frontage along the street, this may not always be possible or desirable. Therefore, this design element includes an allowance for building recesses, notched corners, and spaces between buildings. Along Kaiser Road, the spaces where buildings do not occupy street frontages should be usable spaces that function as extensions of the sidewalk, providing places for people to meet, rest, and socialize.

Setback and frontage occupancy standards are shown in the table below. Figures 4 and 5 provide illustrative examples of the standards.

Setback and Frontage Occupancy Standards

DESIGNATION	NCMU NB	R-24 NB & R-25+ NB
Active Use 1 Street Frontages **(Kaiser Road)**	Setback: Min. = 0 feet, Max. = 5 feet ▪ Where finished grade between a building entrance and the adjacent right-of-way exceeds 5%, the maximum setback can be increased to a maximum of 10 feet, in order to provide space for ramps or stairs. At least 75% of a site's street frontage must be occupied by a building located within the minimum and maximum setback range. ▪ Where the site's street frontage is not occupied by a building meeting the maximum setback (up to 25% of site frontage allowed), usable open space must be provided. Usable open space: ▪ Must have a minimum depth of 20 feet from the lot line and a minimum width of 20 feet. If the building is set back less than 20 feet from the street lot line, usable open space can have a depth of less than 20 feet, but must be provided between the maximum setback and the building façade. ▪ Must include three of the following five pedestrian amenities: bench(es), table(s) and chair(s), seat wall(s), fountain(s) or public art. ▪ May include pocket parks, pedestrian walkways, landscaping, or stormwater planters as long as pedestrian amenities are also provided. ▪ May be partially or entirely paved.	Setback: Min. = 5 feet, Max. = 10 feet At least 75% of a site frontage must be occupied by a building that meets the maximum setback. Requirements for usable open space are the same as for NCMU NB.
Active Use 2 Street Frontages	Setback: Min. = 0 feet, Max. = 5 feet At least 50% of a site's street frontage must be occupied by a building located within the minimum and maximum setback range.	Not Applicable
Non-designated Street Frontages	Setback: Min. = 0 feet, No Maximum No minimum street frontage occupancy requirement.	Not Applicable
East-West Pedestrian Accessway Frontage	Minimum setbacks shall be scaled according to the height of the NCMU NB building located south of the accessway: ▪ 1 to 2 stories: 5 feet ▪ 3 to 6 stories: 10 feet ▪ No maximum setback ▪ Setbacks are measured from the building wall to the property line parallel to the accessway.	Not Applicable
Side and rear property lines that do not abut streets	Where abutting a residential district, the side and/or rear setback shall be no less than that required by the abutting district. Where abutting a property with an NCMU NB District designation, there are no required side or rear yard setbacks.	Not Applicable

Figure 4 - Setbacks and Frontage Occupancy Example in the NCMU NB District (Plan View)

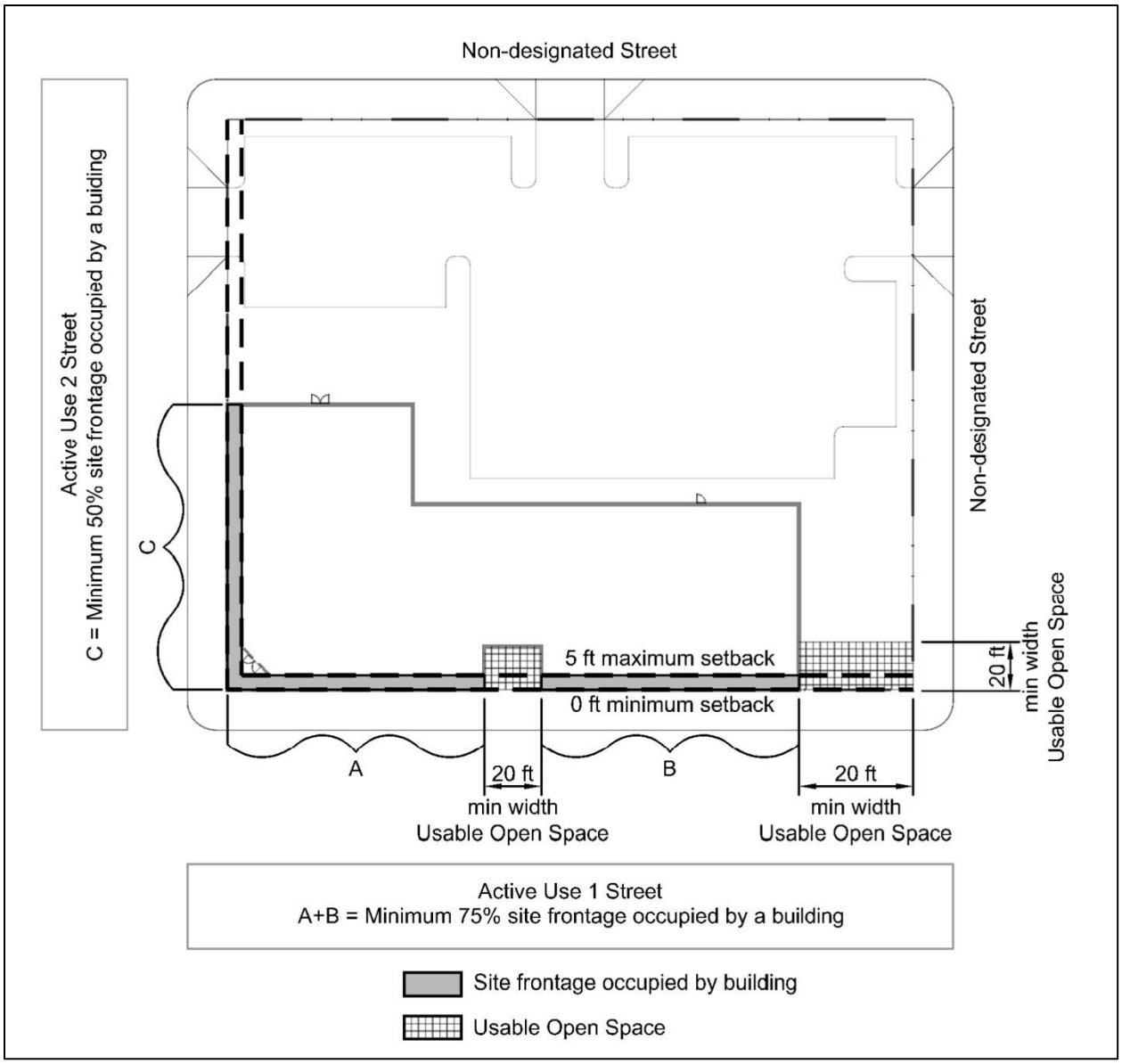
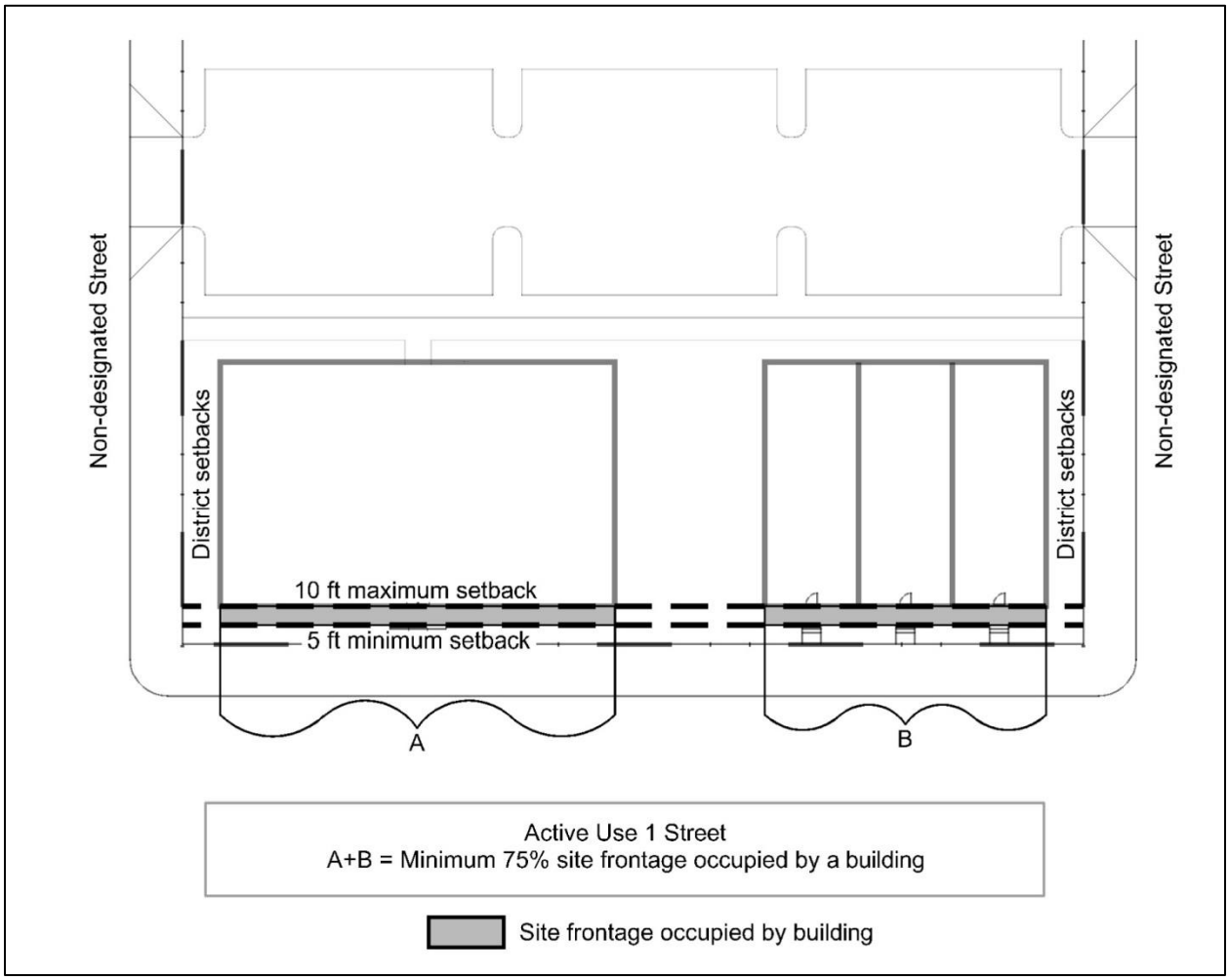


Figure 5 - Setbacks and Frontage Occupancy Example in the R-24 NB and R-25+ NB Districts (Plan View)



(2) Building Entrances and Orientation

Orienting buildings and entrances to the street helps promote an active and engaging street frontage. Building entries are important in making buildings accessible and interesting for pedestrians, and help break down the scale of the building. Buildings in the Main Street area should have entrances oriented to Active Use Streets, with a priority on Active Use 1 (Kaiser Road) street frontages to reinforce walkability on that key walking street.

Building entrance and orientation standards are shown in the table below. Figures 6 and 7 provide illustrative examples of the standards.

Building Entrance and Orientation Standards

<table>
<tr><th>DESIGNATION</th><th>NCMU NB</th><th>R-24 NB & R-25+ NB</th></tr>
<tr><td rowspan="2">Active Use 1 & Active Use 2 Street Frontages</td><td rowspan="2">Buildings with frontage on a designated Active Use Street shall have at least one prominent main entrance oriented to the Active Use Street; the allowed location includes a building corner.

Buildings with frontage on both the Active Use 1 Street (Kaiser Road) and an Active Use 2 Street shall orient the main entrance either to the corner or to the Active Use 1 Street. If the latter, a secondary entrance is required on the Active Use 2 Street.

Main entrances shall be designed with prominent features that distinguish them from other building entrances.

• The main entrance shall be the widest entrance of those provided for use by pedestrians and shall be protected from the weather by canopies or recessed behind the front building façade at least 3 feet.

• The main entrance shall be highlighted with at least one of the following architectural features:
o Transom windows
o At least two ornamental light fixtures flanking the entry
o Pilasters or columns that frame the doorway.</td><td>Buildings with frontage on the Active Use 1 Street (Kaiser Road) shall have at least one prominent primary entrance oriented to the Active Use 1 Street; the allowed location includes the building corner.</td></tr>
<tr><td>The building entrance and orientation standards do not apply to building elevations that face Active Use 2 Street Frontages.</td></tr>
<tr><td>Non-designated Street Frontages</td><td>No specific entrance or orientation requirements</td><td>Not Applicable</td></tr>
<tr><td>East-West Pedestrian Accessway Frontage</td><td>No specific entrance or orientation requirements</td><td>Not Applicable</td></tr>
</table>

Figure 6 - Building Entrance and Orientation Example in the NCMU NB District (Plan View)

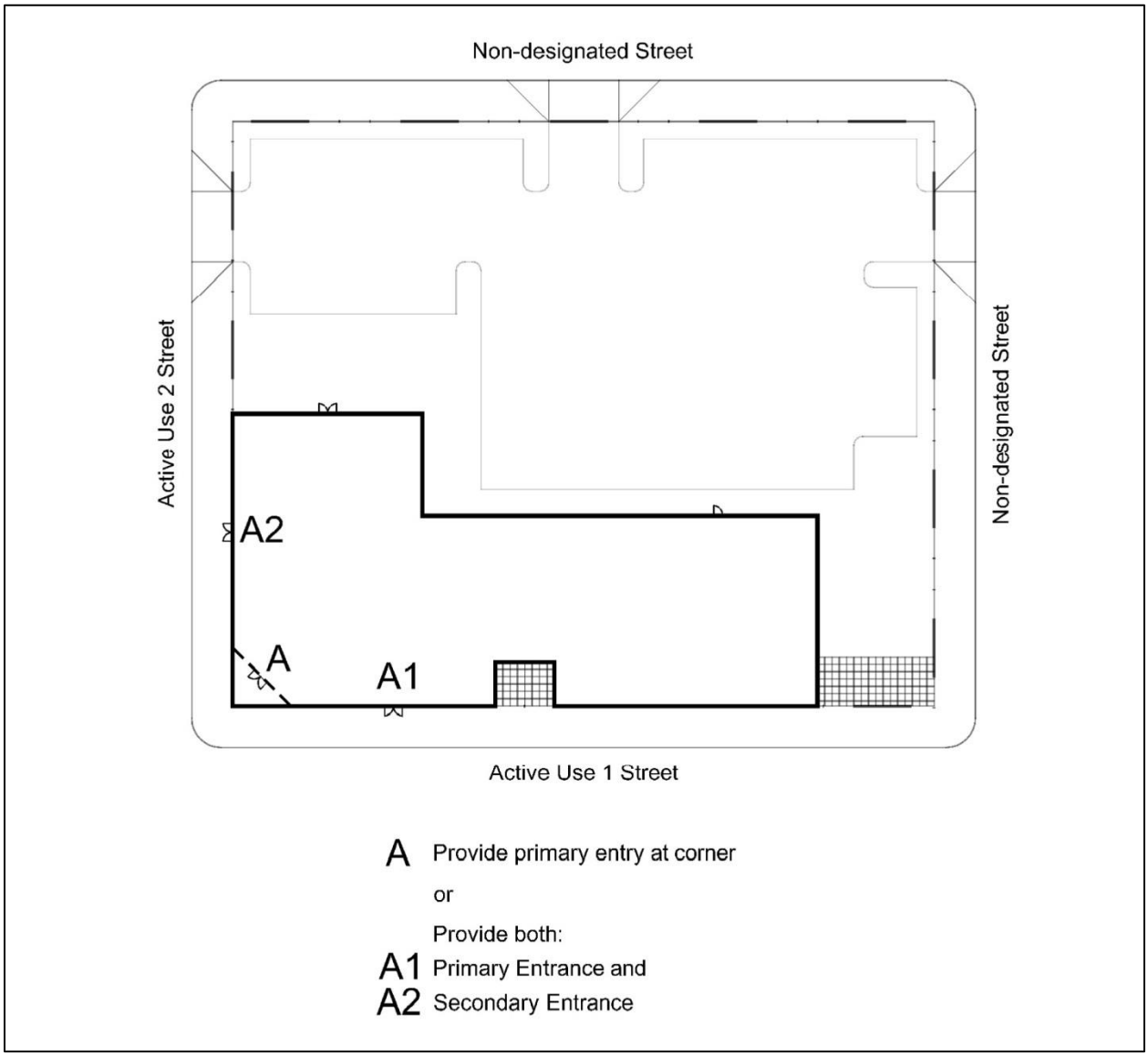
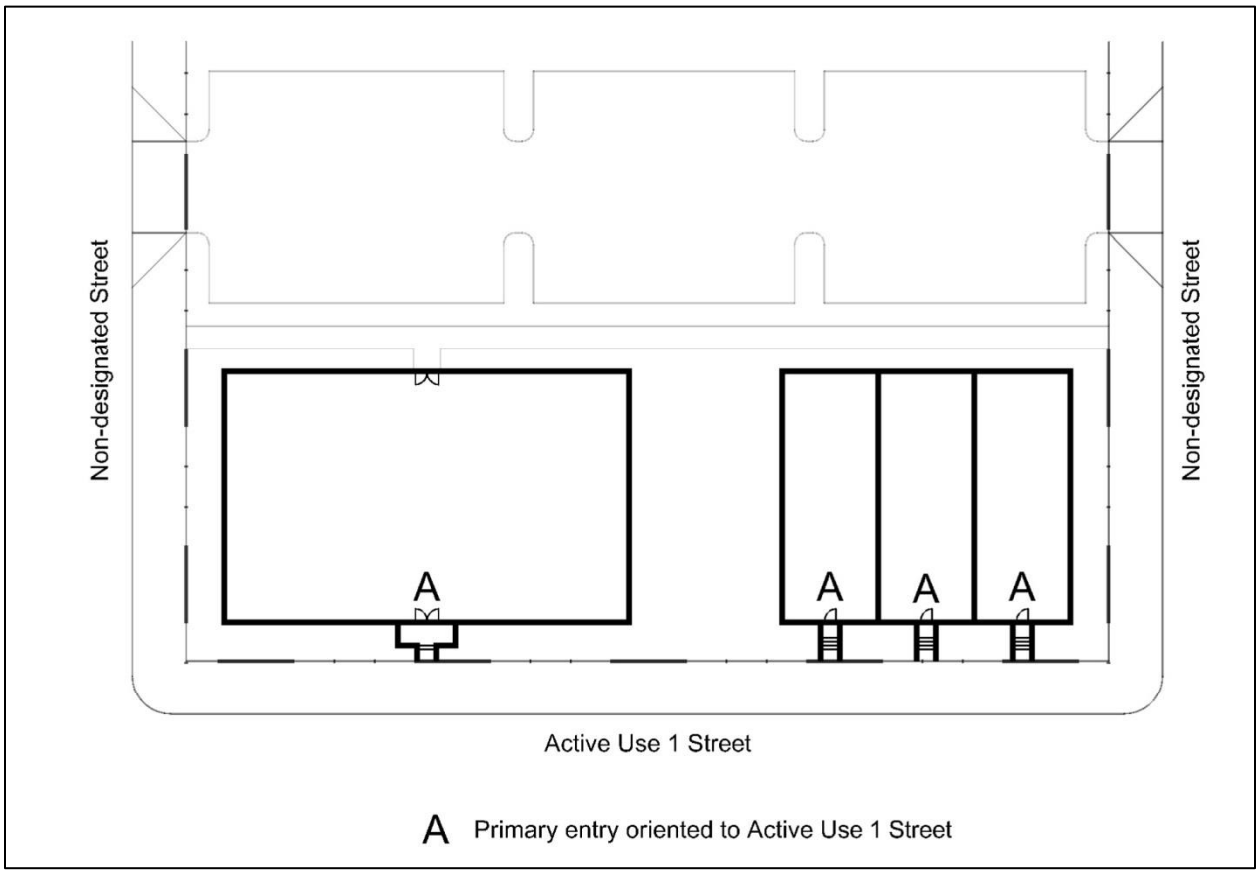


Figure 7 - Building Entrance and Orientation Example in the R-24 NB and R-25+ NB Districts (Plan View)



(3) Building Articulation

Articulation describes variation in architectural features that breaks up larger building fronts into smaller planes and masses. Articulation is key to creating visual interest, establishing a rhythm for pedestrians, and maintaining a human scale. Features that create articulation include windows, balconies, recesses, projections, roofline offsets, canopies, or changes in building material. A high degree of articulation shall be provided along street-facing frontages. Articulation shall be used to break up the overall scale of large buildings, thereby reducing perceived building length while still allowing flexibility for development on large sites.

The building articulation standards listed below apply to all street facing façades in the NCMU NB District, and to the building façades in the R-24 NB and R-25+ NB Districts that face NW Kaiser Road, except as noted. Figures 8 and 9 provide illustrative examples of the standards.

Horizontal Articulation Standards:

- Street-facing building elevations shall be articulated with a minimum 2-foot horizontal change in building plane at least every 30 feet. This horizontal articulation standard must be met for each building story.
    - Horizontal articulation features may, but are not required to, extend the full height of the building.

- The horizontal change in building plane shall be provided through at least two of the following:

    - Projecting bays at least 6 feet wide
    - Building recesses at least 6 feet wide
    - Upper-level balconies (projecting or recessed) at least 6 feet wide
    - Front porch or stoop projections, at least 4 feet wide
    - Recessed building entries at least 6 feet wide
    - Green walls at least 6 feet wide may be provided as one of the two required horizontal articulation treatments, in place of a change in building plane. A green wall, sometimes called a "vegetated wall," "living wall," or "vertical garden," is a vertical surface designed and planted to be covered at maturity by plants to a minimum height of 10 feet.

Roofline Articulation Standards:

- Roofline articulation must correspond with the horizontal articulation on street-facing building elevations, with roofline changes aligning with horizontal articulation features on the building wall beneath them.
- Roofline articulation shall be accomplished by providing one of the following roofline or roof form elements at least every 30 feet:
    - Gables, dormers, offsets in ridgeline, stepped parapets, cornice lines, or changes in roofline elevation.
- The distance between roofline articulation elements shall be measured from the center point of the element (for example, gable, dormer, offset) to the center point of the next roofline articulation element, or to the edge of the roof if that is the next closest break in the roofline.

Significant Recess Standards (applies to NCMU NB designated sites only):

- When the length of a building exceeds 200 feet, every 100 feet of building length requires a full building height recess that is at least 20 feet wide by 15 feet deep.

Figure 8 - Example Perspective of Horizontal and Roofline Articulation

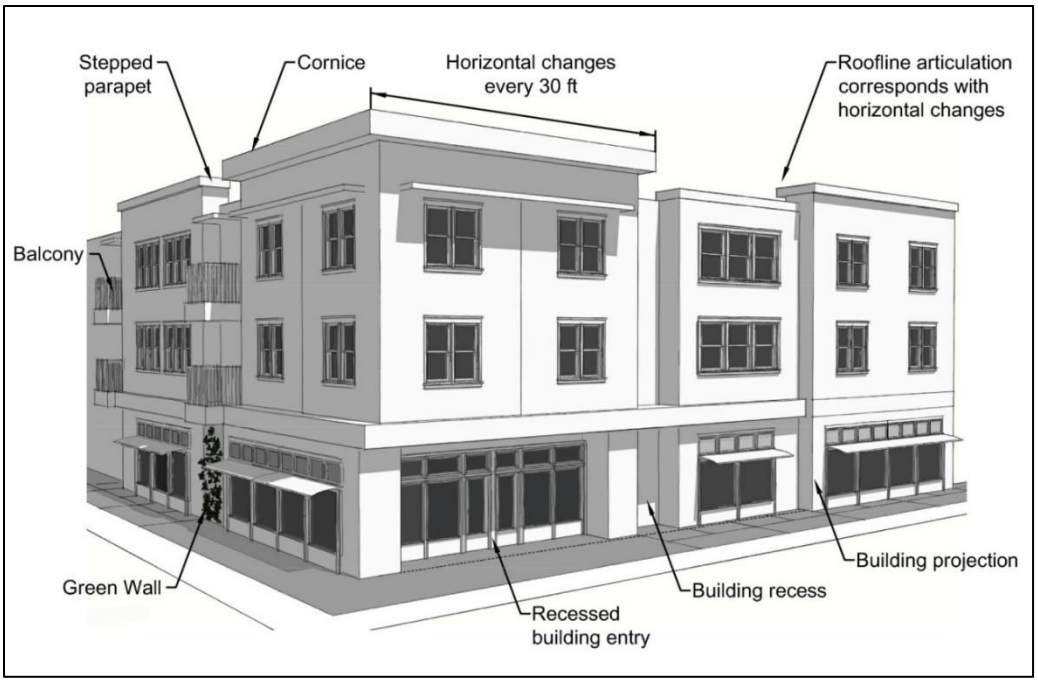
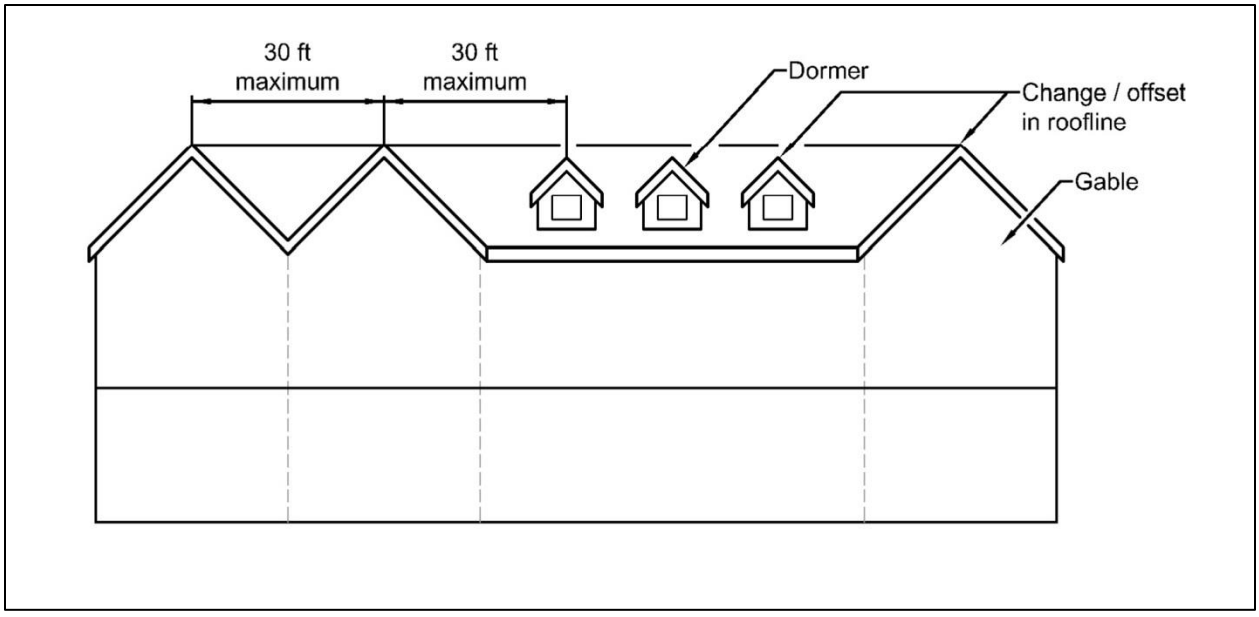


Figure 9 - Roofline Articulation Examples (Elevation)



(4) Transparency

Transparency refers to the amount of glazing (such as windows and glass doors) on a building façade. High levels of transparency at the ground floor allow pedestrians to see into interior spaces, thereby creating a direct connection between public and private realms and engaging the interest of passersby. Ground floor windows also enhance the safety of public spaces by providing direct visibility to the street.

Minimum transparency at upper floors enforces attractive “main street” style building patterns and contributes to building articulation.

High transparency is appropriate for mixed-use areas with active commercial uses at the ground floor, but less so for multifamily buildings where privacy is more of a concern for residents.

Transparency standards are described in the table and bullet list below. Figures 10 and 11 are illustrative examples of building façades having an amount of transparency that is consistent with the standards. The figures are not intended to depict specific required window configurations.

Transparency Standards

DESIGNATION	NCMU NB	R-24 NB & R-25+ NB
Active Use 1 Street Frontages (Kaiser Road)	Ground floor: min. 60% Upper floors: min. 20%	Ground floor: min. 25% Upper floors: min. 20%
Active Use 2 Street Frontages	Ground floor: min. 40% Upper floors: min. 20 %	Not Applicable
Non-designated Street Frontages	Ground floor: min. 30%	Not Applicable
East-West Pedestrian Accessway Frontage	Ground floor: min. 40% Upper floors: min. 20%	Not Applicable

Additional Transparency Standards:

- Transparency is measured as a percentage of wall area.
- Ground floor transparency is measured as the wall area up to the finished ceiling height of the fronting space or 14 feet above finished grade, whichever is less.
- Upper floor transparency is measured as the wall area higher than 14 feet above finished grade.
- All buildings with nonresidential ground floor windows must have a visible transmittance of 0.6 or higher, with the exception of medical and dental offices, which may have tinted windows.
- Visible transmittance (VT) is a measure of the amount of visible light transmitted through a material (typically glass). Information about visible transmittance typically is, or can be, provided by window manufacturers.
- Minimum transparency is not required on building façades that do not face a street.

Figure 10 - Examples of Building Façade Transparency in the NCMU NB District (Elevation)

Figure 11 - Example of Building Façade Transparency in the R-24 NB and R-25+ NB Districts (Elevation)

(5) Weather Protection

Weather protection features such as awnings, canopies, and recessed entries enhance pedestrian comfort by providing protection against sun and rain. They can also provide visual interest and help define the ground level of buildings, while establishing a human scale for development.

Weather protection standards are described in the table and bullet list below, and Figures 12 and 13 provide illustrative examples of the standards.

Weather Protection Standards

DESIGNATION	NCMU NB	R-24 NB & R-25+ NB
Active Use 1 Street Frontages (Kaiser Road)	Minimum 60% of building frontage	Protection over all building entries
Active Use 2 Street Frontages	Minimum 40% of building frontage	Not Applicable
Non-designated Street Frontages	Protection over all building entrances open to the public	Not Applicable
East-West Pedestrian Accessway Frontage	None	Not Applicable

Additional Weather Protection Standards:

- Weather protection may be provided by awnings, canopies, arcades, colonnades, recessed entries, or a combination of these elements.
- Vertical clearance from the weather protection element to the sidewalk must be between 8 and 12 feet.
- Awnings and canopies must project at least 5 feet from the building façade.

- Awnings and canopies that extend over the right-of-way must be removable. Approval of an Encroachment Agreement (Revocable Permit to Encroach Right-of-Way) must be obtained and recorded for awnings and canopies that extend over the right-of-way.
- Buildings with balconies, structural awnings or canopies, arcades, or colonnades must be set back a sufficient distance to prevent intrusion of these elements into the right-of-way, while still meeting maximum setback and frontage occupancy standards.

Figure 12 - Weather Protection Example in the NCMU NB District (Plan View)

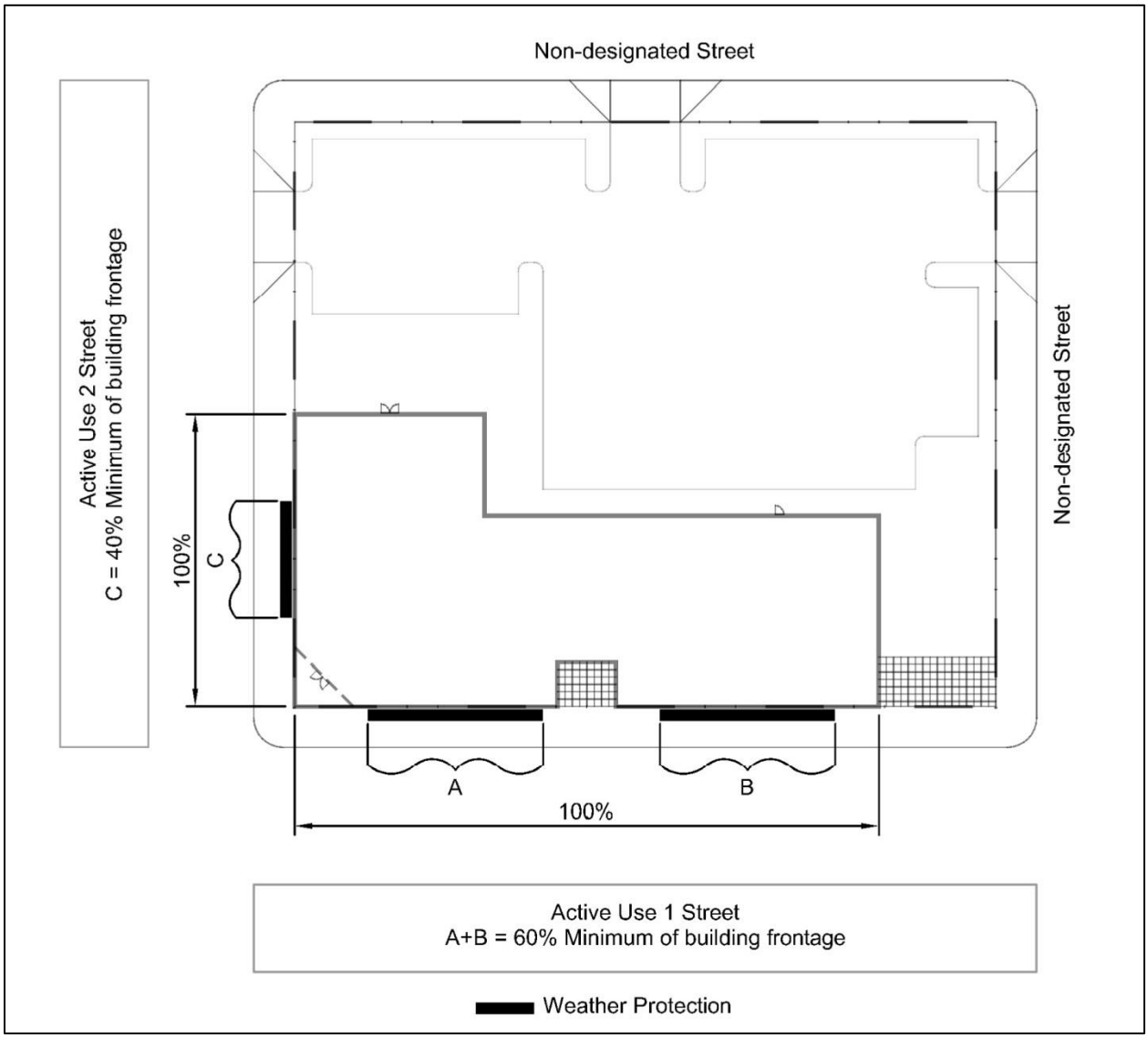
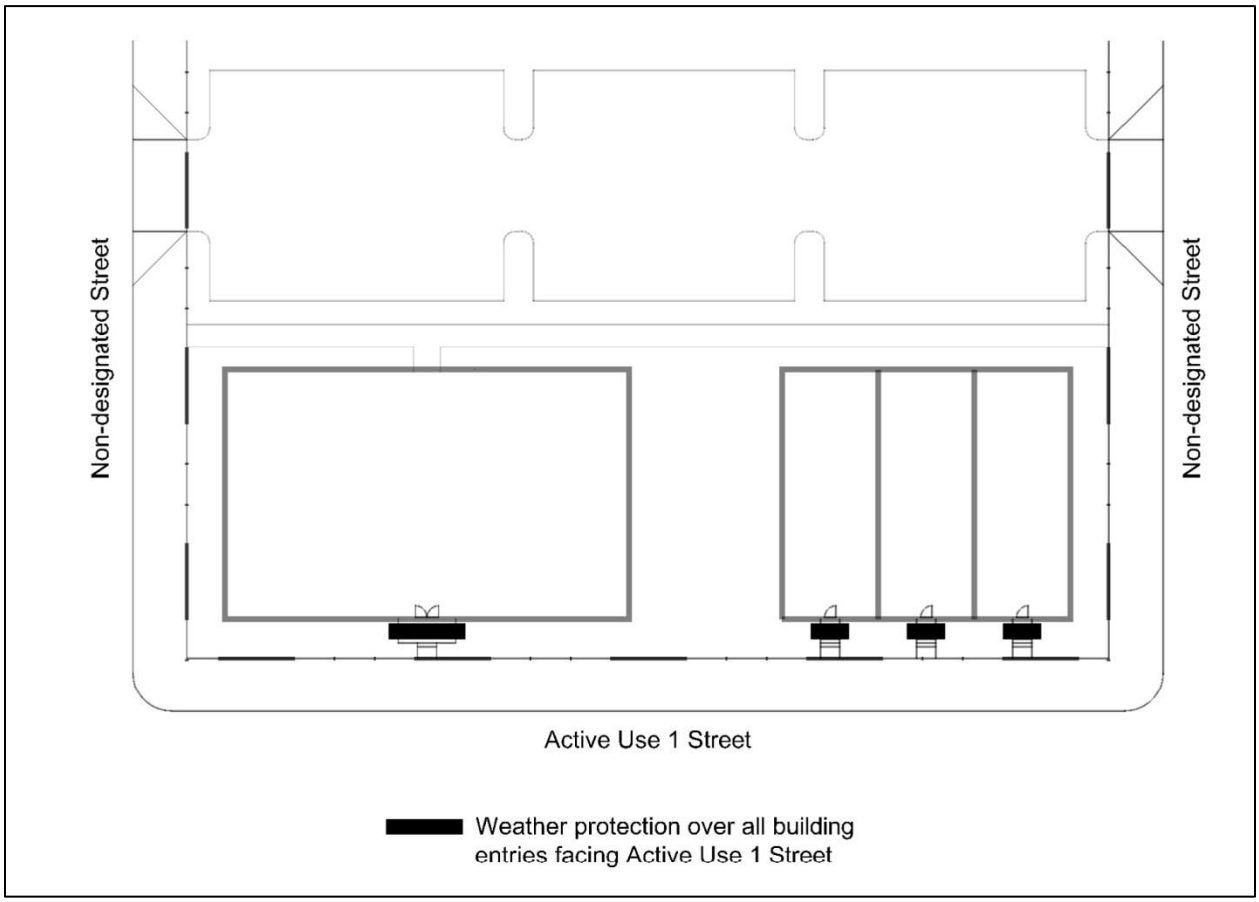


Figure 13 - Weather Protection Example in the R-24 NB and R-25+ NB Districts (Plan View)



(6) Building Materials

The use of exterior building materials and high-quality finishes can establish a sense of permanence and durability for development in the Main Street area, and using a variety of materials helps provide visual interest. The use of lower-quality building materials, as defined below, shall be prohibited.

The building materials standards listed below apply only to street facing façades in the NCMU NB District.

The following exterior building materials are ***allowed***:

- Masonry (4 inches x 4 inches x 16 inches or smaller)
- Stucco
- Stone
- Wood or cementitious shakes and shingles
- Horizontal lapped siding
- Wood or architectural grade fiber cementitious panel siding
- Concrete-wood mix siding
- Metal (standing seam or panel, painted or galvanized)
- Glass

The following exterior building materials are prohibited:

- T-111 siding, plain or plain painted plywood and strandboard sheets, and similar exterior materials
- Concrete or split-face concrete masonry unit (CMU

Variety of exterior building materials:

- Each street-facing building façade must include a minimum of two types of exterior building materials, each with an area of at least 20% of the façade, except that masonry exterior building material may be used singly and applied to the entirety of the façade.

(7) Parking, Loading and Vehicle Access

Vehicle access is often in conflict with pedestrian-friendly design. To promote a safe, comfortable and vibrant pedestrian environment, it is best to limit driveway curb-cuts and surface parking adjacent to sidewalks. Parking and loading should be located behind buildings in the Main Street area to the greatest extent possible.

Landscaping should be used to soften the edges of vehicle areas and provide screening for parking and loading areas. The Community Design Goals in Section III.D. call for integration of stormwater management with other North Bethany Subarea Plan elements. Stormwater planters or low impact development approach (LIDA) facilities can serve as attractive landscaping in addition to their runoff management function, and shall be encouraged to serve this dual function for parking facilities in the Main Street area.

Large surface parking lots should provide safe and comfortable walking paths, to ensure that pedestrians remain a priority. The width and requirements for perimeter parking lot landscaping should provide sufficient visual buffering from the street and to accommodate large shade trees.

The parking, loading and vehicle access standards described in the table and bullet lists below apply only to development in the NCMU NB District. Figure 14 provides an illustrative example of some of the standards.

Parking, Loading and Vehicle Access Standards

DESIGNATION	**R-24 NB**
Active Use 1 Street Frontages (Kaiser Rd)	Vehicle parking is prohibited in the southwest portion of the future East Community Park that is located within the Main Street area.
DESIGNATION	**NCMU NB**
Active Use 1 Street Frontages (Kaiser Rd)	Surface parking and vehicular circulation facilities shall be located behind building(s). For areas where the site's street frontage is not occupied by a building, surface parking and vehicle circulation facilities must be set back a minimum of 20 feet from the lot line abutting the street. Driveway access onto private property is not permitted from Kaiser Road.
Active Use 2 Street Frontages	Surface parking and vehicular circulation facilities shall be located behind buildings, or to the side of building(s), as long as the minimum 50% frontage occupancy standard is met. One driveway access onto a development site is permitted per block.
Non-Designated Street Frontages	No additional standards apply beyond those present in the Community Development Code and other County documents.
East-West Pedestrian Accessway Frontage	Surface parking and vehicular circulation facilities shall be located behind buildings, or to the side of building(s).

Additional Parking, Loading and Vehicle Access Standards:

Parking Lot Perimeter Landscaping

- Where surface parking or vehicular circulation facilities are located adjacent to the right-of-way or east-west pedestrian accessway, perimeter planter strips shall have a minimum 6-foot width, and shall be planted with trees spaced not more than 30 feet on center, and a mix of shrubs and ground cover to provide a landscaped screening buffer.
- LIDA planters or swales may be used to meet some or all of the perimeter landscaping requirement as long as trees and shrubs are also provided.

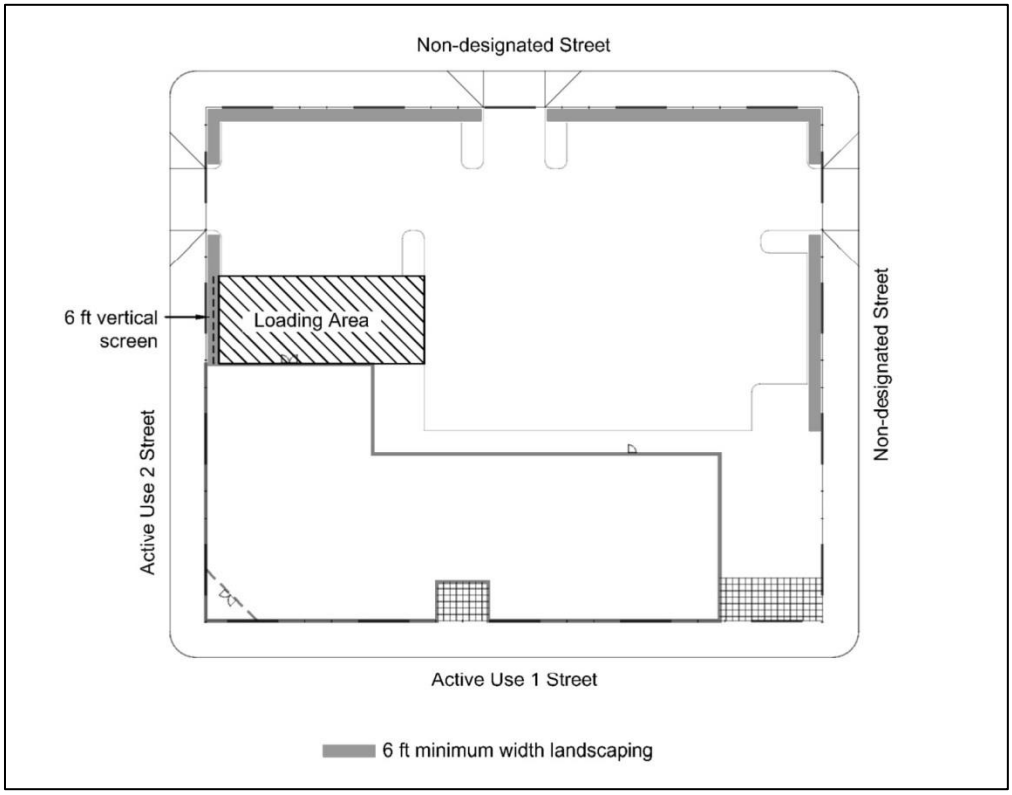
Pedestrian Connections through Parking Lots:

- For non-designated street frontages, pedestrian connections through parking lots are required to connect sidewalks along the street to building entrances.
    - Pedestrian connections must be physically separated from adjacent vehicle parking and from parallel vehicle traffic through the use of curbs and landscaping, if not otherwise provided in the parking lot design.
    - Pedestrian connections shall have a minimum 5-foot width and shall be paved or striped to distinguish them from surrounding parking and vehicle circulation areas.

Loading Areas

- For buildings with surface parking, the loading area must be screened or must not be visible from the right-of-way.
- Where loading areas are adjacent to a right-of-way, the required perimeter parking lot landscaping shall include shrubs reaching a height of 6 feet at maturity, or a 6-foot site-obscuring fence, in addition to the required trees.
- Loading shall not interfere with pedestrian circulation.

Figure 14 - Example of Parking, Loading and Vehicle Access in the NCMU NB District (Plan View)



(8) Emphasized Corners and Main Street Community Gateways

Corner sites will be highly visible within the Main Street area, and are well positioned to activate and add visual interest to the pedestrian realm.

Three corner sites in the NCMU district, depicted in Figure 15, are located at the intersection of two key pedestrian routes, Kaiser Road and the Park Blocks, and frame the heart of the Main Street area. These three corners shall become emphasized corners with prominent design elements. Required design elements shall distinguish the building corners at these sites from the rest of the block with features that create focal points and establish a strong building edge for the street.

Two community gateway locations along NW Kaiser Road, depicted in Figure 15, mark the north and south entrances to the Main Street area. These gateways are also identified on the Core Design Elements Map. Gateway features are intended to help define the main entrances to a district, and can create a sense of place by establishing focal points that set the tone for the Main Street's unique character. Development at Community Gateway sites shall be subject to similar standards as Emphasized Corners, but shall feature additional corner design elements to make them even more prominent.

The east side of the south gateway is also the southwest corner of the East Community Park.

The Core Design Elements map shows a design feature within the southwest quadrant of the East Community Park. That design feature, identified as a civic use in Section VI. D., Southeast Neighborhood Design Element 2, is described as a building. If the civic use building is sited at the southwest corner of

the park adjacent to the NW Kaiser Road/Brugger Road intersection, it will also serve as a gateway feature and will be subject to the gateway standards described below.

However, while the civic use building is required to be sited within the southwest quadrant of the park, it is not required to be sited within the south gateway. If the civic use building is sited north or east of the gateway, it will not serve as a gateway feature.

Since the southwest corner of the East Community Park is the south gateway to the Main Street area, the County believes that the siting of a prominent place-making element at that corner is critical to the performance and success of the Main Street area.

Therefore, if the civic use building will be sited north or east of the south gateway rather than at the corner, the County strongly encourages THPRD to consider siting a plaza space at this corner during THPRD's future master planning of the East Community Park. The County encourages THPRD to consider the inclusion of plaza features such as a fountain, public art or prominent structure to help anchor the park's corner as a south gateway to the Main Street area.

The standards for the Emphasized Corners and Community Gateways are listed below. Figures 16 and 17 provide illustrative examples of the standards.

<u>Standards for Emphasized Corners and Main Street Community Gateways:</u>

A. Buildings at the Emphasized Corners identified in Figure 15 shall feature at least two of the treatment options listed in Items 1 - 4 in Section B below. The treatment options listed in Items 1 - 3 shall have a minimum width of 10 feet along both of the intersecting building façades, measured from the building corner to the edge of the treatment option along each façade. (See Figure 17 for an illustration of the 10-foot minimum width measurement.)

B. Buildings located at Main Street Community Gateway corners identified in Figure 15 shall feature at least three of the treatment options listed in Items 1 - 5 below. The treatment options listed in Items 1-3 shall be subject to the 10-foot minimum width requirement described in Section A above.

    1. Increased building height of at least 10% above the height of the remainder of the building.

    2. Break in horizontal massing of at least 2 feet; this can be a projection or a recess. If the building has more than one story, the massing break must extend for at least two stories.

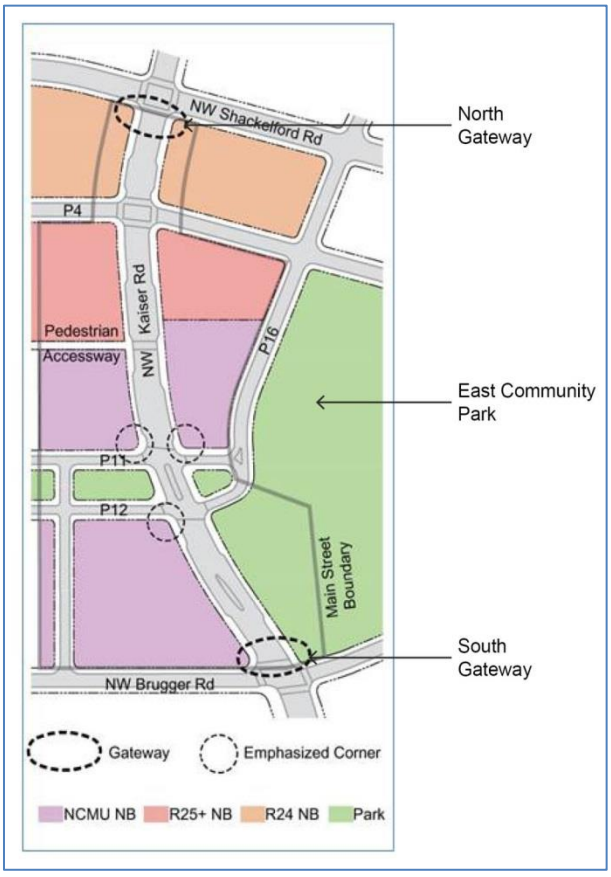


Figure 15 - Location of Emphasized Corners and Community Gateways in the Main Street Area

3. Distinct cornice treatment that is differentiated from the rest of the building roofline.

4. Chamfered or curved corner. A chamfered corner shall have a 45-degree corner cut and a 3-foot minimum depth. A curved corner shall have a 2-foot minimum rounded corner depth. (See Figure 17 for an illustration of the chamfered corner and curved corner minimum depths.)

5. Plaza space with pedestrian amenities and a distinct landscape or hardscape design that incorporates at least two of the following features:

   a) Bench(es)

   b) Seat wall(s)

   c) Pavers or scored, patterned, textured, or colored concrete

   d) Landscaping contained in planters or raised planter boxes

   e) Green wall on an adjacent building. A green wall, sometimes called a "vegetated wall," "living wall," or "vertical garden," is a vertical surface designed and planted to be covered at maturity by plants to a minimum height of 10 feet

   f) Fountain

   g) Public art

Figure 16 - Examples of Emphasized Corner and Community Gateway Treatment Options (Elevation)

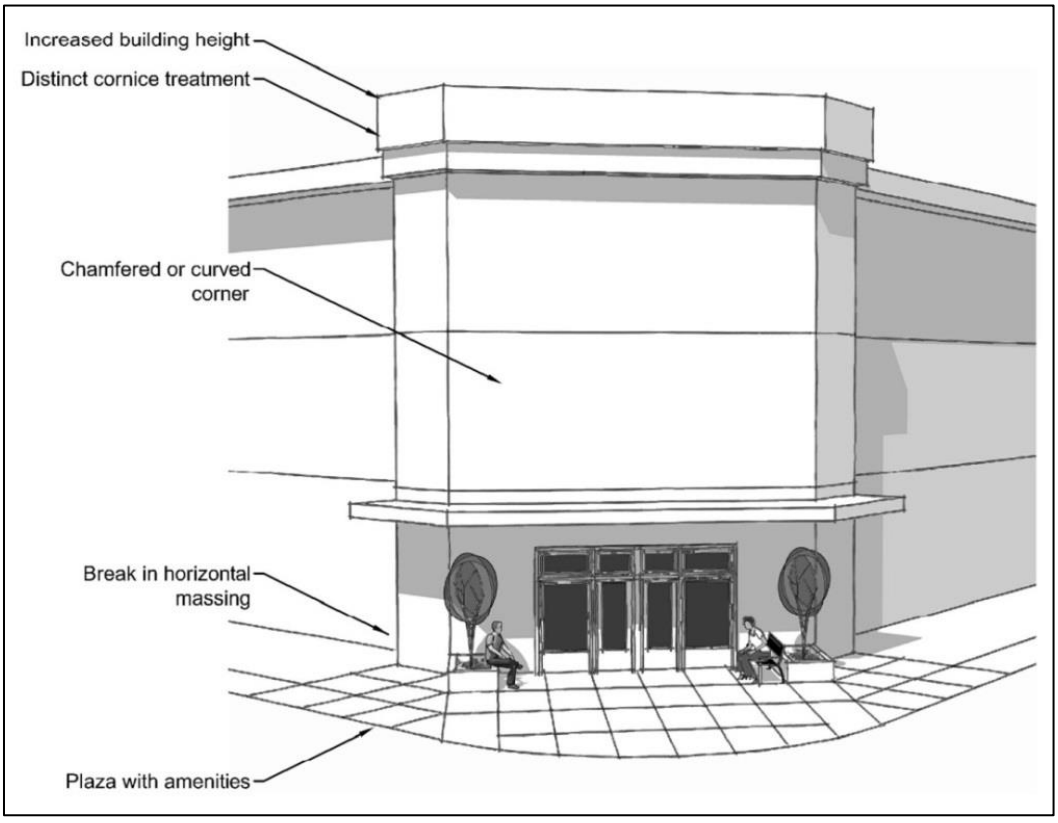
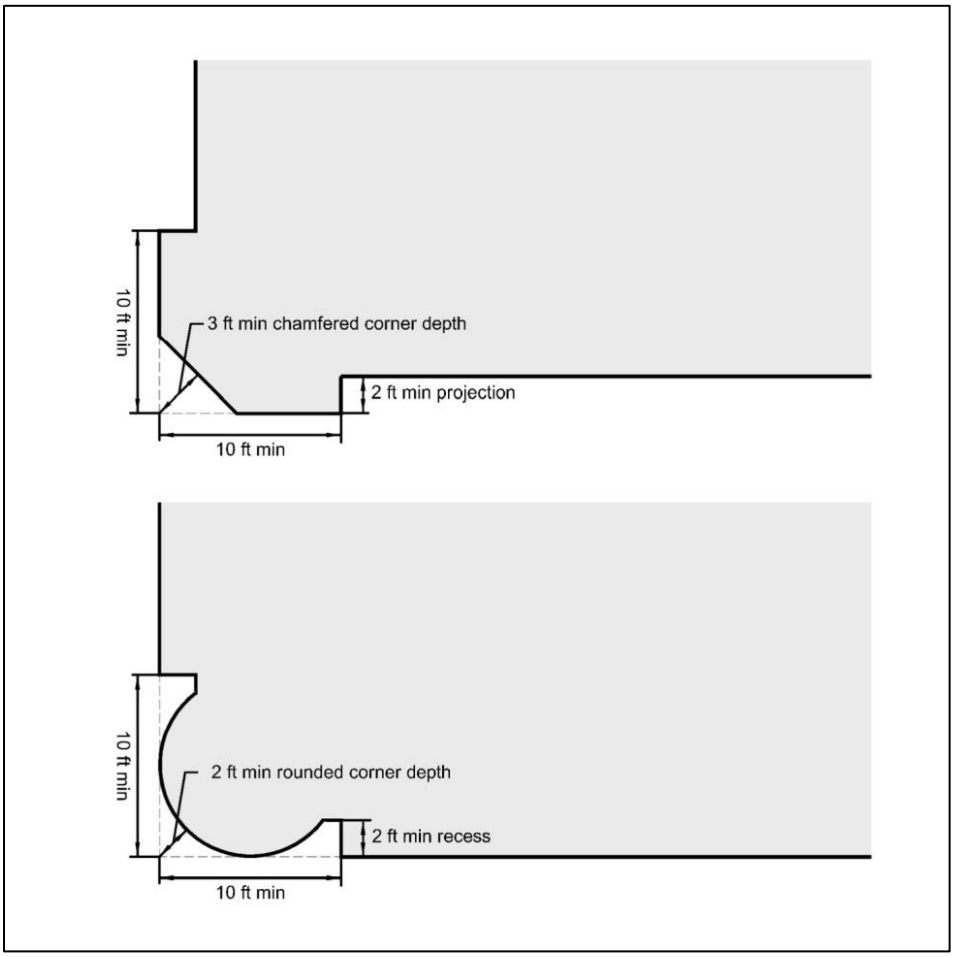


Figure 17 - Examples of Chamfered and Curved Corner Treatment Options (Plan View)



(9) Street Furnishings

Some elements of the streetscape design for the Main Street, such as street tree species and streetlight fixtures and poles, were established with the initial adoption of the North Bethany Subarea Plan in 2010 via A-Engrossed Ordinance No. 730. However, the style of street furnishings - benches, trash receptacles and bicycle racks - was not determined.

A distinct palette of street furnishings can help enhance the unique character of a district by distinguishing it from other areas. Therefore, the UDP evaluated styles of street furnishings for the Main Street area.

The street furnishings for the Main Street area should reflect the desired character of North Bethany, a "community of distinction" that promotes high-quality, enduring urban design and integrates natural areas throughout its urban spaces. The street furnishings should also coordinate with the streetlight fixture previously established for use in the Main Street.

Street Furnishings Palette

At the public open houses for the North Bethany Main Street Urban Design Plan, the community chose a preferred street furnishings palette with a minimalist design. This street furnishings palette will be powder-coated black to match the black streetlight fixture that is required along Kaiser Road. Figure 18 shows the bench, trash receptacle and bike rack for this palette.

Figure 18 - Street Furnishings Palette

The street furnishings palette consists of the following products:

Bench:	Trash Receptacle:	Bike Rack:
Product: Austin Bench Details: Backed with end arms Manufacturer: Landscapeforms Mounting: Surface mount Material: DSTMA wood, Black powder-coat arms and underbody Contact: 800-430-6206 x1319	Product: Austin Litter Receptacle Details: Side opening without lock Manufacturer: Landscapeforms Finish: Black powder-coat Contact: 800-430-6206 x1319	Product: Loop Bicycle Rack Manufacturer: Landscapeforms Mounting: Embedded mount Finish: Black powder-coat Contact: 800-430-6206 x1319

In the event that the above street furnishings are discontinued or otherwise unavailable, the Planning and Development Services Manager may approve substitute furnishings. The substituted furnishings shall be consistent with the appearance of the approved products.

Street Furnishing Location & Spacing

Benches, trash receptacles, and bicycle racks shall be located within the street furniture zone between the sidewalk and the curb, and in line with street trees.

Benches, trash receptacles and bicycle racks shall be spaced closer together on Active Use Streets, where there is likely to be the most pedestrian and bicycle activity.

The table below provides the recommended spacing for street furnishings by Active Use Street type. These are recommendations only, recognizing that street furnishing locations may need to be fit around other site features such as street lights and utilities. All street furnishing locations and spacing are subject to County Engineer approval.

Recommended Spacing for Street Furnishings

DESIGNATION	BENCHES	TRASH RECEPTACLES	BIKE RACKS
Active Use 1 Street Frontages (Kaiser Road)	One bench for every 100 feet of building frontage or two per block, whichever is more	One receptacle for every 100 feet of building frontage or two per block, whichever is more	At least one rack for every 100 feet of building frontage or two per block, whichever is more
Active Use 2 Street Frontages	At least one bench per block	At least one receptacle per block	At least one rack per block
Non-Designated Street Frontages	None required	None required	None required

Street Furnishing Maintenance

Maintenance of street furnishings in the Main Street area is subject to the requirements of CDC Section 390-22.5, North Bethany Subarea Overlay District - Road Landscape and Street Furniture Maintenance.

c. Illustrative Street Cross Sections

The adopted street cross section for Kaiser Road within the Main Street area, Street Design Type AR-b, includes wide sidewalks, bike lanes, on-street parking, LIDA swales, a planted median, and two vehicle travel lanes. The Kaiser Road right-of-way has a generous width of 102 feet, but street trees and street furnishings will help create a human scale along the street. The following illustrative cross sections show what Kaiser Road might look like with future development that complies with the ASC 2 design elements, at three points within the Main Street area that are shown in Figure 19.

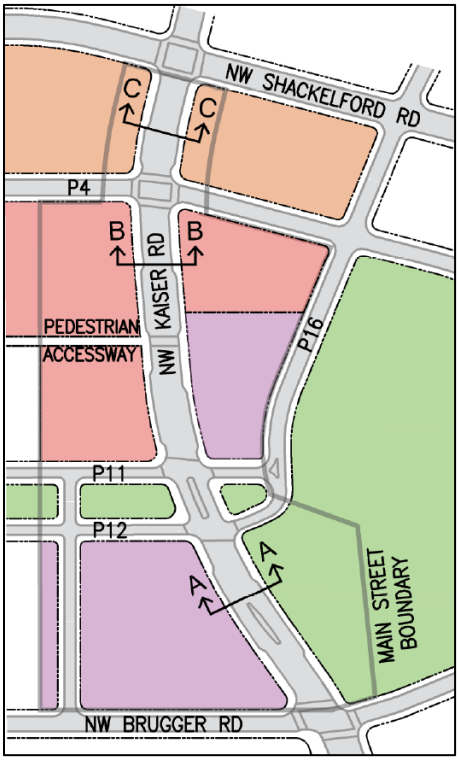
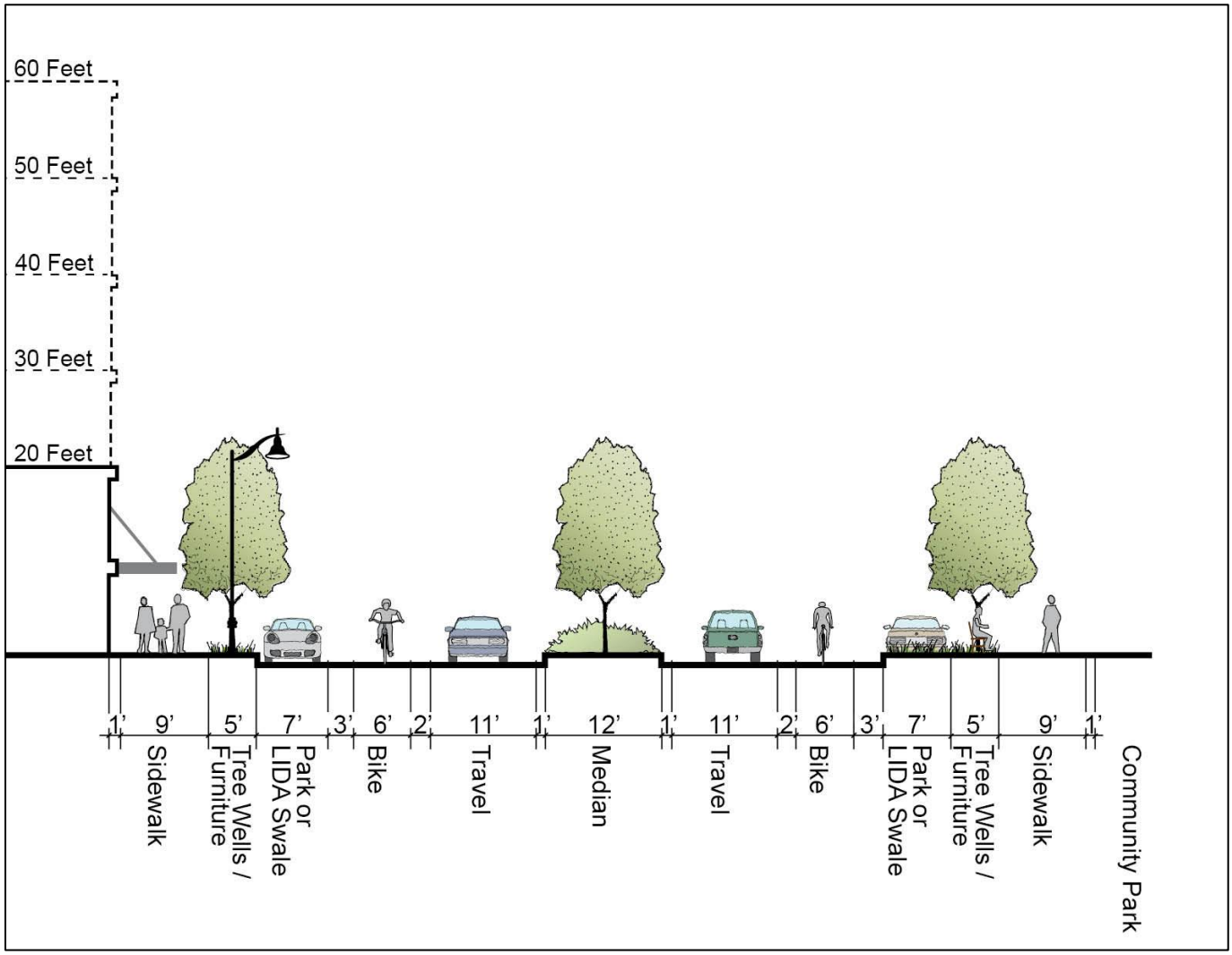


Figure 19 - Illustrative Cross Section Locations

(1) Cross Section A

Cross Section A, shown in Figure 20, illustrates NW Kaiser Road at the southern NCMU NB block with the East Community Park to the east. The cross section illustrates the minimum building height of 20 feet and the maximum height of 65 feet. The cross section depicts the width of the road right-of-way relative to a future building, thereby illustrating the importance of the building's ability to create a sense of enclosure. The cross section shows how weather protection such as awnings, street trees and furnishings can help create a more human scale.

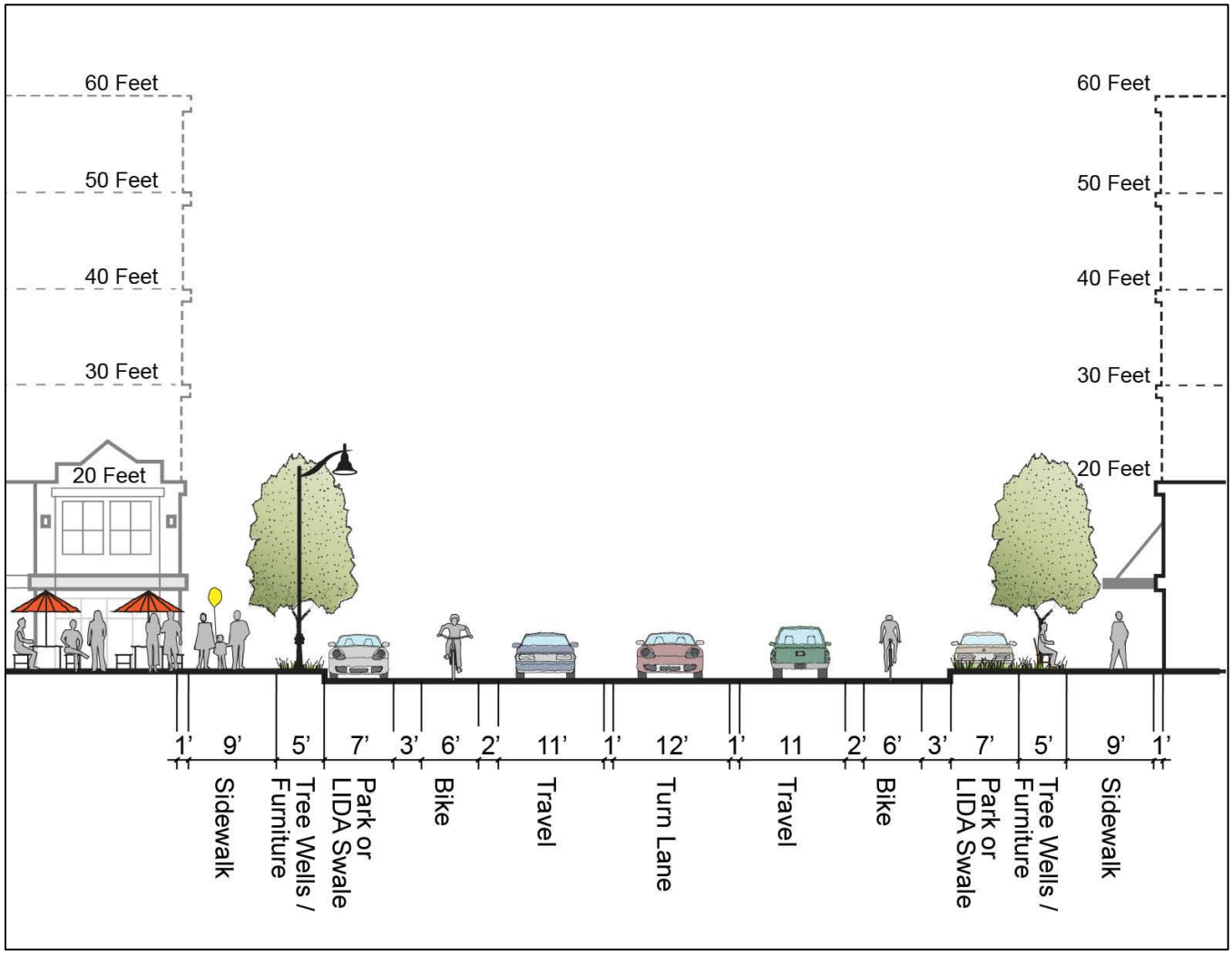
Figure 20 – Cross Section A



(2) Cross Section B

Cross Section B, shown in Figure 21, illustrates what the NCMU NB blocks might look like with a pedestrian plaza on one side. While sidewalks on Kaiser Road may provide some space for outdoor seating (such as small café tables), larger seating areas and gathering places should be accommodated in building recesses or spaces between buildings.

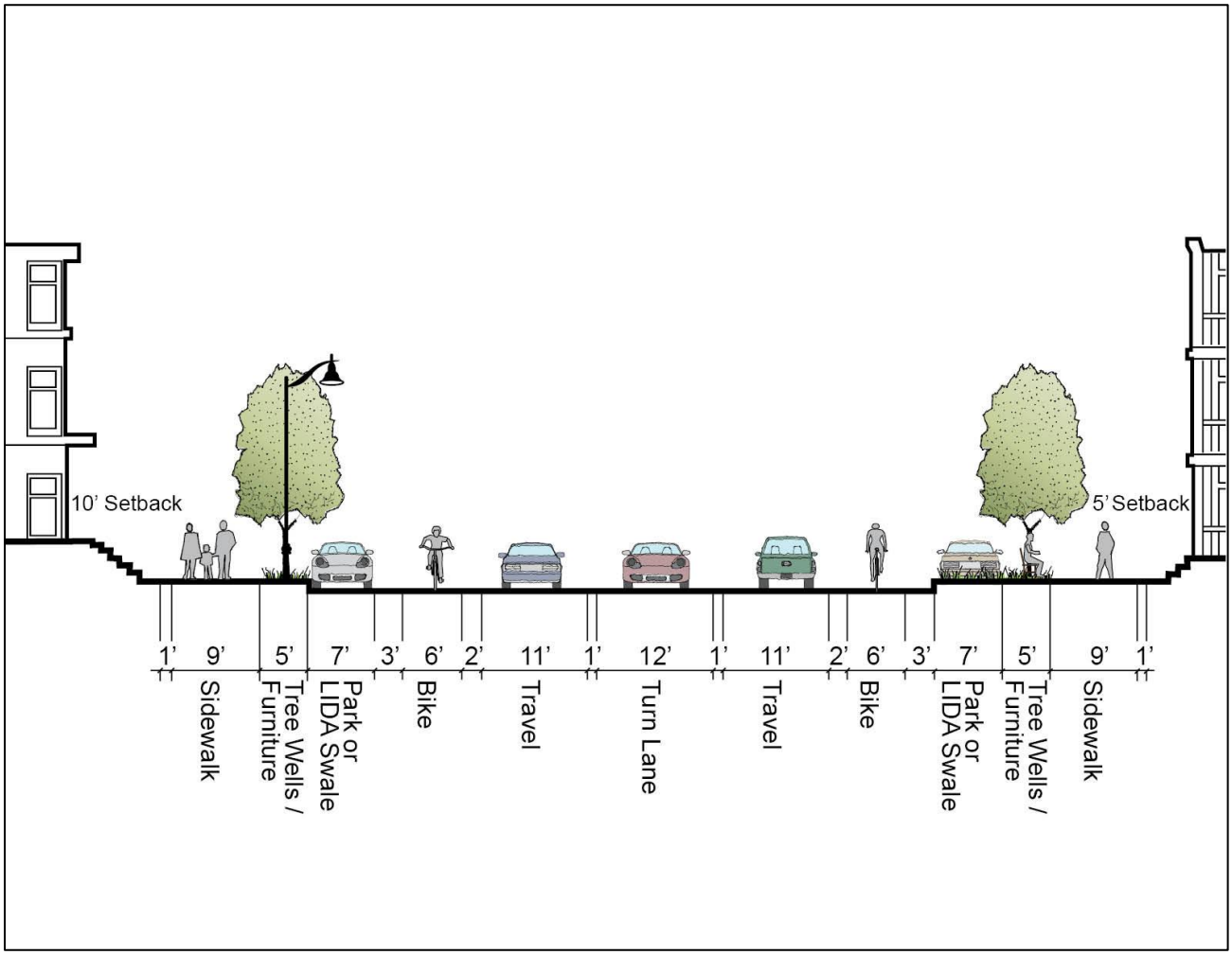
Figure 21 – Cross Section B



(3) Cross Section C

Cross Section C, shown in Figure 22, illustrates the R-24 NB multifamily blocks on the north end of the Main Street, with minimum and maximum setbacks of five and 10 feet, respectively. The CDC has already established a maximum height of 50 feet for this district. The scale of future buildings is likely to be around three stories.

Figure 22 – Cross Section C



ASC Road Corridor 3 – Joss Avenue: Brugger Road to Road A

Until Road A is constructed between NW Joss Avenue and NW 185th Avenue, this segment of Joss Avenue is expected to carry significantly higher volumes of traffic than is typical for a neighborhood route. Consequently, while NW Joss Avenue is designated as an interim collector on the Functional Classification Map in the Transportation Plan, it is anticipated that it ultimately will be reclassified to its expected function as a neighborhood route after construction of Road A to NW 185th Avenue. Extensions of NW Joss Avenue shall be consistent with either the Neighborhood Route or the CL-1 street design cross section shown in Section VII, with modifications permitted as described below. The County Engineer shall approve the appropriate cross section prior to submittal of any development applications for land adjacent to this segment of NW Joss Avenue.

The County Engineer may approve modifications to the street design cross section to address the interim classification. For instance, two viable interim options include:

- Build a neighborhood route and restrict on-street parking while providing vehicle, bike and pedestrian access during the interim collector period; or
- Build a CL-1 cross section without a center turn lane and converting bike lanes to on-street parking when the street becomes a neighborhood route.

The street trees shall be consistent with the Neighborhood Route designation for the Northwest and West Neighborhoods, as listed in the North Bethany Street Tree List.

ASC Road Corridor 4A – NW Springville Road between the Arbor Oaks Subarea eastern boundary and the county line

NW Springville Road shall be three lanes with additional turn lanes at intersections as determined by the County Engineer. Consistent with the AR-2 cross section drawing included in Section VII, the street shall include five-foot wide sidewalks and a seven-foot wide landscape strip, where practicable, within the right-of-way area, along with curb extensions at public streets where appropriate. Landscaped medians shall be provided wherever such medians do not conflict with vehicular stacking for left turn movements. Unless review at the land development stage indicates corner vision (CDC Section 418-3) or sight distance issues (CDC Section 501-8.5F), access to NW Springville Road from Primary Streets shown on the Primary Streets Map and non-Primary Streets shown on the Neighborhood Plan Maps shall be allowed. Turn restrictions on these allowed accesses may be required through the land development process. Additional access locations shall be consistent with the arterial access spacing requirements of CDC Section 501-8.5.

Right-of-way shall be 90 feet. Property on the north side of NW Springville shall dedicate up to 53 feet from centerline.

ASC Road Corridor 4B – NW Springville Road between NW 185th Avenue and the Arbor Oaks Subarea western boundary

NW Springville Road shall be five lanes with additional turn lanes at intersections as determined appropriate by the County Engineer. Consistent with the AR-2 cross section drawing included in Section VII, the street shall include five-foot sidewalks and a seven-foot wide landscape strip, where practicable, within the right-of-way area, along with curb extensions on public streets where appropriate. Landscaped medians shall be provided wherever such medians do not conflict with vehicular stacking for left turn movements. Unless review at the land development stage indicates corner vision (CDC Section 418-3) or sight distance issues (CDC Section 501-8.5F), access to NW Springville Road from Primary Streets shown on the Primary Streets Map and non-Primary Streets shown on the Neighborhood Plan Maps shall be allowed. Turn restrictions on these allowed accesses may be required through the land development process. Additional accesses shall be consistent with the arterial access spacing requirements of CDC Section 501-8.5. The design for NW Springville Road includes a realignment of the NW 185th Avenue/NW Springville Road intersection, which shifts NW Springville Road to the north of its existing alignment between NW 181st Avenue and NW 185th Avenue (as shown on the Neighborhood Plan Map and the Transportation System Plan).

Right-of-way shall be 90 feet. Property on the north side of NW Springville shall dedicate up to 53 feet from centerline.

ASC 5 – Park Blocks Local Street Circulation and Setbacks

The Park Blocks ASC includes the Park Blocks and developable residential land to the north and south. The Park Blocks are situated along the top of a ridge that extends in an east-west direction. From this vantage point, views are available to the Tualatin Hills (north and east) and the Tualatin River Valley (south and west). The Park Blocks are centrally located within the Subarea and adjacent to community gathering locations including the two community parks and the North Bethany Main Street area. The shorter east-west block lengths are designed to maximize pedestrian connections to the Park Blocks and associated views from the ridgeline. The following requirements apply in the Park Blocks ASC:

1. Comply with the connectivity and block length standards of CDC Section 408-6, with the following exception:

    a. The north-south block length between the Park Blocks and Primary Street P4 may exceed 530 feet in conjunction with the pedestrian accessway shown on the Parks, Trails and Pedestrian Connections Map and described below under item 6 of this ASC.

2. East-west block lengths may be longer than what is shown on the Neighborhood Plan within the following specifications:

    a. The block lengths along the entire length of the Park Blocks shall be relatively uniform, with a maximum variation of 10%.
    b. The north-south block length as shown on the Neighborhood Plan and the Block Perimeter Standards in Section 408-6 shall be met.
    c. There shall be no fewer than four north-south streets intersecting the Park Blocks between the Waterhouse Powerline Trail Corridor and Kaiser Road. If fewer than five north-south intersecting streets are provided, a minimum of three north-south pedestrian-bicycle accessways shall be provided between the powerline corridor and Kaiser Road.

        One of these required pedestrian-bicycle accessways shall be provided east of Primary Street P20, approximately in the center of the property identified as Map 1N1 17B, Tax Lot 700, to continue the alternating pattern of north-south streets and accessways located on properties further east that were approved through the development review process. A full street may be substituted for this pedestrian-bicycle accessway.

        These north-south pedestrian-bicycle accessways shall have a minimum 10-foot paved width. These accessways shall have a minimum right-of-way width of 20 feet. Instead of right-of-way dedication, the required width may be recorded in a tract or easement. The minimum right-of-way width shall be 30 feet in areas where all of the following conditions are present: The accessway is flanked on both sides by existing or proposed buildings for a distance of more than 300 feet; the separation distance of the buildings on opposite sides of the accessway is less than 70 feet; and the length of the parallel building walls on each side of the accessway equates to 75% or more of the >300 foot distance along the accessway. These north-south accessways shall extend between NW Brugger Road and Road P4, including crossing through the Park Blocks.

        The length of continuous fencing along the accessways is limited to a maximum of 300 feet. Continuous fence lines shall contain openings at minimum intervals of 300 feet, and the openings shall be a minimum of 10 feet in width.

The north-south pedestrian-bicycle accessways may exceed 300 feet in length between streets, but shall comply with the other standards of CDC Section 408-9. In the event standards of ASC 5 conflict with a requirement of CDC Section 408-9, the ASC 5 standards shall control.

3. Primary Streets P11 and P12 comprise a couplet with the Park Blocks as a median. The width of the Park Blocks median shall be 170 feet (100 feet of median width with 35 feet of couplet right-of-way on each side of the block).

4. Vehicular access to residential properties adjacent to the Park Blocks is not permitted from the Park Blocks in order to maintain a continuous pedestrian-oriented public streetscape. A consolidated vehicular access to the North Bethany Main Street Area is permitted.

5. Parking lots between the street and the adjacent buildings are prohibited.

6. Development shall provide an east-west pedestrian accessway between the Park Blocks and Primary Street P4. The pedestrian accessway shall be consistent with CDC Section 408-8.2. This accessway may exceed 300 feet in length between streets, but the accessway design shall be consistent with the other standards of CDC Section 408-9, except if emergency vehicular access is required in conjunction with the accessway. In that instance, design of the pedestrian accessway shall be separated or integrated into a woonerf-type pedestrian street subject to approval by the County Engineer. A woonerf is a street where pedestrians and bicyclists have priority over motorists. Access is shared, not separated, and design supports very low speed limits (5-10 m.p.h.) through the use of curved alignment, alternative paving materials (i.e., pavers, brick, etc.) and colors, and other traffic calming devices such as trees, planters, bollards, parking, and street furniture. In the event standards of ASC 5 conflict with a requirement of CDC Section 408-9, the ASC 5 standards shall control.

7. The front façades of all buildings shall front on the Park Blocks, consistent with General Design Element 8.

8. Front yard build-to setbacks in the Park Blocks shall comply with the setback requirements of General Design Element 7. Where side yard build-to setbacks and front yard build-to setbacks are proposed for the same street frontage, the side yard build-to setback shall not be less than the front yard build-to setback. Any fences along these side yards shall be set back behind the front yard build-to setbacks of adjacent lots where front yards face the street.

9. Adjacent to the Park Blocks, buildings shall be a minimum of two stories.

10. In order to minimize the distance between pedestrian street crossings in the vicinity of the Park Blocks, curb bump-outs shall be used on the adjacent streets that run parallel and perpendicular to the Park Blocks, subject to the design approval of the County Engineer.

ASC 6A – Northeast Neighborhood Local Street Circulation

A grid street network is required to be provided in ASC 6A, which is located in the Northeastern Neighborhood. The grid street network is integral to the design and location of the land use designations.

1. Local streets shall be aligned in the same directional orientation as the Primary Streets (i.e., parallel and perpendicular to these streets).

2. Development shall comply with CDC Section 408-6 for connectivity and block dimension standards.

ASC 6B –Neighborhood Route Corridor

The alignment of Primary Street P16 is required to cross a tributary of Abbey Creek in the northern portion of the Northeast Neighborhood. The intent of the requirements in this ASC is to provide flexibility in the location of the street's creek crossing.

A final alignment of Primary Street P16, a neighborhood route, may have two 90 degree (right angle) turns to accommodate the grid system required by ASC 6A.

1. As part of a Type II process, the alignment of Primary Street P16 may shift anywhere within Corridor A shown on the Areas of Special Concern Map.

2. As part of a Type II process, the alignment of Primary Street P16 may be shifted into Corridor B shown on the Areas of Special Concern Map if the proposed modification meets all of the following criteria:

    a. The new alignment is not shifted onto neighboring properties outside of Corridor B.
    b. The new alignment maintains the planned functional classification of new and existing roads in the surrounding area.
    c. The new alignment does not result in a significant increase in volumes on other nearby roads.
    d. The new alignment does not result in a significant amount of out-of-direction travel for users of the road.

3. The necessary pedestrian connection and off-street trail, north of the stream, identified in the Park, Trails and Pedestrian Connections Map, may be shifted to be consistent with the final alignment of Primary Street P16.

ASC 7 – Bethany Creek Trail Corridor and Rosetta Street Alignment (Primary Street P2) Corridor Alignment

ASC 7 addresses the design configuration of the trail corridor to the north of Bethany Creek (which runs parallel to the north side of Springville Road) and the specific location of Primary Street P2 (Street P2 on the Primary Streets and Core Design Elements Maps) that is generally parallel to the trail. The ultimate placement of the P2 Street and other nearby planned components within ASC 7 (trail, linear park, neighborhood park, and regional stormwater facilities or other LIDA facilities approved by CWS) depend on the location of the boundary of the Bethany Creek wetland/Vegetated Corridor buffer and future site-specific facility design. This ASC describes the intent that the multipurpose design shall follow.

The Subarea Plan identifies the approximate boundary of a protected wetland/habitat area along with the approximate boundary for the associated Vegetated Corridor buffer (resource boundary). For the purpose of this ASC, the term "resource boundary" refers to the edge of these combined areas and not

the edge of the wetland/habitat area. The specific boundary for this protected area shall be delineated on-site as a preliminary step for development in the ASC.

Beyond the limits of the resource boundary, CWS's North Bethany Drainage Master Plan calls for stormwater treatment facilities along the north side of the protected area; wetland mitigation may also occur in this area. At the time of the adoption of the North Bethany Subarea Plan, the specific sizing and location of stormwater facilities was not determined; likewise with respect to the need for wetland mitigation sites. Future development applications for properties in the ASC must reflect coordination with CWS to determine the ultimate size and locations of stormwater quantity and quality facilities. The Subarea Plan calls for a trail along the north side of this stretch of Bethany Creek that is adjacent to the protected area and roughly parallel to the creek, between Primary Street P15 and Primary Street P3. This ASC requires development of the area to incorporate a design that provides a landscaped and appropriately lighted trail adjacent to the protected area. The trail shall be sized and designed for shared use by bicycles and pedestrians and must be designed in collaboration with THPRD. A meandering asphalt trail with planted tree canopy and adequate room for access of maintenance vehicles is one design example.

Because the trail replaces the sidewalk in some locations and serves a dual trail-sidewalk purpose, it shall be hard-surface and the adjacent street alignment, where present, shall be adjusted to generally follow the trail. The trail, mitigation sites and regional stormwater facilities shall be located outside the right-of-way for the P2 Street; the right-of-way width that otherwise calls for sidewalk shall be used for additional landscape and/or street LIDA area in the linear park. Since the final alignment of the trail and the P2 Street cannot be determined until the final delineation of Bethany Creek's resource boundary has been determined, the centerline of the P2 Street may be adjusted within the boundary of ASC 7.

The trail along Bethany Creek encounters several distinct conditions. These are described below and are illustrated in the following sketch and cross section drawings.

1. In general, the trail is located adjacent to the Bethany Creek open space. The trail will roughly follow the resource boundary. If the distance between the parallel street right-of-way and the resource boundary is 25 feet or more, the area between the trail and the street can be used as park space (e.g., a pocket park).

2. Because of the meandering nature of the open space area, there may be some locations where the distance between the street right-of-way and the resource boundary is less than 25 feet. In this situation, the street's sidewalk and trail should be combined into one facility by widening the sidewalk to 12 feet.

3. In some locations there may be enough space between the street right-of-way and the resource boundary (approximately 100 feet or more) to accommodate the trail, regional stormwater facilities, and private residential property(ies). (This situation could occur in the area east of Primary Street P15 and south of Primary Street P2 if a neighborhood park is not provided in this area.) In this situation the trail will run between the private property and the open space. It is important to balance the demands for privacy for the private property with the needs for accessibility, visibility and safety of the public facilities (the trail and regional stormwater facilities). The best way to do this could be by developing the trail and regional stormwater facilities first, before the private property develops, and to guide the development of the private

property with design guidelines that protect the quality of the trail and the functionality of and access to the regional stormwater facilities.

4. The east-west segments of the P2 Street, the trail, the linear park, and the regional stormwater facilities shall be located in ASC 7. The final location of these facilities will be determined during the development review process when the final resource boundary of Bethany Creek's wetlands and Vegetated Corridor buffer will be determined. Consequently, the centerline of the east-west segments of the P2 Street within ASC 7 may be adjusted within the boundary of ASC 7 without the use of a Planned Development application, even if portions of its centerline move more than 75 feet.

5. Direct access to the P2 Street from detached dwellings on R-6 NB lots adjacent to the P2 Street is permitted when lots have less than 70 feet of frontage on the P2 Street.

General design guidelines for the trail:

a. The trail shall be designed as an autonomous element, with gentle curves that logically follow the creek open space area. It should take its design cues from the natural resource, not from adjacent development.

b. The trail and park space shall be designed as a harmonious composition with the adjacent street and open space. If there is space for park uses between the trail and the sidewalk of the adjacent street, the space should be designed as an autonomous element, not a “left over” space.

c. In general, the trail shall be as close to the open space boundary as possible, so that the boundary is defined by it, and becomes tangible, manageable and maintainable. Where possible, a 2 foot to 3 foot wide “shy zone” between the trail and the resource should be provided so the trail is framed by consistent park vegetation on both sides.

d. The design shall take advantage of terrain changes and slopes to carve out the trail alignment. Look for opportunities to include seating walls, preferably at trail intersections.

e. The trail alignment shall minimize the use of tight curves and use gentler curves in order to facilitate natural walking and biking patterns.

f. Where an adjacent street is present, the trail and the street’s sidewalk shall connect at regular intervals at a minimum of 250 feet, preferably in locations where they are nearest each other.

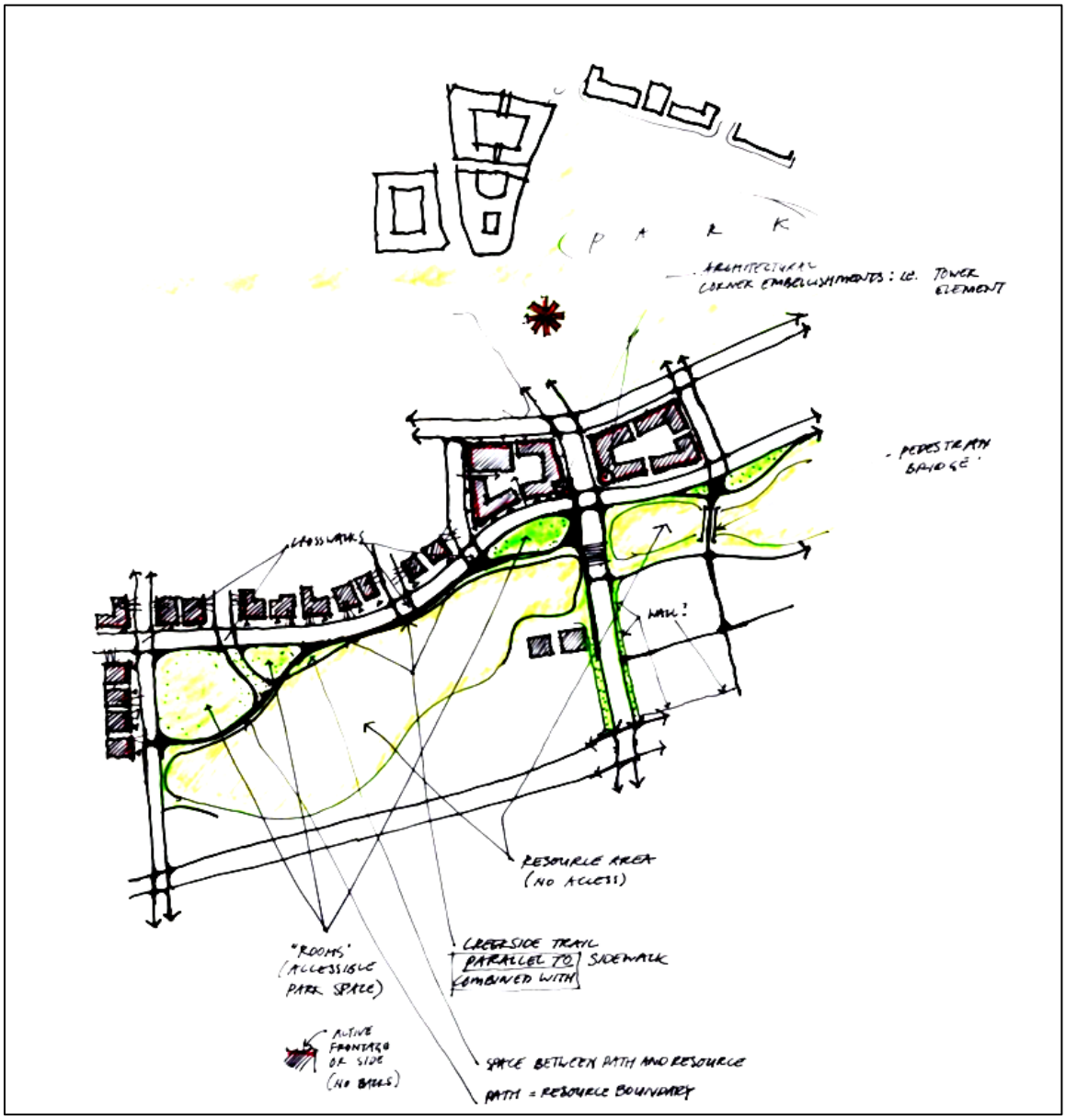
g. Where an adjacent street is present, create a colonnade by planting street trees on both sides of the sidewalk bordering the park. Align the trail with a single row of trees on the opposite side of the resource open space. Where the park is bordered only by a trail and no sidewalk is present, align the trail with a row of trees on each side. The tree lines will spatially define park “rooms”. Prune the trees up to 10 feet to allow clear views between the tree trunks. The spacing and species of trees along the trail is at the discretion of THPRD.

h. Provide ample seating opportunities along the length of the trail to accommodate impromptu seating and allow users to stop and observe the creek corridor to the south, but limit the amount of formal benches: no more than one per every 500 feet and preferably less.

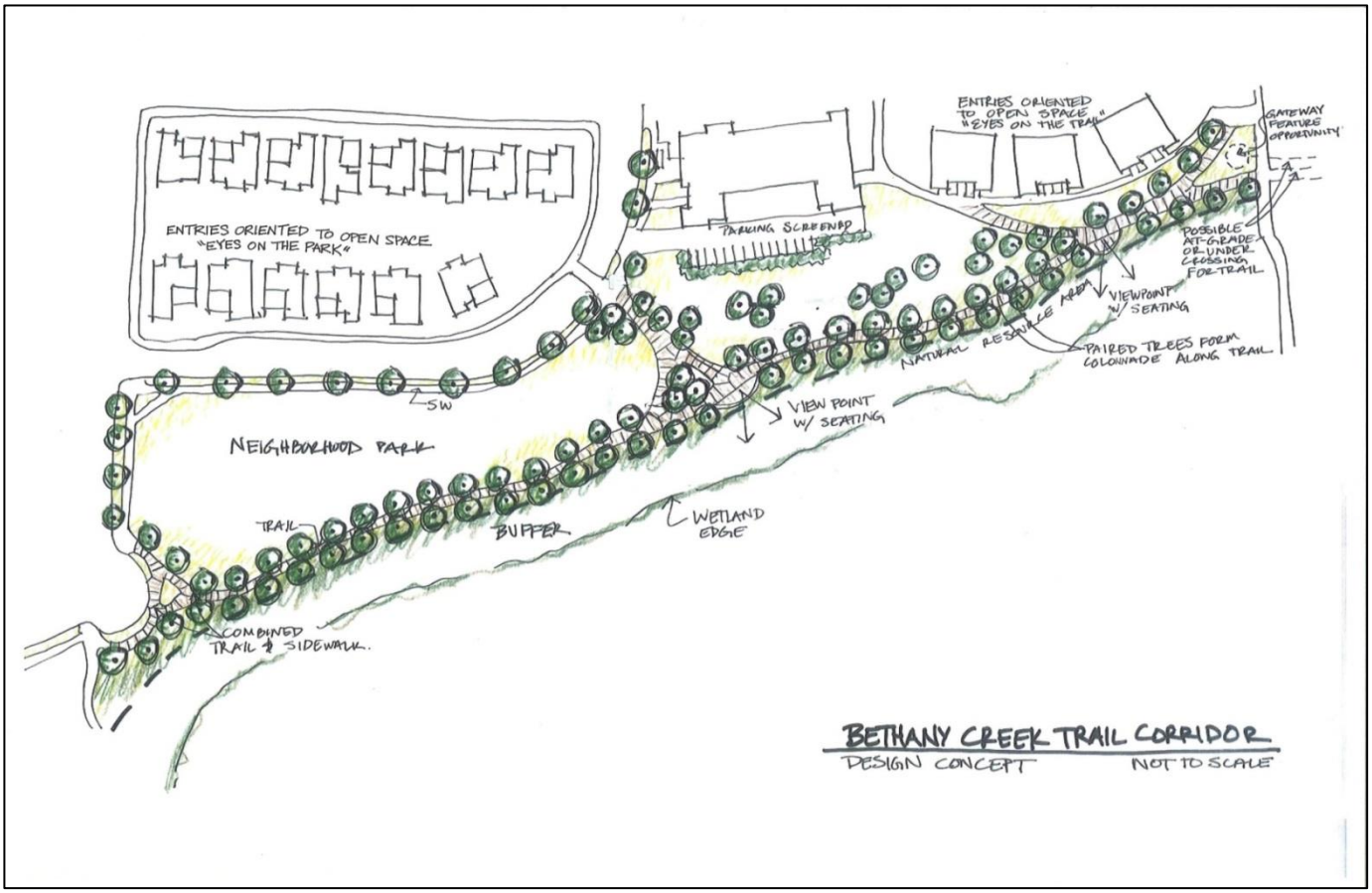
i. The trail is proposed to cross Kaiser Road as a mid-block crossing or an under-crossing. In either case, the trail crossing shall be direct and shall align with the adjacent trail segments

on either side of Kaiser Road. THPRD would be responsible for contributing to the construction costs associated with a trail under-crossing.

Bethany Creek Trail Corridor Sketch No. 1

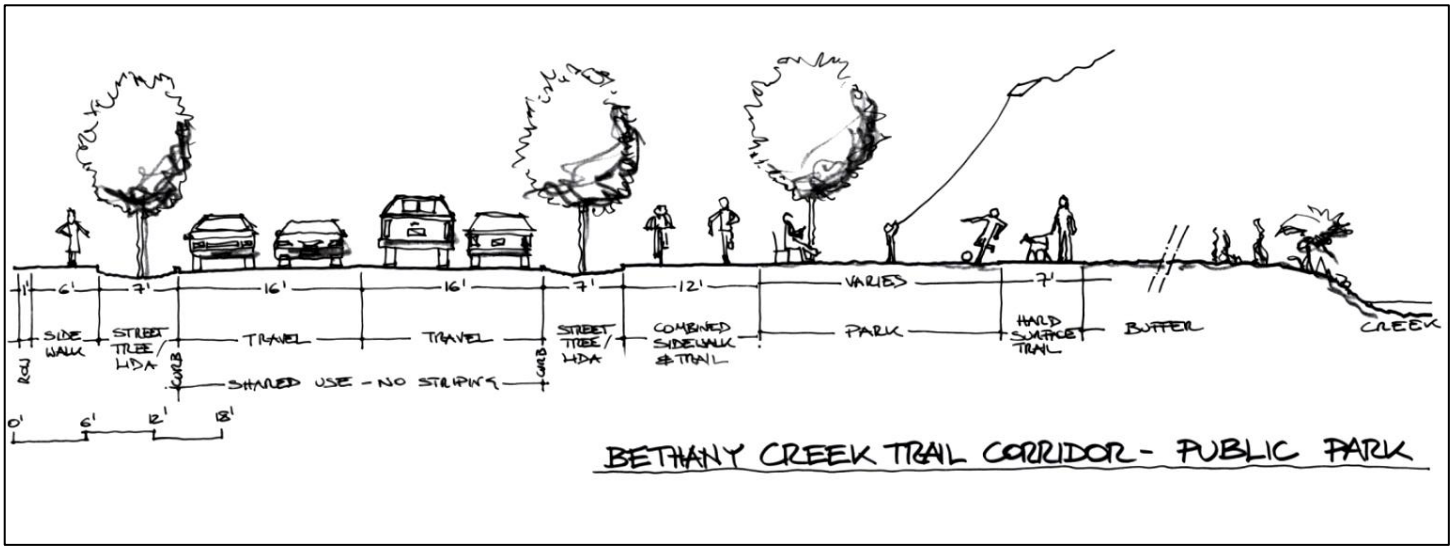


Bethany Creek Trail Corridor Sketch No. 2

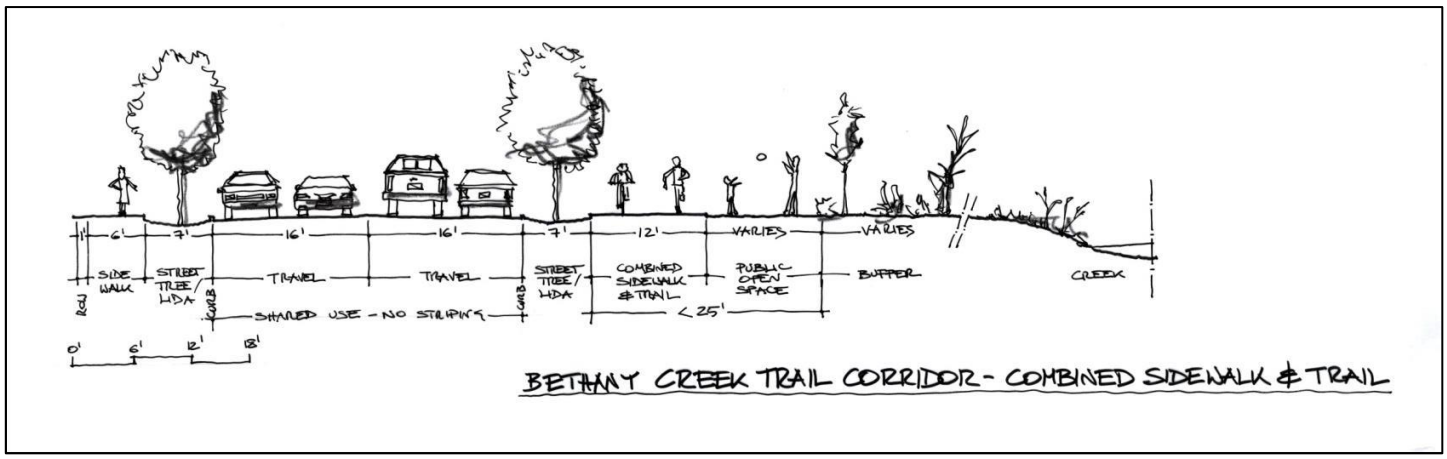


The following cross sections along the corridor illustrate design solutions that are consistent with the design intent and guidelines described herein for this ASC.

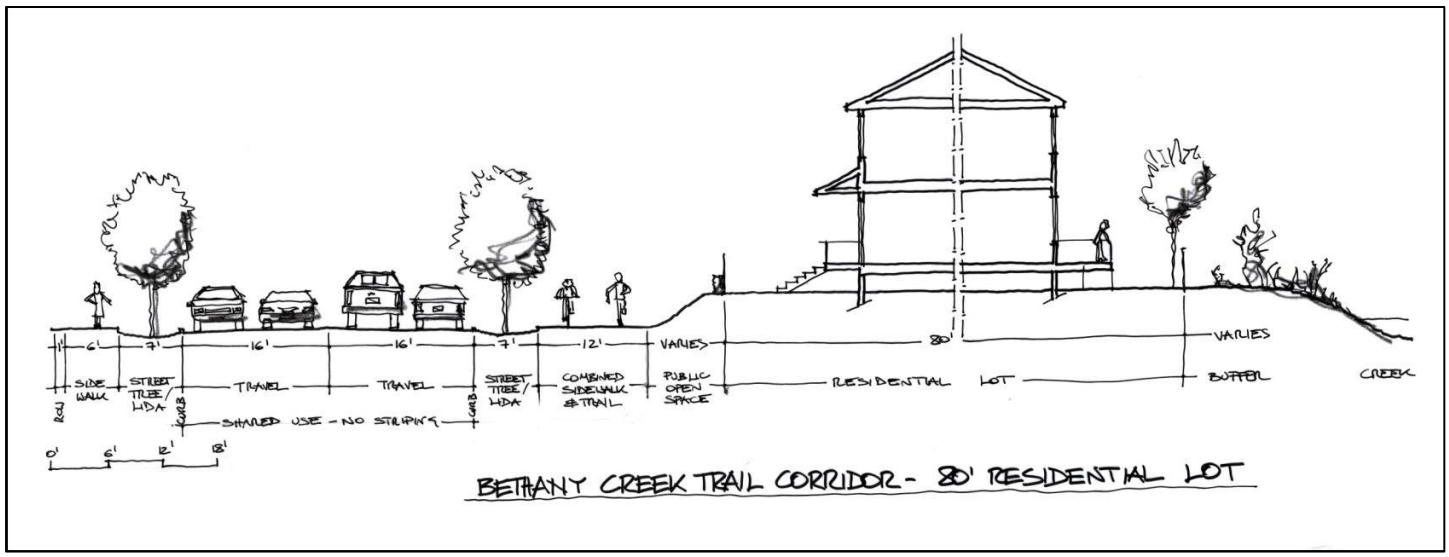
1. Trail and pocket park



2. Trail combined with sidewalk



3. Trail behind private lot



ASC 8 – Road A Linear Park

ASC 8 addresses the intended design and function of the linear park feature along the southern edge of the Northeast Neighborhood. This area runs nearly the entire length of Road A to the east of Kaiser Road and is identified as a "fixed park" on the Parks, Trails and Pedestrian Connections Map.

The linear park is an important link in the open space network of the North Bethany Subarea. It links the Rock Creek drainages to Bethany Creek and the open fields east of North Bethany in Multnomah County. Trails throughout the Subarea are designed to connect to a network of pedestrian routes that in the future will connect to regional trails. The linear park also serves a purpose as a foreground to the Northeast Neighborhood, subtly setting it apart from the neighborhood south of Road A. The portion of the linear park that is east of Primary Street P3 offers the residences north of Road A some separation from the street by opening to the linear park, rather than directly to the street. While not required, the design intent is to have front doors face the path and the linear park, while garages are accessed via alleys behind the homes, and to have the path in the linear park be located along the front property line of the adjacent lots, defining the north boundary of the park.

The south boundary of the linear park is defined by the right of way of Road A and its sidewalk. The sidewalk and path should ideally be constructed of identical material for uniformity and connect with perpendicular sidewalks at regular intervals that coincide with adjacent street stubs and pedestrian connections. Between the two parallel pedestrian facilities, there is space for vegetation and storm water swales. It is important that the vegetation remains below four feet in height so that views across the linear parks are not obscured for safety reasons. It is also recommended that this path have its own pedestrian scale lighting system, particularly if it is determined that the street light along Road A will be too far away to achieve a satisfactory illumination level.

The continuity of the linear park is interrupted about midpoint, where an opportunity exists to make a clear connection to the adjacent commercial designation. The intent is to create a small pedestrian plaza that will allow the neighborhood retail to spill into the public realm, creating the opportunity for outdoor seating. The plaza should be designed as a year-round neighborhood meeting place offering shelter, seating and interest.

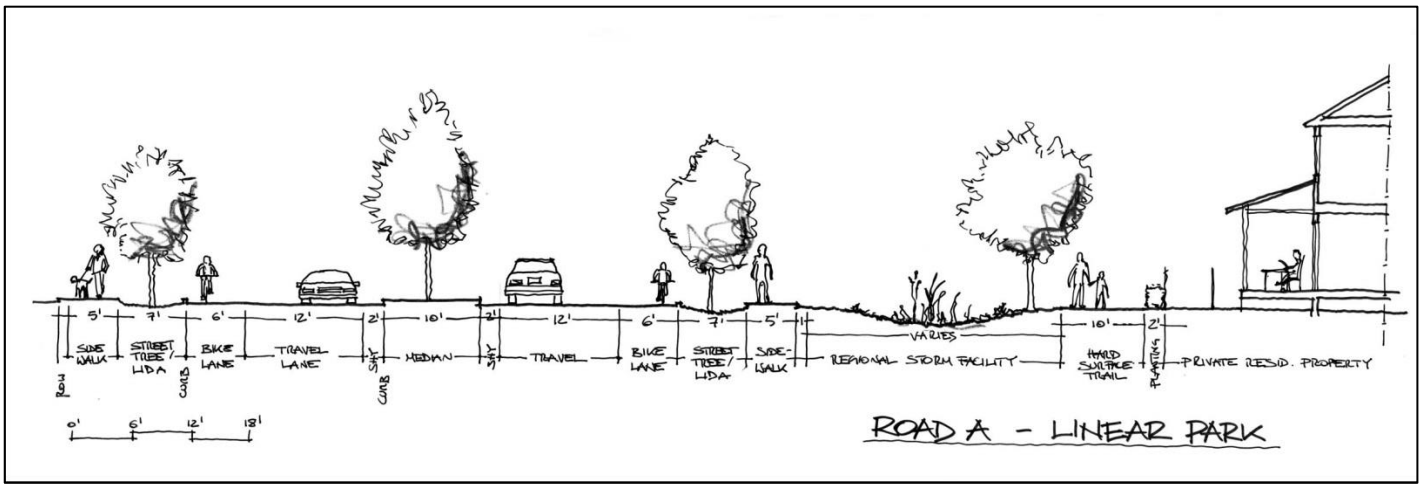
The linear park shall be constructed to function as a multipurpose facility incorporating a pedestrian connection, public plaza adjacent to the commercial site, and regional stormwater facilities. The overall width of the park shall be uniform along its entire length with the ultimate width dependent upon the area required for the multipurpose path. Development in ASC 8 shall coordinate with:

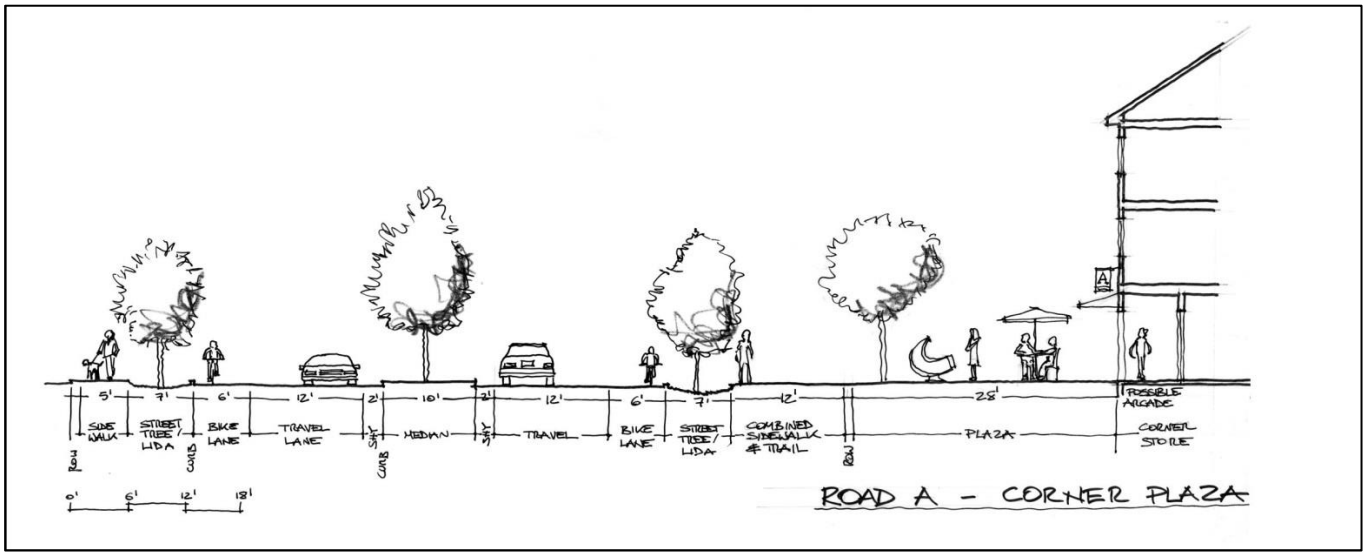
1. Washington County and THPRD to align a hard-surface trail on the north side of Road A as part of the linear park.

2. THRPD to incorporate a public plaza that is adjacent to the neighborhood commercial designation. The plaza may be privately or publicly maintained.

3. THPRD and CWS to incorporate stormwater facilities along the park.

The following cross sections along the linear park illustrate design solutions that are consistent with the design intent and guidelines described herein for this ASC.





ASC 9 - Multifamily site at the Southwest Corner of NW Brugger and NW Kaiser Roads

ASC 9 addresses the development of property at the southwest corner of the intersection of NW Brugger and NW Kaiser Roads. A future local street will be provided at the western boundary of the ASC. Property in ASC 9 is in the R-24 NB District.

Design Elements

In order to create a quality pedestrian environment and mitigate the density transition and the mass and height of multifamily buildings, development in ASC 9 shall meet the following requirements:

1. Ground level dwelling units shall be provided adjacent to the frontage of each street when dwelling units are provided adjacent to a street. Each dwelling unit shall have its front door open onto a stoop, porch or paved walkway adjacent to the street's sidewalk.

2. Ground level dwelling units shall be provided adjacent to the trail along the south side of the site when dwelling units are provided adjacent to the trail. Each dwelling unit shall have its front door open onto a stoop, porch or paved walkway facing the trail.

3. Where structured parking is provided, including tuck-under parking, it shall be screened to limit its visibility from adjacent streets, the trail along the north side of Bethany Creek, and any accessways. Screening shall consist of one of the following, located between the structured parking area and the street, trail or accessway:

    a. Habitable ground floor building area; or

    b. The setback area between the property line and the structured parking shall include a landscaped berm that hides the structured parking area. The floor of the habitable building area above the structured parking area shall be within three feet of the new grade (top of berm).

4. Vehicular access to parking areas shall be limited to one curb cut for each parking area. The maximum curb cut width shall be 24 feet.

5. Where surface parking is provided, it shall be screened to limit its visibility from adjacent streets, the trail along the north side of Bethany Creek, and any accessway. Screening shall consist of one of the following, located between the surface parking lot and the street, trail or accessway:

    a. Habitable ground floor building area; or
    b. Landscaping and screening structures, including trellises and a mixture of trees and shrubs, which at maturity will be capable of screening the parking area.

6. The overall length of buildings shall not exceed 300 feet.

7. When the length of a building exceeds 100 feet, a full building height recess that is at least 10 feet wide by 10 feet deep is required for each 100 feet of building length.

8. When a street-facing building façade is more than 750 square feet in area, the building wall plane shall be divided into smaller planes of 500 square feet or less. This division of a building wall plane into smaller planes may be accomplished by including one or more of the following elements:

    a. A porch, a dormer that is at least four feet wide, or a balcony that is at least three feet deep and is accessible from an interior room;
    b. A bay window, extending the full height of a floor or floors, that extends at least two feet; or
    c. Recessing a section of the façade by at least two feet. The recessed section must be at least six feet wide.

9. 15% of ground level building façades shall be window area. 10% of the remaining building façades shall be window area. Darkly tinted windows and mirrored windows that block two-way visibility are prohibited on the ground floor;

10. To soften the visual impact of grade changes and the height and mass of buildings, the following measures are required:

    a. Buildings shall be designed and constructed to follow the site's topography, which may require buildings to be stepped down to follow the existing grade in some locations;
    b. Grade changes within ASC 9 and along its perimeter shall be terraced to limit the height of retaining walls to no more than five feet;
    c. Retaining walls shall be set back a minimum of 10 feet from the edge of trails, and from the back of the sidewalk(s) along perimeter streets and shall be faced with brick or stone veneer;
    d. Terraced areas along the perimeter of the ASC shall be filled at a 1 to 2 ratio and planted with trees and shrubs; and
    e. Tall building foundation walls shall be filled at a 1 to 2 ratio and landscaped so that no more than four feet of the wall is exposed. Landscaping shall include trees and shrubs.

11. Trees and shrubs shall be provided in the setback areas along the western, eastern and southern property lines to help minimize the height and mass of buildings and differences in grade from adjoining properties.

ASC 10 - Early Development of a Main Street Area Residential Site

ASC 10 addresses the early development of an approximately two-acre portion of Tax Lot 800, Tax Map 1N1 17B, that is designated as R-25+ NB. Most of ASC 10 is in the Main Street Area on the west side of NW Kaiser Road, between Primary Street P4 and the Neighborhood Commercial Mixed-Use District site. The purpose of ASC 10 is to allow the owner of Tax Lot 800 to develop this property under a single development application beginning in 2012.

Design Elements

In order to ensure that development in ASC 10 will be complementary to development in the remainder of the Main Street Area, the development of the site in ASC 10 shall comply with the following design elements when a development application is submitted prior to the adoption of the Main Street Area's Urban Design Plan.

1. Development in ASC 10 shall be a Planned Development application. The application shall be reviewed at a public hearing in order to provide nearby residents, property owners and other interested parties the ability to provide oral testimony.

2. Prior to the submittal of an application, the applicant shall conduct at least one public design workshop that addresses how the proposed development addresses these design elements and other applicable requirements of this Community Plan and the CDC. The design workshop shall satisfy the neighborhood meeting requirements in CDC Section 203-3. Minutes of the workshop shall be included in the application materials.

3. Site and building design, including building setbacks and building orientation, shall be based upon the most recent available road engineering design information for NW Kaiser Road from the Department of Land Use & Transportation. If the ultimate road right-of-way has not been determined at the time of the submittal of a development application, the site and building design shall be based upon Street Design Type AR-b (the street design cross section for the "Kaiser Road Main Street") in Section VII., Subsection A of this Community Plan. The site and building design shall also comply with the requirements of ASC 2 and other applicable provisions of this Community Plan.

4. There shall be no vehicular access to ASC 10 from NW Kaiser Road, except for Primary Street P4.

5. In order to create a quality pedestrian environment, vehicular access to parking shall be limited to one curb cut per parking area. The maximum curb cut width shall be 24 feet.

6. Where surface parking is provided, it shall be screened to limit its visibility from adjacent streets and any accessway. Screening shall consist of one of the following, located between the surface parking lot and the street or accessway:

    a. Habitable ground floor building area; or
    b. Landscaping and screening structures, including trellises and a mixture of trees and shrubs, which at maturity will be capable of screening the parking area.

7. Where structured parking is provided, including tuck-under parking, it shall be screened to limit its visibility from adjacent streets and the accessway. Screening shall consist of one of the following, located between the structured parking area and the street or accessway:

a. Habitable ground floor building area; or

b. The setback area, between the property line and the structured parking, shall include a landscaped berm that hides the structured parking area. The floor of the habitable building area above the structured parking area shall be within three feet of the new grade (top of berm).

8. Development in ASC 10 shall construct the section of east-west accessway located along the ASC's southern boundary. This section of the accessway shall include the following improvements:

a. The accessway shall be constructed with textured paving materials and include three of the following features: a plaza or courtyard, walls for sitting or with planters atop, concrete or ceramic free-standing planters, or public art.

b. Pedestrian-scaled lighting shall be provided along the length of this section of the accessway in order to create a safe night time pedestrian environment.

c. A pedestrian and bicyclist connection shall be provided to the adjacent residential development.

9. NW Kaiser Road and Primary Street P4 Frontages

Development adjacent to NW Kaiser Road and Primary Street P4 shall comply with the following requirements:

a. Building height shall be a minimum of three stories.

b. Ground level dwelling units shall be provided adjacent to the frontage of each street. Each dwelling unit shall have its front door open onto a stoop, porch or paved walkway adjacent to the street's sidewalk.

c. The following build-to-setbacks are applicable:

(1) For NW Kaiser Road, the minimum setback is five feet and the maximum setback is 10 feet;

(2) For Primary Street P4, the build-to-setback is the applicable setback of the Primary District; and

(3) When a setback equal to or greater than ten feet is provided, at least 50% of the setback area shall be landscaped with grass, ground cover or low shrubs. Hardscape materials, including concrete or brick, and shall be limited to no more than 50% of the landscape area.

d. The construction of a low fence or sitting wall at the back of the sidewalk along NW Kaiser Road is desirable in order to help define the curve of the Main Street Area. If provided, the height of a fence shall not exceed three feet in height. Fencing materials are limited to the use of powder coated metal. Wood, plastic/vinyl or aluminum materials are not permitted for a fence. If provided, the height of a wall shall be 15 to 22 inches in height, and the wall shall be faced with brick or stone veneer. If a fence or wall is provided along Primary Street P4 or a future western street, it shall also comply with these standards.

10. Accessway Frontage

Development adjacent to the accessway along the southern boundary of ASC 10 shall comply with the following requirements:

a. The build-to-setback is the applicable setback of the Primary District;

b. Ground level dwelling units shall be provided adjacent to the accessway frontage. These units shall have one or more doors opening to stoops, porches, decks or paths. The doors are not required to be the "front" door of these units. A primary building entrance for use of the public is not required; and

c. Landscape area: At least 50% of the setback area shall be landscaped with grass, ground cover or low shrubs. Hardscape materials, including concrete or brick, shall be limited to no more than 50% of the landscape area.

11. Western Street Frontage
Buildings along ASC 10's western boundary shall have a build-to-setback that is the applicable setback of the Primary District.

12. Building Façades
Well-designed building façades that use quality building materials are essential within the Main Street Area. The dominant feature of the façades shall be habitable areas with accompanying windows and doors. The building façades along all adjacent streets and the accessway shall comply with the following requirements:

a. The overall length of a building shall not exceed 300 feet.

b. When the length of a building exceeds 100 feet, a full building height recess that is at least 10 feet wide by 10 feet deep is required for each 100 feet of building length.

c. When a street-facing building façade is more than 750 square feet in area, the building wall plane shall be divided into smaller planes of 500 square feet or less. This division of a building wall plane into smaller planes may be accomplished by including one or more of the following elements:

(1) A porch, a dormer that is at least four feet wide, or a balcony that is at least three feet deep and is accessible from an interior room;

(2) A bay window, extending the full height of a floor or floors, that extends at least two feet; or

(3) Recessing a section of the façade by at least two feet. The recessed section must be at least six feet wide.

d. 15% of ground level building façades shall be window area. 10% of the remaining building façades shall be window area. Darkly tinted windows and mirrored windows that block two-way visibility are prohibited on the ground floor;

e. For buildings with flat roofs, the roof shall have either 12-inch eaves or a cornice. Parapets shall have a cornice. Cornices shall have two parts - The top part of the cornice shall project at least six inches from the face of the building and be at least two inches further from the face of the building than the bottom part of the cornice. The cornice shall have a minimum height of 11 inches.

f. Required building materials

(1) Siding materials shall be limited to brick, stone veneer, or wood siding that meets the standards in Design Element 13. Metal or "cultured" concrete block may be used when the standards listed in Design Element 14 are met.

(2) Each building façade shall use a minimum of two types of siding materials, each with an area of no less than 20% of the façade. However, brick or stone veneer siding material may be used singly and applied to the entirety of a façade.

13. Standards for Wood or Horizontal Lapped Siding

a. Wall materials shall be of:
   (1) Horizontal lapped siding;
   (2) Wood shingles; or
   (3) Board and batten with 1x2 battens equally spaced no more than two feet on center.

b. Window and exterior door (with or without glass lites) materials shall be of:
   (1) Wood; or
   (2) Metal, painted or clear anodized.

c. Main entries shall be marked between the ground floor and the upper floors by an awning or canopy with a minimum width of eight feet and a minimum projection of four feet. Awnings and canopies shall be made of glass, metal or exterior grade fabric, or a combination of these materials.

d. A minimum of two types of siding materials and/or siding styles, separated by trim that is a minimum of 5.5 inches wide. For street-facing and/or alley facing façades, the secondary type shall have a minimum area of 20% of the overall façade.

e. Columns are not required. If columns are provided, columns and supporting pillars on street-facing façades must meet one of the following standards. Wrought iron style supports will not satisfy this standard.
   (1) Large columns that are divided visually into clear areas of top, center and bottom. Large rectilinear columns shall be at least 8 inches by 8 inches. Large rounded columns shall have a diameter of at least 8 inches; or
   (2) Groupings of two, three or four small columns that are divided visually into clear areas of top, center and bottom. Small rectilinear columns shall be at least 4 inches by 4 inches. Small rounded columns shall have a diameter of at least 4 inches.

f. The façade treatments listed below shall be provided on all sides of a building:
   (1) Variation in wall surface pattern, siding material or siding style;
   (2) Fully trimmed windows and doors. Trim shall be a minimum of 3.5 inches wide and completely surround the windows and/or doors; and
   (3) Corner trim/corner boards, 3.5-inch minimum exposure.

g. Provide a band, band course, band molding, belly band, belt course, or similar horizontal element of relatively slight projection, which marks a horizontal division in the wall plane between each floor. Such bands or courses shall be a minimum of 7.5 inches in width.

h. The ground floor façade shall be brick, stone veneer, or "cultured" concrete block as specified in Design Element 14.

i. Street-facing façades at the ground level of the structure shall include the use of larger windows on the ground floor façade and smaller windows on the upper floors, or a row of transom windows above the main windows on the ground floor façade.

14. Standards for metal or "cultured" concrete block siding materials:

    a. Metal siding materials shall be of flat metal panels with concealed fasteners. Panels shall have a 24-inch maximum width, a factory-applied painted coating, and a 22-gauge minimum thickness.
    b. "Cultured" concrete block [i.e., concrete masonry unit (CMU)] materials shall be allowed as follows:
        (1) For stem-wall or ground-floor applications only.
        (2) Finishes may be split-face, ground face, glazed (pre-faced), or unpainted.

ASC 11 – West Community Park and Vicinity

ASC 11 addresses the ultimate design intent for the West Community Park. ASC 11 also addresses a Primary Street to be located on the property immediately east of the West Community Park and the Waterhouse powerline trail corridor.

The West Community Park shall be approximately 12 to 13 acres in size, and shall have a minimum of 2.72 acres of active park space.

A primary street, P20, shall be located along the east side of the Waterhouse powerline corridor between primary streets P4 and P6. Primary Street P20 is intended to accommodate on-street parking for the West Community Park. Modification to the mapped alignment of Primary Street P20 is not permitted through the development review process described in Table A of General Design Element 10 (Circulation). Modification to the mapped alignment of Primary Street P20 would require a plan amendment. THPRD shall be responsible for construction of the western half-street improvement of P20 between primary streets P4 and P6. Where the trail within the adjacent powerline corridor is less than 25 feet from the Primary Street P20 right-of-way, the street's sidewalk and the trail may be combined into one facility by widening the sidewalk to 12 feet.

ASC 12 – Residential Density and Wetland north of the East Community Park

ASC 12 addresses the calculation of residential density for portions of Tax Lots 600 and 709 of Tax Map 1N1 17A that are located east of the planned intersection of NW Kaiser Road and Road A, and north of Road A and the planned East Community Park.

The North Bethany Local Wetland Inventory (LWI) identified a wetland within this ASC. The LWI determined that this wetland was not "locally significant" per the Goal 5 significance criteria of ORS 197.279(3)(b). Therefore, the wetland was not designated as a significant natural resource on the Significant Natural and Cultural Resources map, or as density restricted land on the Density Restricted Lands map.

Based on preliminary feedback from Department of State Lands (DSL) and the Army Corps of Engineers (Corps), the wetland within this ASC is a jurisdictional wetland under the jurisdiction of these agencies. These resource agencies may limit or prohibit proposed future residential development within the wetland.

Per CDC Section 300-3, density transfers from jurisdictional wetlands and other types of unbuildable areas are not allowed in North Bethany. The density transfer prohibition was adopted to preserve North Bethany's density transect, an intentional transition from areas of higher to lower density that results from the way the land use districts have been located relative to one another. As a result, the residential density from the wetland in this ASC cannot be transferred to the remainder of the properties on which the wetland is located.

However, proposals for future residential development on these properties are required to meet the minimum and maximum density requirements of the underlying land use district(s). Since development within the wetland may potentially be prohibited by the resource agencies and residential density cannot be transferred from the wetland to the remainder of the properties, an allowance may be needed for the wetland area to be subtracted from the overall site area for purposes of the residential density calculation required by CDC Section 300-2 (Residential Density Calculation).

Therefore, the wetland area in this ASC (as determined by its future delineation and concurrence by DSL) may be subtracted from the overall site area for the purpose of the residential density calculation required by CDC Section 300-2.

VI. NEIGHBORHOOD DESIGN ELEMENTS

The North Bethany Subarea is comprised of six neighborhoods, each with a set of distinct design elements. These design elements are described in text below and illustrated on the Neighborhood Plans. As described under Section IV.C., above, the depicted locations of streets that are not Primary Streets in the Neighborhood Plans are intended as guidance, suggesting one preferred configuration for these transportation improvements.

The design elements of the Areas of Special Concern (ASCs) described above shall apply to development in these areas.

A. Northwest Neighborhood

The Northwest Neighborhood boundaries are the UGB to the north and west, Road A to the south, and the Waterhouse Powerline Trail Corridor to the east.

Prominent landscape features include the two powerline corridors and a tributary to Abbey Creek and an associated wetland. Steeper slopes (generally greater than 15%) provide edge conditions along the north, west and east boundaries. These slopes and prominent ridges provide opportunities for views of the riparian areas and the Tualatin Mountains.

The land use designations and street pattern in this neighborhood are designed to respond to the topography, provide a range of densities, provide views of the surrounding natural and agricultural landscapes, and provide connectivity.

Design Elements

1. A 1.5 to 2-acre neighborhood park shall be located in the Northwest Neighborhood. The park may be located on either side of NW Joss Avenue. Public street frontage shall be provided along at least one-half of its perimeter. The park shall be situated on axis with the open space provided for the high-density area (see the Neighborhood Plan Map for more details).

2. A neighborhood commercial site fronts the intersection of Road A and a north-south Primary Street (P8). The site is approximately two-thirds of an acre. The site shall be developed so the building(s) fronts Road A and Primary Street P8. Building entrances and windows shall be included in these building façades. The site shall include a small public plaza to serve as a community gathering space that will allow the neighborhood retail to spill into the public realm, creating opportunity for outdoor seating. The plaza should be designed as a year-round neighborhood meeting place offering shelter, seating, and interest.

3. Trails and pedestrian connections shown on the Parks, Trails and Pedestrian Connections Map shall be provided that are consistent with THPRD standards, and that include the following elements:

    a. On the Northwest Neighborhood's eastern boundary, a pedestrian trail and bridge shall span the Abbey Creek tributary to connect this neighborhood with the Northeast Neighborhood. This pedestrian connection is important for connectivity between neighborhoods and provides a pedestrian route to the Beaverton School District's school west of NW Kaiser Road.
    b. The Waterhouse Trail runs through North Bethany along the north-south powerline corridor. It is important for trail users to have reasonable access to the trail. Visible pedestrian-bicycle access points shall be provided at regular intervals along the trail, generally spaced at every block.
    c. The Perimeter Trail shall be provided along the northern and western boundaries of the Subarea as shown on the Parks, Trails and Pedestrian Connections Map and the Northwest Neighborhood Plan Map, (includes the trail through the powerline corridor at the northwest corner of the neighborhood). Pedestrian connections shall be provided to the Perimeter Trail as shown on the Park, Trails and Pedestrian Connections Map (street connections and one connection from another trail) to allow trail users to enjoy the views toward the north.

4. The Northwest Neighborhood is organized by three Primary Streets. Primary Streets shall be provided in new development consistent with Section IV.C (Primary Streets) and Section V.B (Areas of Special Concern) of the North Bethany Subarea Plan. The intent of each Primary Street is provided below:

    a. Road A is the southern boundary of the Northwest Neighborhood. See ASC Road Corridor 1B for design criteria.
    b. Primary Street (P8) provides a connection to the West Neighborhood. It also provides access to the Neighborhood Commercial site located at the intersection with Road A.
    c. NW Joss Avenue (P19) extends across Road A from the West Neighborhood to provide a connection to the Northwest Neighborhood and a future neighborhood park.

5. The western edge of the neighborhood at Road A is a gateway into the neighborhood. This gateway marks the transition from rural to urban character and the beginning of the northwest cross-section for Road A, which has a planted center median. The preferred treatment for this gateway is associated with designed vertical elements on the bridge span that crosses the floodplain area. The following elements are suggested:

    - Vertical elements signifying entrance on the North Bethany side of the bridge that may be: next to the sidewalk, a pedestrian pass-through, or over the entire bridge.
    - Special detailing on feature elements in the form of concrete and/or a railing.
    - Minimal or no landscaping.
    - Lighting at both a pedestrian and a vehicular scale.

    Consistent with the Neighborhood Plan Map, two prominent Focal Points shall be provided to mark this entrance into the North Bethany Subarea. A design plan shall be prepared that addresses the Neighborhood Plan and Street Design Map elements, CDC standards and any additional gateway design treatments.

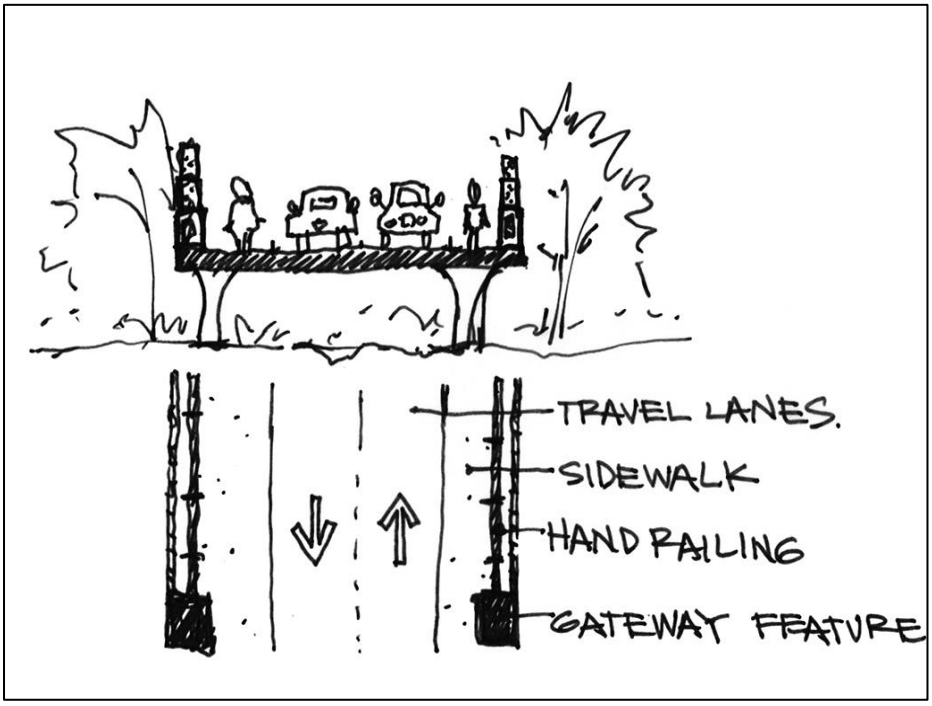
    The following sketches and photograph illustrate examples of potential vertical and feature elements of this gateway.

6. Within the high-density residential lands, private open space shall be provided, as depicted on the Neighborhood Plan. The private open space shall be for use by residents in the high-density residential housing and shall be in addition to the requirements of CDC Section 407.

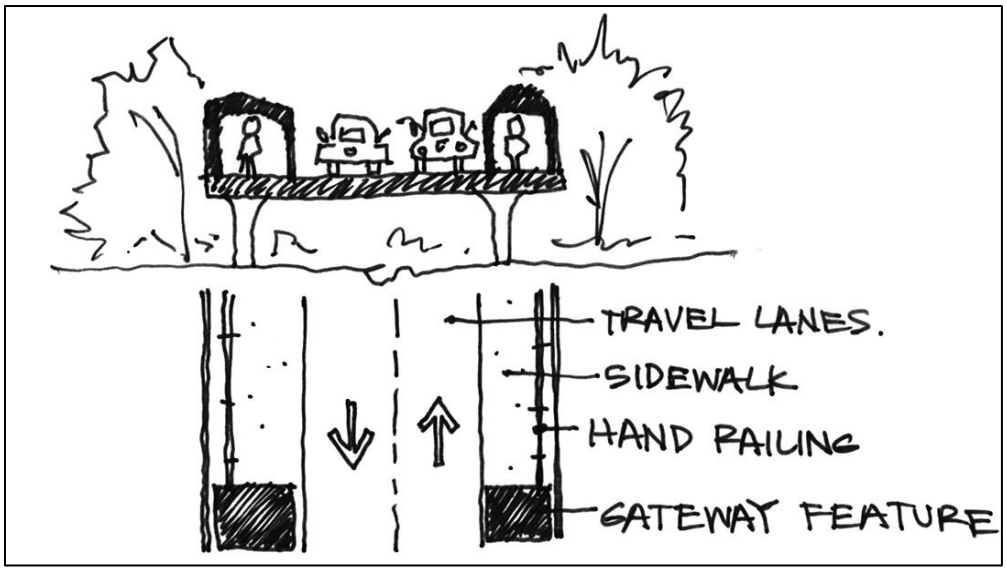
7. Development shall be consistent with ASC Road Corridor 1B.

Bridge Gateway Vertical Elements Examples

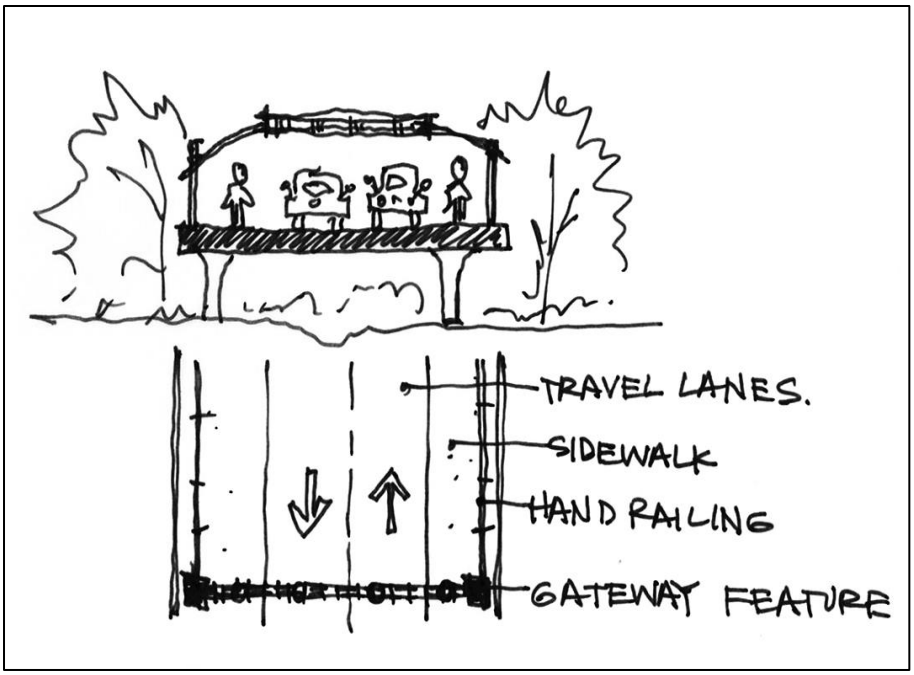
Next to Sidewalk



Pedestrian Pass-Through (above each sidewalk)



Over Bridge


TRAVEL LANES.
SIDEWALK
HAND RAILING
GATEWAY FEATURE


MODESTO
WATER WEALTH CONTENTMENT HEALTH

B. West Neighborhood

The West Neighborhood is bounded by the UGB to the west, Road A to the north, and the Waterhouse Powerline Trail Corridor to the east. The West Neighborhood extends south from Road A to the northern boundaries of the PCC Rock Creek Campus and the Arbor Oaks Subarea. The southeastern boundary of this neighborhood is formed by the portion of NW Joss Avenue south of street P1 on the west and the existing section of NW Brugger Road on the south.

This neighborhood is at the western edge of the ridge where the topography begins to slope towards the Rock Creek floodplain. The area generally drains to the west, the low point being a wetland area that straddles the UGB to join with the Rock Creek floodplain north of the PCC Rock Creek campus.

The West Neighborhood includes the West Community Park and a neighborhood park that anchors the western edge of the ridge and provides views towards the southwest. The neighborhood's highest density is clustered adjacent to the community park, with the density gradually decreasing from the community park toward the west.

Design Elements

1. The following parks shall be provided in the West neighborhood:

    a. The West Neighborhood includes one of the Subarea's two community parks. It is specifically located at the western end of the Subarea's ridge feature and is an integral element of the Park Block features. The community park shall be located at the west end of the Park Blocks, shall be approximately 12 to 13 acres in size, and shall contain a minimum of 2.72 acres of active park space. The active park area shall have street frontage along its north and south sides that can accommodate on-street parking for park users. To accommodate parking for park users, the streets fronting the park shall be designed to be no less than the minimum County standard for parking on two sides. The front façades of residential buildings on these streets shall front the park.

    b. A 1.5 to 2-acre park shall be located in the West Neighborhood. PCC shall be involved with the design of the park, including its location, due to the potential adverse impact to the college's academic use of the wooded area to the south. The appropriate location of the park and any trails shall be coordinated with the applicant, THPRD, PCC, and the County.

2. The following trail connections shall be provided in the West neighborhood:

    a. The Waterhouse Powerline Trail runs through the Subarea along the north-south powerline corridor. It is important for trail users to have reasonable access to the trail. Visible pedestrian-bicycle access points shall be provided at regular intervals along the trail, generally spaced at every block.

    b. Providing pedestrian connections to the Subarea's western boundary is important to provide public access to the Subarea's edges, including opportunities to enjoy the views toward the west. The streets and off-street trail along the UGB have been intentionally located to preserve views into the floodplain/natural resource area as part of the public realm. The streets and trail shall be constructed to parallel the UGB to the extent practicable, given potential topographic and wetland constraints. Access points for public

access and viewing shall be provided along this edge, consistent with the West Neighborhood Plan Map and the Parks, Trails and Pedestrian Connections Map.

c. A connection from the West Neighborhood to the PCC Rock Creek campus shall be provided. The location of this connection will be determined when PCC expands its campus in the northeast corner and shall take into account the sensitive nature of PCC's wooded area. The appropriate location of the connection shall be coordinated with the applicant, THPRD, PCC, and the County.

d. A trail providing an east-west connection between NW Joss Avenue and the active portion of the West Community Park shall be provided. The trail alignment may go through or around the wetland that is located on the west side of the West Community Park, and may include boardwalk components.

3. The West Neighborhood is organized by six Primary Streets. The north-south Primary Streets are important neighborhood-to-neighborhood connections. The east-west Primary Streets are important for their clear and logical connection to the central ridge area. Primary streets shall be provided in new development consistent with Section IV.C (Primary Streets) and Section V.B. (Areas of Special Concern) of the North Bethany Subarea Plan. The intent of each Primary street is provided below:

   a. Primary Street (P1) extends west from NW Joss Avenue (P19) to the UGB (does not include the Urban Reserve areas). The street parallels the existing topography and extends the view shed from the West Community Park to the Rock Creek floodplain.

   b. Primary Street (P8) extends north from Arbor Oaks Subarea. This route may provide the eastern edge of the neighborhood park and intersects with Road A at the small neighborhood commercial site in the NW neighborhood.

   c. Primary Street (P5) provides a connection from the westernmost portion of the neighborhood and (P8) to NW Joss Avenue (P19).

   d. Primary Streets (P4) and (P6) provide a connection from NW Joss Avenue (P19) to NW Kaiser Road.

   e. NW Joss Avenue (P19), as it extends to the north of the Arbor Oaks Subarea, is a Primary Street. It is intended to connect existing NW Joss Avenue within the Arbor Oaks Subarea to Road A along the existing NW Brugger Road alignment.

   f. Road A is the northern boundary of the West Neighborhood. See ASC 1B for design criteria.

4. The western edge of the neighborhood at Road A is a gateway into the Subarea. Refer to Design Element 5 for the Northwest Neighborhood.

5. Development shall be consistent with ASCs Road Corridors 1B and 3 and ASC 5.

6. A neighborhood commercial site fronts NW Joss Avenue. The site is approximately one-half acre. The site shall be developed so the building(s) fronts NW Joss Avenue. Building entrances and windows shall be included in these building façades. The site shall include a small public plaza to serve as a community gathering space.

C. Northeast Neighborhood

The Northeast Neighborhood is bordered on the south by Road A. The northern and eastern boundaries are the UGB. On the west, the neighborhood boundary is the north-south powerline corridor and comes to a point where the Abbey Creek tributary and powerline corridor meet the northern UGB.

Prominent natural features of the landscape include two tributaries to Abbey Creek and wooded and steep slopes along the northern boundary. An existing cemetery, two proposed school sites and a neighborhood park provide open space in the neighborhood. The neighborhood is designed to emphasize strong visual sightlines between the open space features, public services and a neighborhood commercial site.

Site topography and natural features result in the northernmost and westernmost portions of this neighborhood being more secluded than the rest of the Subarea. The same is true of a portion of land between NW Kaiser Road and the tributary to the east. These site conditions and the adjacent rural areas make these edge areas more suitable for low density development.

Design Elements

1. A neighborhood commercial site is adjacent to Primary Streets (P3) and Road A. The site is approximately one-half acre. Building entrances and windows shall be included in these building façades. The site shall include a small public plaza to serve as a community gathering space, as described in ASC 8 (Road A Linear Park).

2. The neighborhood park shall be 1.5 to 2 acres contiguous to the western boundary of the Beaverton School District site.

3. A linear park along the southern edge of the neighborhood shall be consistent with ASC 8.

4. Trails and pedestrian connections shown on the Parks, Trails and Pedestrian Connections Map shall be provided that are consistent with THPRD standards and that include the following elements:

    a. Pedestrian connections to the eastern and northern boundary shall be provided in order to create public access to the trail network and opportunities for the community to enjoy the views toward the north and east. At least three access points shall be provided along each boundary for public access/viewing.
    b. The necessary pedestrian connection extending between the northern termini of Primary Streets P3 and P16, if provided on-street, shall have an unobstructed width of 10 feet unless a lesser width is approved by THPRD.

5. The Northeast Neighborhood has eight Primary Streets. Primary Streets shall be provided in new development consistent with Section IV.C. (Primary Streets) and Section V.B. (Areas of Special Concern) of the North Bethany Subarea Plan. The intent of each Primary Street is provided below:

    a. Primary Street (P14) provides direct access to the developable land west of NW Kaiser Road and aligns with the northern boundary of the school site.

b. Primary Street (P3) extends north-south from Road A to the northeast corner of the neighborhood. This route provides connectivity from the northeast corner of the Subarea to NW Springville Road while also providing an edge along the neighborhood park and the small neighborhood commercial site. The street shall extend to the north and terminate as a pedestrian access to the Perimeter Trail along the UGB.

c. Primary Street (P2) is an extension of a street that intersects with Road A from the south. This street establishes a connection to the future Beaverton School District Site school site from the Central and Southeast neighborhoods and Arbor Oaks Subarea.

d. Primary Street (P17) follows the northern boundary of the future Beaverton School District school site and intersects with Primary Street (P3).

e. Primary Street (P18) follows the southern boundary of the future Beaverton School District school site and intersects with Primary Street (P3).

f. Primary Street (P16) provides access within the Northeast Neighborhood. The alignment shall be consistent with emergency access standards established by Tualatin Valley Fire & Rescue.

g. Road A is the southern neighborhood boundary. See ASC 1A for design criteria.

h. NW Kaiser Road is a Primary Street that extends through the neighborhood along the existing right of way.

6. The Northeast Neighborhood includes the following Design Features and Focal Points that shall become vistas along future street alignments incorporated into new development:

   a. The elementary school building west of NW Kaiser Road will be sited to become the visual termination point of a future east-west street.

   b. The existing cemetery is a Focal Point that will be used to terminate the western end of an east-west street north of Road A.

   c. North-south streets will terminate at the eastern school site as depicted as Focal Points on the Neighborhood Plan Map.

7. Development shall be consistent with ASC Road Corridor 1A and ASC 6, 8, and 12.

8. A gateway is identified at the intersection of NW Kaiser Road and Road A on the Core Design Elements Map. The gateway marks the northern entrance to the designated Main Street area (see Policy 40 of the Comprehensive Framework Plan for the Urban Area). Buildings located at the gateway corners on the east and west sides of this intersection shall comply with the design standards for Main Street Community Gateways described in ASC Road Corridor 2.

D. Southeast Neighborhood

The Southeast Neighborhood boundaries are Road A to the north, the UGB to the east, NW Springville Road to the south and NW Kaiser Road to the west.

The neighborhood borders the Springville Subarea to the south and street and trail connections between the two areas are integral to the design. Bethany Creek flows from east to west and is planned as an expanded stream corridor with a trail and regional stormwater swales along the creek. Prominent features of the built landscape include Bethany Presbyterian Church, a proposed fire station, the

proposed civic center, the East Community Park, and the Main Street Area primarily west of NW Kaiser Road (a portion of which is located on the east side of NW Kaiser Road).

Design Elements

1. The following design elements shall be incorporated into the portion of the neighborhood between Bethany Creek and NW Springville Road:

    a. The preferred location for the 1.5- to 2-acre neighborhood park is contiguous to Bethany Creek and adjacent to the proposed fire station and the neighborhood commercial site. The proposed fire station and the neighborhood park may be separated by a local street or pedestrian path;
    b. The Subarea street pattern shall have an east-west street alignment through this area with access to NW Springville Road at spacing approved by the County Engineer;
    c. A neighborhood commercial site, approximately two-thirds of an acre, is adjacent to NW Springville Road and Primary Street P3; and
    d. Designated access points shall be provided consistent with the Primary Streets Map. Additional access to NW Springville Road may be provided at spacing approved by the County Engineer.

2. The southwest corner of the East Community Park is the planned location of a civic use (e.g., community center) and shall have a design that connects the civic use to the adjacent community park. The civic use building is designated as a Design Feature and shall be located on the site consistent with the orientation arrows depicted on the Neighborhood Plan Map. Specifically, the building shall be visible from NW Kaiser Road and the Park Blocks. Additional complementary design features include building orientation to front the park and the placement of a plaza between the park and the civic use.

3. The East Community Park shall be approximately 15 acres. The tree groves in the southwestern corner shall be preserved. The park anchors the eastern end of the ridge and views shall extend to the east, terminating at the east end of Primary Street P4 (as denoted by the Design Feature symbol on the Core Design Elements Map). The front façades of all buildings, including residential and commercial uses, shall front on the park consistent with Design Element 7.

4. Trails and pedestrian connections shown on the Parks, Trails and Pedestrian Connections Map shall be provided that are consistent with THPRD standards, and that include the following elements:

    a. Two pedestrian crossings shall span Bethany Creek in locations that align with street connections across NW Springville Road.
    b. Pedestrian and bicycle connections to and across NW Springville Road and NW Kaiser Road are important and shall be developed consistent with the Parks, Trails and Pedestrian Connections Map.

5. The Southeast Neighborhood has eleven Primary Streets. Primary Streets shall be provided in new development consistent with Section IV.C. (Primary Streets) and Section V.B. (Areas of Special Concern) of the North Bethany Subarea Plan. The intent of each Primary Street is provided below:

a. Primary Street P3 extends from NW Springville Road north to Road A. Primary Street P3 aligns with existing NW Benny Street south of NW Springville Road and provides the eastern boundary of the Neighborhood Commercial area. Extending north of Bethany Creek, the street alignment intersects with Road A just south of the Northeast Neighborhood commercial area. The street is essential to provide a direct route from NW Springville Road to the Northeast Neighborhood.

b. Primary Street P21 extends east from Primary Street P10 to Primary Street P3. Primary Street P10, along with a portion of Road A, frames the community park, provides parking for park uses and provides a park edge that is connected to the neighborhood. The front façades of all buildings shall front on the park consistent with General Design Element 8.

c. Two Primary Streets (P11) and (P12) extend east from the Park Blocks one-way street couplet. The streets provide access to the civic center, East Community Park and commercial area from NW Kaiser Road and from the northeast part of the Subarea. Access to and from these streets at Kaiser Road shall be consistent with ASC Road Corridor 2.

d. Primary Street (P16) extends north from the one-way couplet to Road A. The street provides a connection from the Main Street Area to Road A.

e. NW Rosetta Street is a Primary Street (P2) that connects Primary Street P3 to Primary Street P18 in the Northeast Neighborhood.

f. Primary Street (P13) provides access to the Southeast Neighborhood from NW Springville Road and aligns with the eastern property line of a proposed future fire station.

g. Road A is a Primary Street and its development shall be consistent with ASC Road Corridor 1A. A gateway is identified at the intersection of Road A and NW Kaiser Road on the Core Design Elements Map. That gateway marks the northern entrance to the designated Main Street area. Buildings located at the gateway corners in the southeast and southwest sides of the intersection shall comply with the design standards for Main Street Community Gateways described in ASC Road Corridor 2.

h. NW Kaiser Road is a Primary Street and development shall be consistent with ASC Road Corridor 2.

i. NW Springville Road is a Primary Street that is located primarily within existing right of way. Development shall be consistent with ASC Road Corridor 4A.

6. The site at the eastern end of Primary Street P21 terminates opposite the eastern boundary of the community park and shall have a prominent landmark in the form of an architectural or landscape feature, such as the front entrance or lobby of a building, or a park.

7. A linear park and trail, described in ASC 7, run roughly east-west along the north side of Bethany Creek. Future residential development on land that abuts the north side of the linear park and trail, between NW Kaiser Road and Primary Street P3, shall include ground level dwelling units adjacent to the linear park or along an east-west local street located adjacent to the linear park. Each ground level dwelling unit adjacent to the linear park or local street shall have its front door open onto a stoop, porch or paved walkway facing the linear park or facing an east-west local street located adjacent to the linear park. Where a multifamily building is adjacent to the linear park or local street, a main building entry that opens onto a stoop, porch or paved walkway facing the linear park or local street may be provided in lieu of separate unit entries.

If an east-west local street is provided adjacent to the trail, the street's sidewalk and the trail may be combined into one facility where the trail is less than 25 feet from the street right-of-way. A combined sidewalk/trail facility shall be a minimum of 12 feet in width.

8. A uniform landscaped strip shall be provided along NW Springville Road for aesthetic purposes.

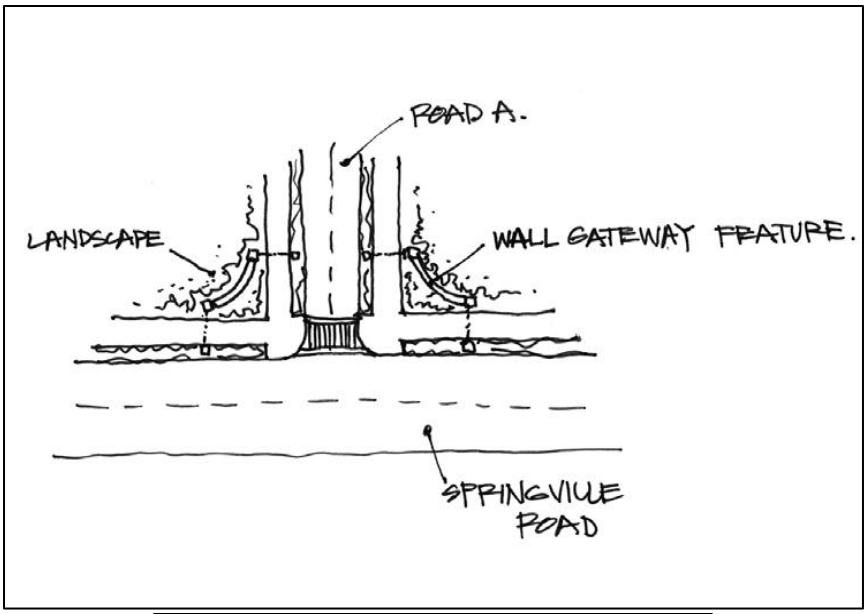
9. Development shall be consistent with ASCs Road Corridors 1A, 2 and 4A and ASC 7.

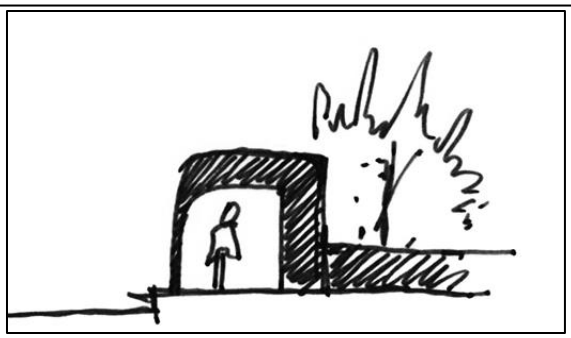
10. A gateway at the intersection of NW Springville Road and Road A marks the entrance to the Southeast Neighborhood. The gateway is identified on the Core Design Elements Map. A design plan shall be prepared that addresses the Neighborhood Plan and Street Design Map elements, applicable CDC standards and any additional gateway design treatments. A preferred design solution will include the following elements:

    - Vertical element signifying entrance into the community.
    - Special detailing on feature elements, which may include: water, walls, rocks and/or metal.
    - A significant amount of landscaping.
    - Lighting to emphasize monument features.

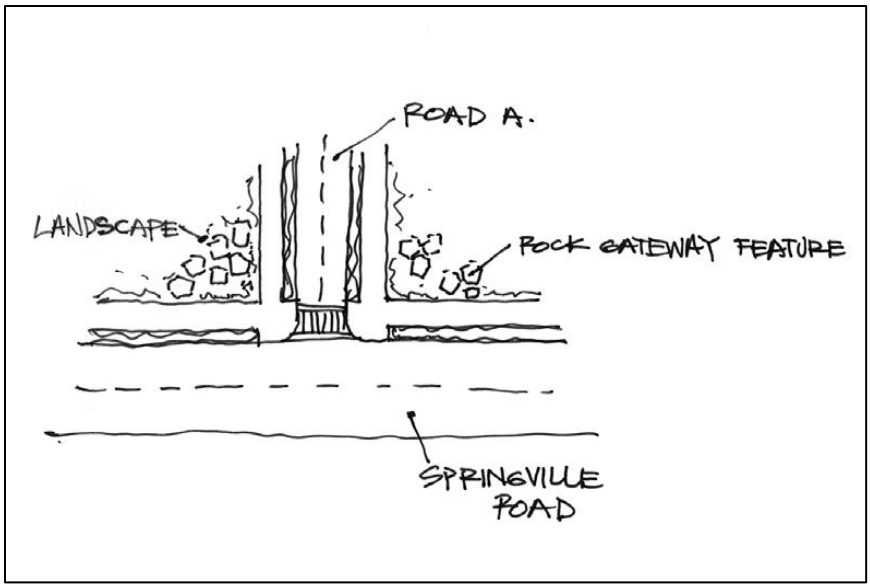
    The following sketches and photographs illustrate examples of potential vertical and feature elements for this gateway.

Walled Monument

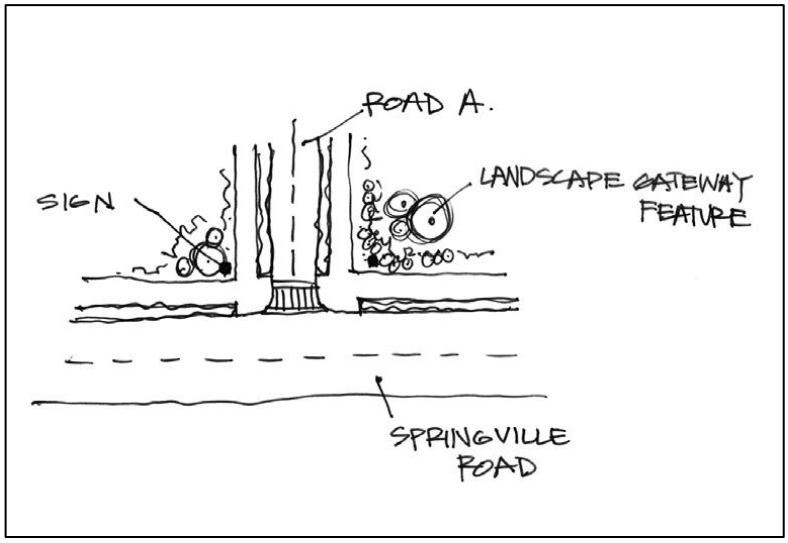


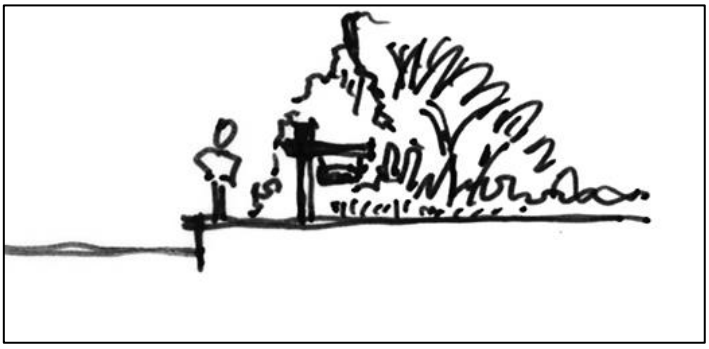


Rock Monument



Landscape Monument





E. Central Neighborhood

The Central Neighborhood extends north from NW Springville Road to Road A. Generally, the western boundary is the Waterhouse Powerline Trail Corridor and the eastern boundary is NW Kaiser Road.

The most prominent natural features of this neighborhood are the ridge that runs east-west along the highest point, and the associated views of the surrounding area including the Tualatin Mountains, Chehalem Mountains and Tualatin River valley. Other notable features include an ash forest/wetland south of the Park Blocks and Bethany Creek.

The key design parameters for the Main Street Area require the central section of NW Kaiser Road to have the following characteristics:

- A "main street" design (on-street parking, pedestrian scale and urban design features);
- A strong relationship to the Park Blocks and East and West Community Parks;
- A building scale and form which reflects its role as the focal point of the community; and
- A civic use in a central and prominent location with an adjacent public gathering area.

Design Elements

1. The Central Neighborhood shall have two neighborhood parks and the linear Park Blocks.

    a. A 1.5 to 2-acre northern neighborhood park shall be south of Road A and adjacent to the Waterhouse Powerline Trail Corridor or the Abbey Creek tributary.

    b. A 1.5 to 2- acre southern neighborhood park near Bethany Creek will have a connection to Bethany Creek and provide a trailhead for the multipurpose path north of and parallel to Bethany Creek. The park shall have street frontage along its north side that can accommodate on-street parking for park users. As such, this street shall be designed to be no less than the minimum County standard for parking on two sides. The front façades of residential buildings on this street shall face the park.

    c. The Park Blocks shall be consistent with ASC 5.

2. The location of higher density along the central ridge and the Main Street Area and the streetscape design along the Park Blocks are intended to make these primary community amenities immediately accessible to a large number of residents. The Park Blocks will support future transit through the placement of the highest residential densities along the Park Blocks and design standards in the CDC.

3. Trails and pedestrian connections shown on the Parks, Trails and Pedestrian Connections Map shall be provided that are consistent with THPRD standards and standards of ASC 7.

4. The Central Neighborhood has eleven Primary Streets. Primary Streets shall be provided in new development consistent with Section IV.C. (Primary Streets) and Section V.B. (Areas of Special Concern) of the North Bethany Subarea Plan. The intent of each Primary Street is provided below:

    a. NW Rosetta Street is Primary Street P2 that parallels Bethany Creek for portions of its length between Primary Street P15 and Road A. P2 is an important east-west connection between

Arbor Oaks Subarea and the central portion of the North Bethany Subarea. Development of P2 shall be consistent with ASC 7.

b. The Park Blocks are created by two parallel Primary Streets P11 and P12. The western terminus of the Park Blocks shall end at the center of the West Community Park. P11 and P12 cross NW Kaiser Road and terminate at East Community Park and the northern edge of the civic site. Development of these streets shall be consistent with ASC 2 and 5.

c. NW Kaiser Road is a Primary Street that will be located primarily in existing right-of-way. Development shall be consistent with ASC 2.

d. Primary Street P15 provides a connection to the Park Blocks from NW Springville Road, at the intersection with NW Oats Terrace.

e. NW Brugger Road (P6) is a Primary Street that is located in existing right-of-way.

f. Primary Street P9 connects NW Brugger Road with Road A to the north, and with Primary Street P2 (NW Rosetta Street) to the south.

g. Primary Street P4 connects the West Neighborhood to NW Kaiser Road.

h. NW Springville Road is a Primary Street that is located primarily in existing right of way. Development shall be consistent with ASC 4A.

i. Road A is a Primary Street. Development along Road A shall be consistent with ASC Road Corridor 1B.

j. Primary Street P20 provides a north-south connection between Primary Street P4 and Primary Street P6 (Brugger Road), and is directly adjacent to the powerline trail corridor along most of its length. Primary Street P20 shall accommodate on-street parking for the West Community Park located adjacent to the powerline trail corridor.

5. Buildings constructed as part of the Community Park shall be placed near and oriented to adjacent streets and used to define the park edge.

6. The design and development of the Main Street area shall be consistent with the requirements of ASC Road Corridor 2.

7. Development shall be consistent with ASC Road Corridors 1B, 2 and 4A and ASC 5, 7, 9 and 10.

8. Gateways are identified at the intersections of NW Kaiser Road/Road A and NW Kaiser Road/NW Brugger Road on the Core Design Elements Map. These gateways mark the northern and southern entrances to the designated Main Street (see Policy 40 of the Comprehensive Framework Plan for the Urban Area). Buildings located at the gateway corners on the east and west sides of these intersections shall comply with the design standards for Main Street Community Gateways described in ASC Road Corridor 2.

F. College Neighborhood

The College Neighborhood includes the PCC Rock Creek campus and a small area of residential land at the northeast corner of NW Springville Road and NW 185th Avenue. The PCC campus includes the THPRD Rock Creek Campus Recreation Facility, which is a multipurpose recreational facility constructed by THPRD through a partnership with PCC.

The northeastern corner of the PCC campus includes a wooded sensitive biological area that is currently utilized academically. Between the wooded area and the THPRD recreation facility is a future campus expansion area for new facilities.

The southwest corner of the neighborhood is planned for low density residential due to topographical and sight distance constraints along NW Springville Road and NW 185th Avenue. A few properties in this area are designated Institutional to reflect recent land acquisitions by PCC.

There are four planned pedestrian/bicycle connections between the PCC campus and adjacent development. They are:

1. A trail connection from the THPRD recreation facility east to the Arbor Oaks Subarea;

2. A connection to the Arbor Oaks Subarea north of the THPRD recreation facility;

3. A north/south trail along the eastern perimeter, which is partially built in the THPRD recreation facility; and

4. A connection from the campus to the West Neighborhood. The location of this connection will be determined when PCC expands its campus in the northeast corner and shall take into account the sensitive nature of PCC's wooded area.

A future realignment of NW Springville Road at 185th Avenue will be made to address transportation capacity needs, topography and sight distance constraints at the intersection (see ASC Road Corridor 4B).

Design Elements

1. Where not constrained by natural resources, future development of the PCC Rock Creek campus shall provide pedestrian/bicycle connections to the neighborhoods to the north and east. In general, bicycle and pedestrian accessways from this area should stub to the north and east, not preclude the opportunity for future bicycle and pedestrian connections, and reduce the need for local trips to use the arterials to access community services. The bicycle and pedestrian connections to be provided are:

    a. A trail from the THPRD recreation facility east to the Arbor Oaks Subarea;
    b. A connection to the Arbor Oaks Subarea shall be made just north of the THPRD recreation facility when the PCC Rock Creek campus further develops;
    c. A north/south trail along the eastern boundary, north of Springville Road as shown on the Parks, Trails and Pedestrian Connections Map; and
    d. A connection from the campus to the West Neighborhood. The design and location of this connection shall be determined when PCC expands its campus in the northeast corner. The connection may utilize campus accessways/sidewalks. PCC shall coordinate with THPRD to determine the most appropriate location for the connection. The appropriate location of the connection of the campus to the West Neighborhood shall be designed to not have an adverse impact on the college's wooded area.

e. Future development shall consider a potential access point to NW 185th at PCC's western property line.

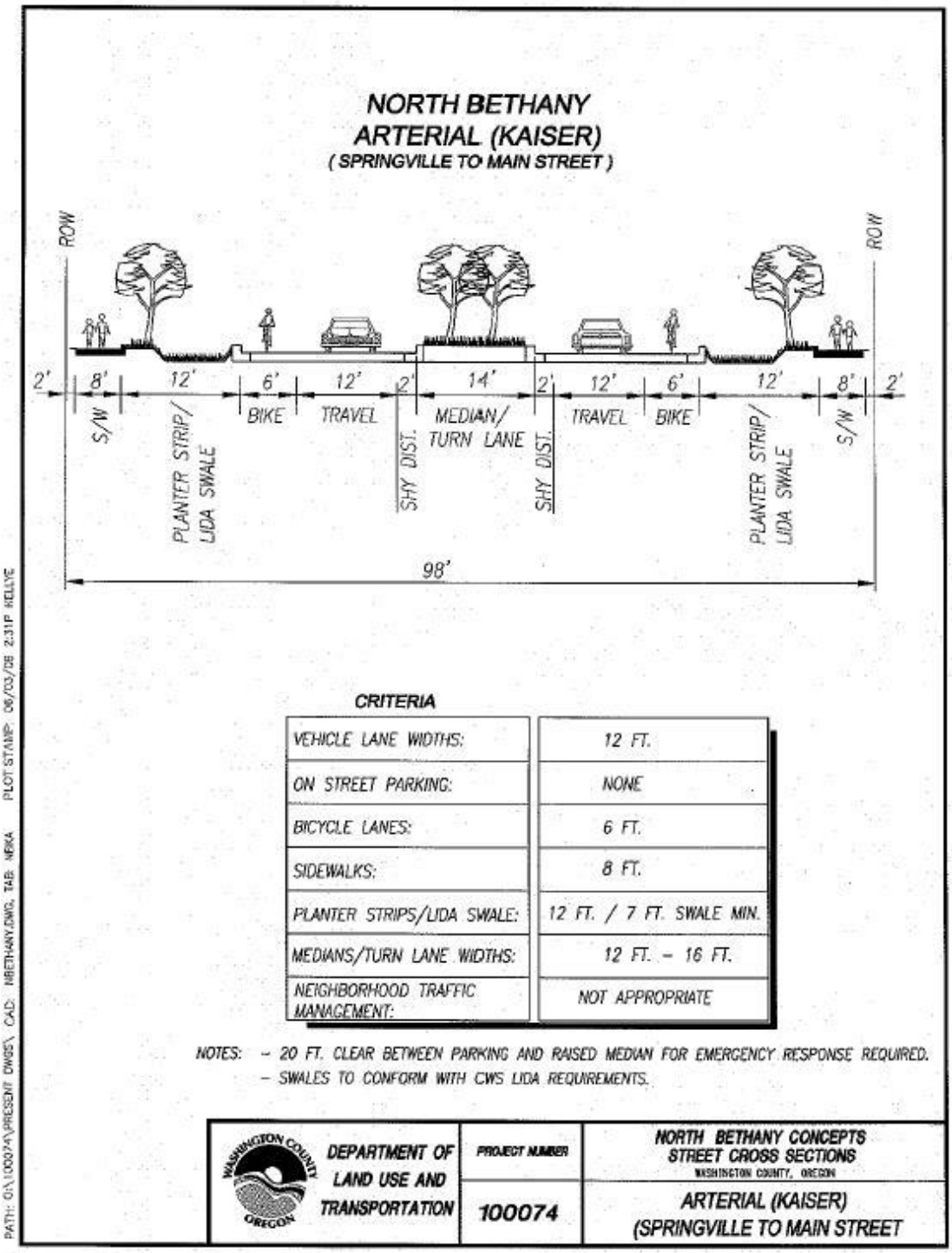
2. NW Springville Road is an existing Primary Street along the southern boundary of the College Neighborhood. NW Springville Road will be realigned where it intersects with NW 185th Avenue.

3. Development shall be consistent with ASC Road Corridor 4B.

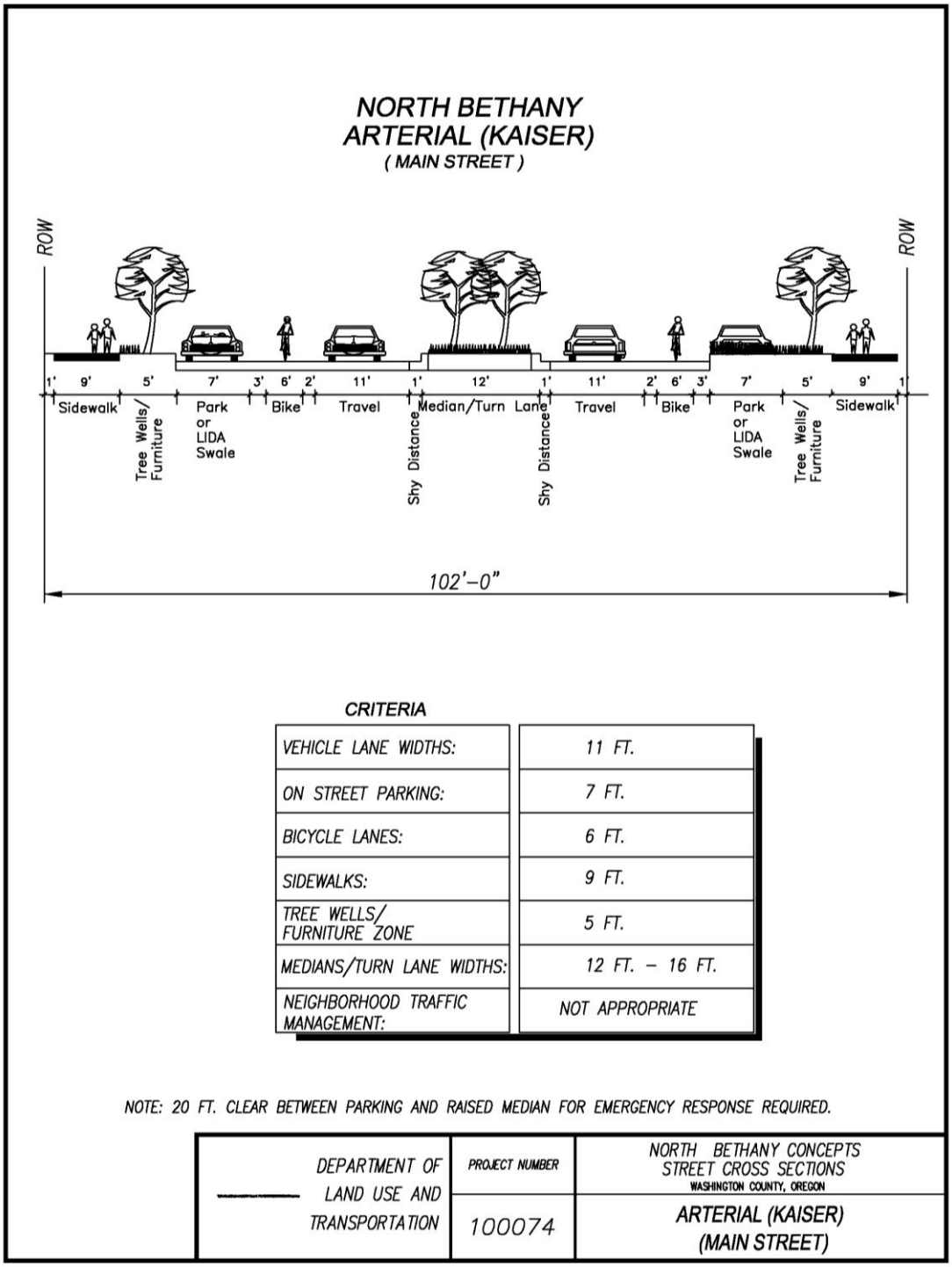
VII. MAPS, DRAWINGS, TABLES & GUIDES

Subsection A – Street Design Cross Sections

Street Design Type AR-a



Street Design Type AR-b



PATH: H:\PROJECT10_CAD4ROB\ CAD: NBETHANY.DWG, TAB: NBKB PLOT STAMP: 06/04/18 8:46A KATHERINES

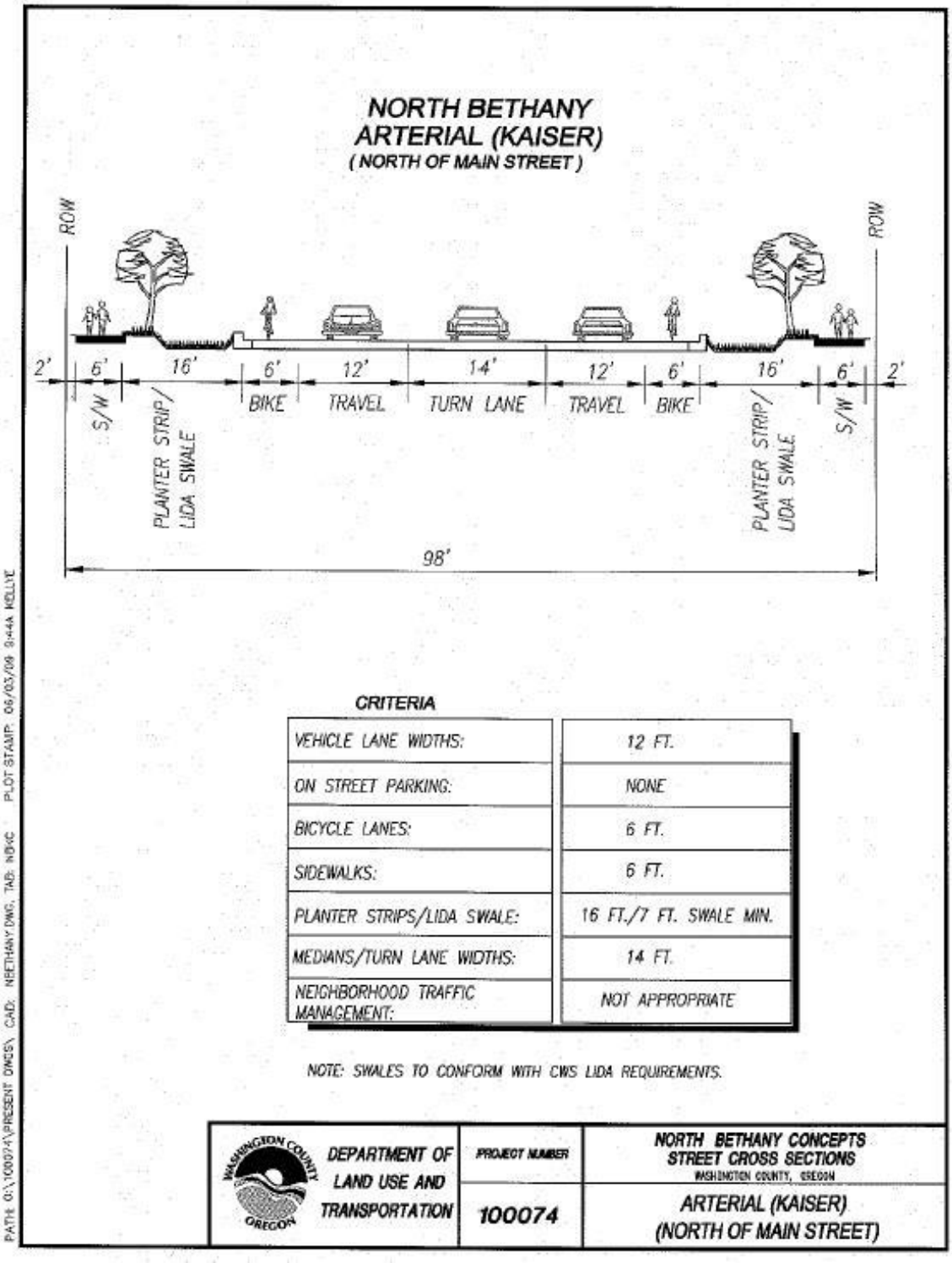
CRITERIA

VEHICLE LANE WIDTHS:	11 FT.
ON STREET PARKING:	7 FT.
BICYCLE LANES:	6 FT.
SIDEWALKS:	9 FT.
TREE WELLS/ FURNITURE ZONE	5 FT.
MEDIANS/TURN LANE WIDTHS:	12 FT. – 16 FT.
NEIGHBORHOOD TRAFFIC MANAGEMENT:	NOT APPROPRIATE

NOTE: 20 FT. CLEAR BETWEEN PARKING AND RAISED MEDIAN FOR EMERGENCY RESPONSE REQUIRED.

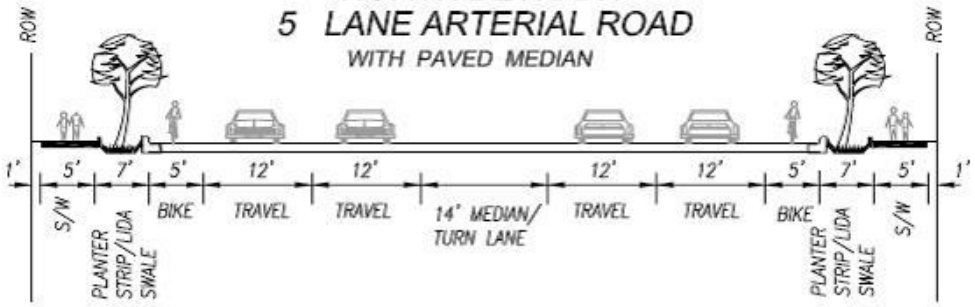
DEPARTMENT OF LAND USE AND TRANSPORTATION	PROJECT NUMBER	NORTH BETHANY CONCEPTS STREET CROSS SECTIONS WASHINGTON COUNTY, OREGON
	100074	ARTERIAL (KAISER) (MAIN STREET)

Street Design Type AR-c



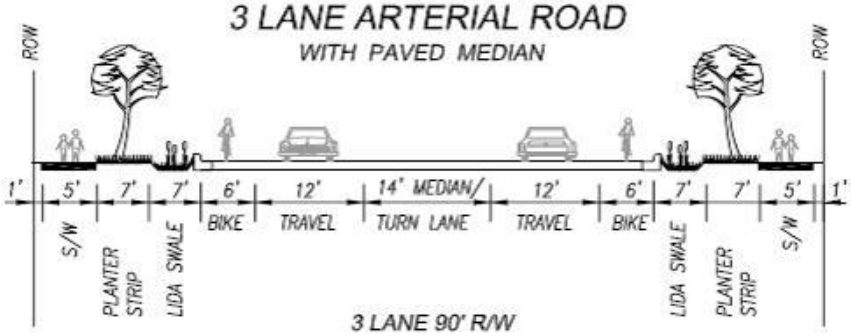
Street Design Type AR-2

NORTH BETHANY
5 LANE ARTERIAL ROAD
WITH PAVED MEDIAN



5 LANE 98' R/W

3 LANE ARTERIAL ROAD
WITH PAVED MEDIAN



3 LANE 90' R/W

CRITERIA	5 LANE ARTERIAL ROAD	3 LANE ARTERIAL ROAD
VEHICLE LANE WIDTHS:	12 FT.	12 FT.
ON STREET PARKING:	NONE	NONE
BICYCLE LANES:	6 FT.	6 FT.
SIDEWALKS:	5–12 FT.	5–7 FT.
LANDSCAPE STRIPS/LIDA SWALE:	14 FT./7 FT. SWALE MIN.	14 FT./7 FT. SWALE MIN.
MEDIANS/TURN LANE WIDTHS:	14 FT.	14 FT.
NEIGHBORHOOD TRAFFIC MANAGEMENT:	NOT APPROPRIATE	NOT APPROPRIATE

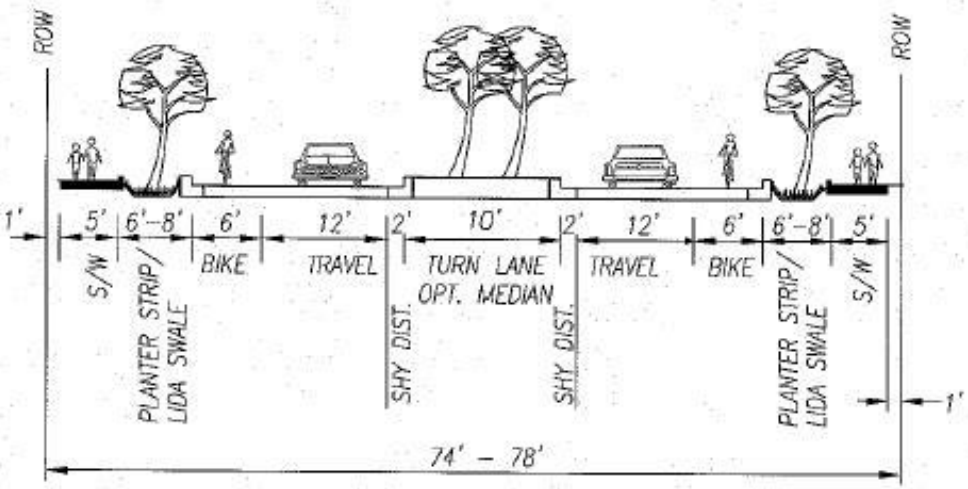
– SWALES TO CONFORM WITH CWS LIDA REQUIREMENTS.

WASHINGTON COUNTY OREGON — DEPARTMENT OF LAND USE AND TRANSPORTATION	PROJECT NUMBER	NORTH BETHANY CONCEPTS STREET CROSS SECTIONS WASHINGTON COUNTY, OREGON
	100074	5 & 3 LANE ARTERIALS WITH PAVED MEDIANS

PATH: O:\100074\PRESENT DWGS\ CAD: NBETHANY.DWG, TAB: NBTPU2 PLOT STAMP: 07/20/09 11:29A KELLYE

Street Design Type CL-1

NORTH BETHANY
3 LANE COLLECTOR



CRITERIA	3 LANE COLLECTOR
VEHICLE LANE WIDTHS:	12 FT. MIN.
ON STREET PARKING:	NONE
BICYCLE LANES:	6 FT.
SIDEWALKS:	5 FT. – 7 FT.
PLANTER STRIPS/LIDA SWALE:	4 FT. / 7 FT. SWALE MIN.
TURN LANE WIDTHS:	14 FT.
NEIGHBORHOOD TRAFFIC MANAGEMENT:	NOT APPROPRIATE

NOTES: – 20 FT. CLEAR BETWEEN PARKING AND RAISED MEDIAN FOR EMERGENCY RESPONSE REQUIRED.
– SWALES TO CONFORM WITH CWS LIDA. REQUIREMENTS.

WASHINGTON COUNTY OREGON — DEPARTMENT OF LAND USE AND TRANSPORTATION	PROJECT NUMBER 100074	NORTH BETHANY CONCEPTS STREET CROSS SECTIONS WASHINGTON COUNTY, OREGON — NORTH BETHANY 3 LANE COLLECTOR WITH OPEN OPTION CONVEYANCE

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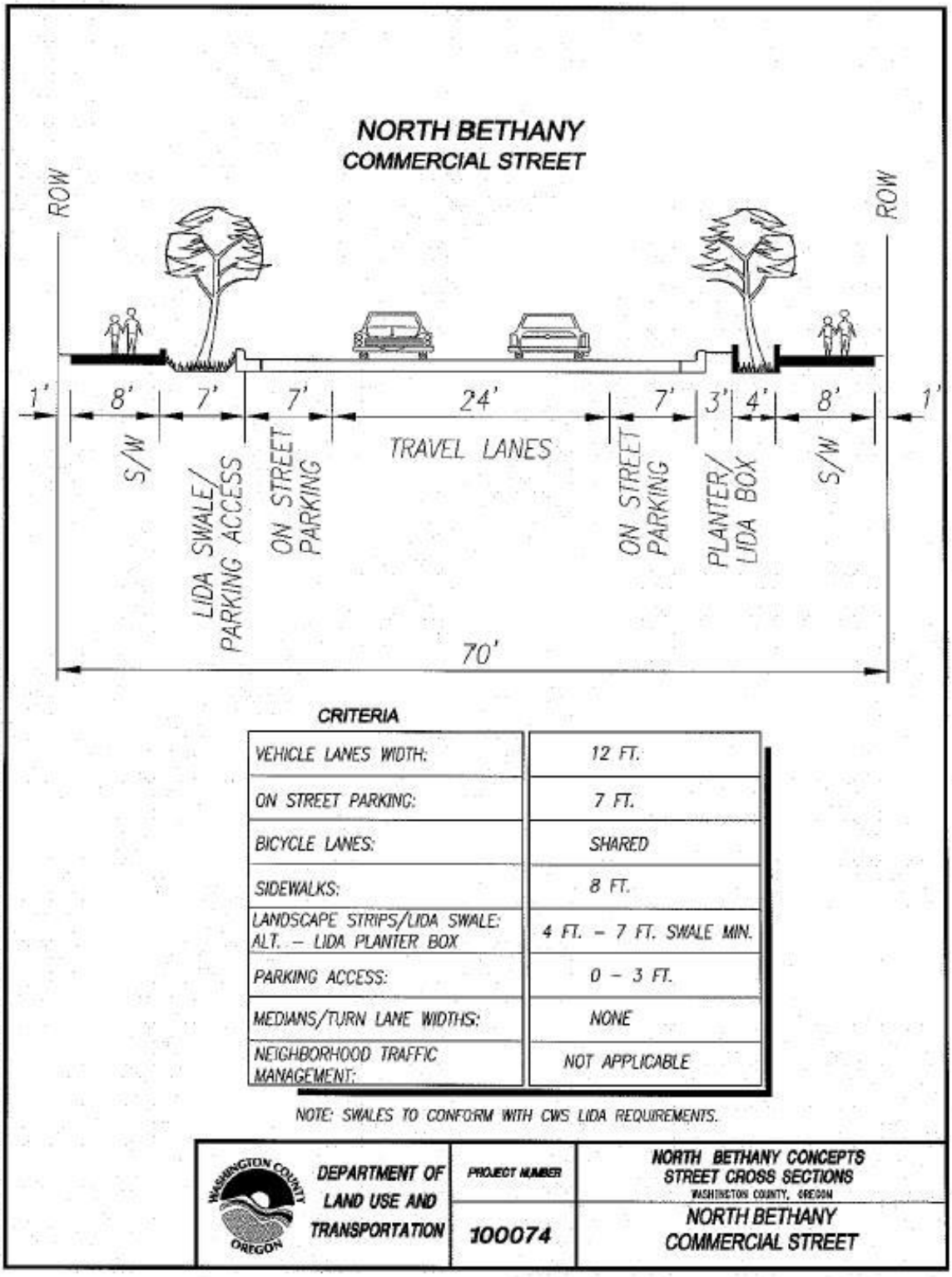
Street Design Type CM



CRITERIA

VEHICLE LANES WIDTH:	12 FT.
ON STREET PARKING:	7 FT.
BICYCLE LANES:	SHARED
SIDEWALKS:	8 FT.
LANDSCAPE STRIPS/LIDA SWALE: ALT. – LIDA PLANTER BOX	4 FT. – 7 FT. SWALE MIN.
PARKING ACCESS:	0 – 3 FT.
MEDIANS/TURN LANE WIDTHS:	NONE
NEIGHBORHOOD TRAFFIC MANAGEMENT:	NOT APPLICABLE

NOTE: SWALES TO CONFORM WITH CWS LIDA REQUIREMENTS.

DEPARTMENT OF LAND USE AND TRANSPORTATION	PROJECT NUMBER	NORTH BETHANY CONCEPTS STREET CROSS SECTIONS
	100074	WASHINGTON COUNTY, OREGON
		NORTH BETHANY COMMERCIAL STREET

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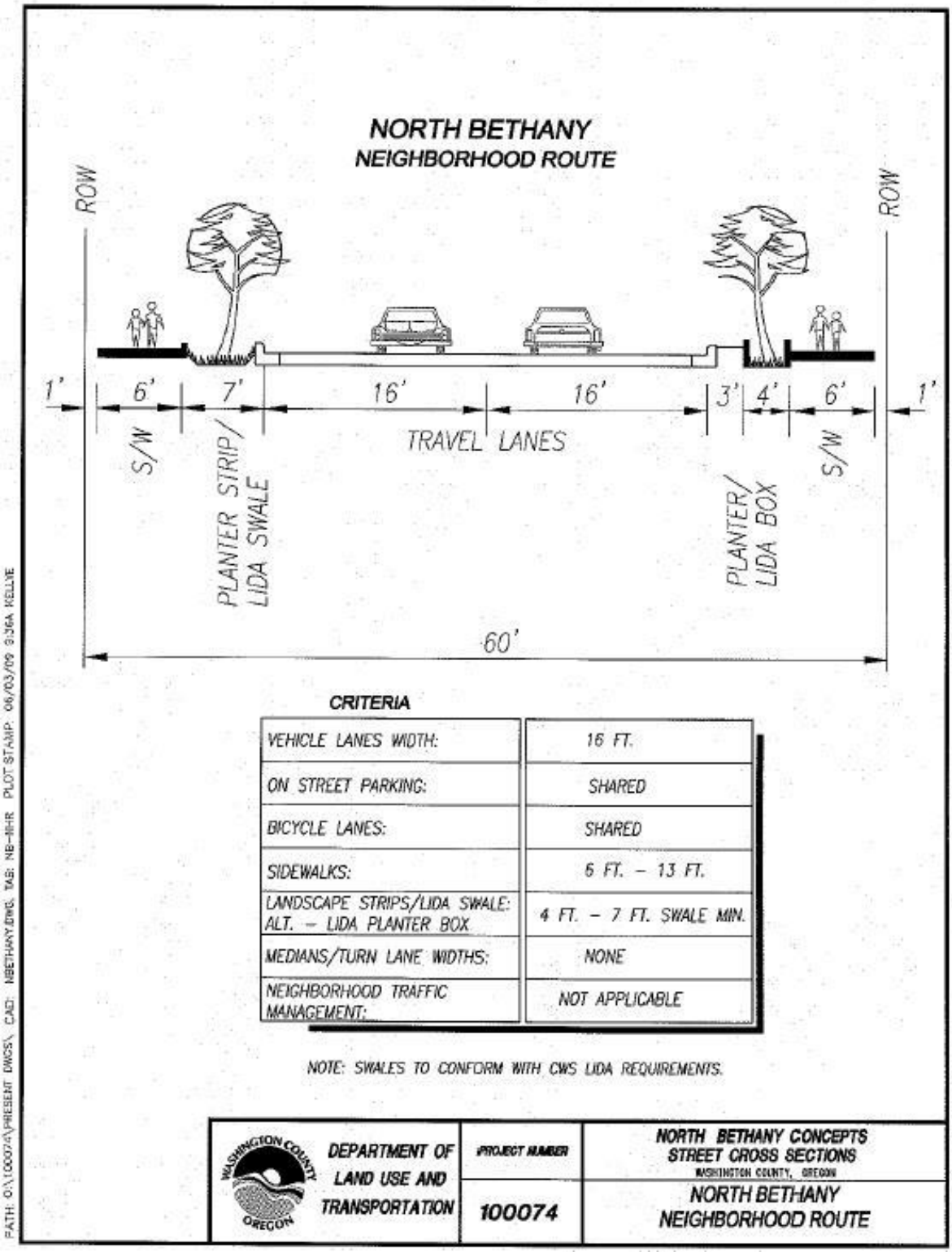
Street Design Types NR-1 through NR-5



CRITERIA

VEHICLE LANES WIDTH:	16 FT.
ON STREET PARKING:	SHARED
BICYCLE LANES:	SHARED
SIDEWALKS:	6 FT. – 13 FT.
LANDSCAPE STRIPS/LIDA SWALE: ALT. – LIDA PLANTER BOX	4 FT. – 7 FT. SWALE MIN.
MEDIANS/TURN LANE WIDTHS:	NONE
NEIGHBORHOOD TRAFFIC MANAGEMENT:	NOT APPLICABLE

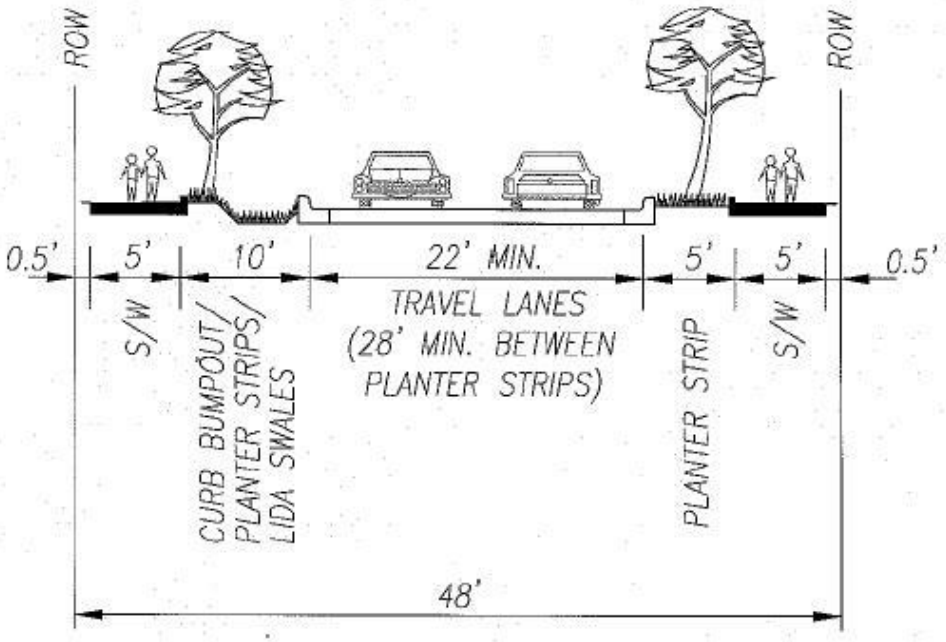
NOTE: SWALES TO CONFORM WITH CWS LIDA REQUIREMENTS.

DEPARTMENT OF LAND USE AND TRANSPORTATION	PROJECT NUMBER	NORTH BETHANY CONCEPTS STREET CROSS SECTIONS WASHINGTON COUNTY, OREGON
	100074	NORTH BETHANY NEIGHBORHOOD ROUTE

PATH: O:\100074\PRESENT DWGS\ CAD: NBETHANY.DWG, TAB: NB-NHR PLOT STAMP: 06/03/09 9:36A KELLYE

Street Design Types LO-1 through LO-5

NORTH BETHANY LOCAL STREET RESIDENTIAL



CRITERIA	LOCAL - 2 LANE
VEHICLE LANES WIDTH:	22 FT. MIN. (BETWEEN BUMP OUTS) 28 FT. MIN. (BETWEEN PLANTER STRIPS)
ON STREET PARKING:	YES/ALTERNATE WITH CURB BUMPOUT
BICYCLE LANES:	NONE
SIDEWALKS:	5 FT. MIN.
CURB BUMP OUT/LIDA SWALE/PLANTERS	10 FT.
LANDSCAPE STRIPS/LIDA SWALE:	4 FT. MIN. / 7 FT. SWALE MIN.
MEDIANS/TURN LANE WIDTHS:	NONE
NEIGHBORHOOD TRAFFIC MANAGEMENT:	YES

NOTE: SWALES TO CONFORM WITH CWS LIDA REQUIREMENTS.

DEPARTMENT OF LAND USE AND TRANSPORTATION	PROJECT NUMBER	NORTH BETHANY CONCEPTS STREET CROSS SECTIONS WASHINGTON COUNTY, OREGON
	100074	NORTH BETHANY LOCAL STREET - RESIDENTIAL

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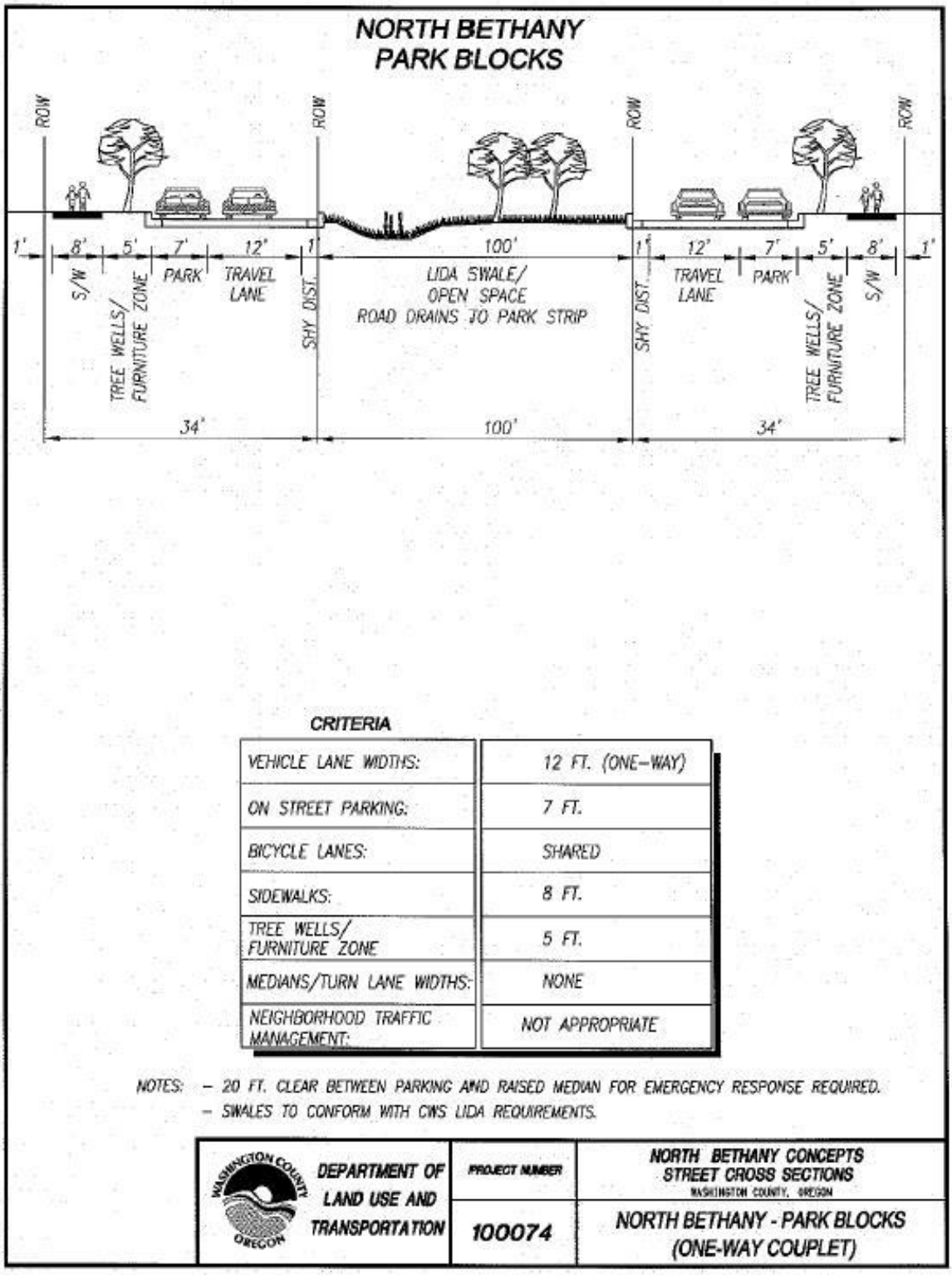
Street Design Type PB



CRITERIA

VEHICLE LANE WIDTHS:	12 FT. (ONE-WAY)
ON STREET PARKING:	7 FT.
BICYCLE LANES:	SHARED
SIDEWALKS:	8 FT.
TREE WELLS/ FURNITURE ZONE	5 FT.
MEDIANS/TURN LANE WIDTHS:	NONE
NEIGHBORHOOD TRAFFIC MANAGEMENT:	NOT APPROPRIATE

NOTES: – 20 FT. CLEAR BETWEEN PARKING AND RAISED MEDIAN FOR EMERGENCY RESPONSE REQUIRED.
– SWALES TO CONFORM WITH CWS LIDA REQUIREMENTS.

WASHINGTON COUNTY OREGON — DEPARTMENT OF LAND USE AND TRANSPORTATION	PROJECT NUMBER: 100074	NORTH BETHANY CONCEPTS STREET CROSS SECTIONS, WASHINGTON COUNTY, OREGON — NORTH BETHANY - PARK BLOCKS (ONE-WAY COUPLET)

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Subsection B - Street Tree Tables

Table 1: North Bethany Street Tree List, by Neighborhood

Neighborhood/Street Cross Section		Common name	Latin name	Spacing	Mature Height/ Width
N-1 - Northwest and West Neighborhoods					
CL-1	Collector Road A	Legend Linden	*Tilia americana 'DTR 123'*	35'	40' x 30'
	- Center median	Legend Linden	*Tilia americana 'DTR 123'*	35'	40' x 30'
NR-1	Neighborhood Route	Red Oak	*Quercus rubra*	35'	50' x 45'
LO-1	Local Streets				
	- North/south streets	Snow Cone Japanese Snowbell	*Styrax japonicas 'JFS-E'*	20'	20' x 20'
	- East/west streets	Paperbark Maple	*Acer griseum*	20'	25' x 20'
N-2 - Northeast Neighborhood					
AR-1c	Arterial - Kaiser Road north of Main Street designation	Village Green Zelcova	*Zelkova serrata 'Village Green'*	35'	40' x 40'
CL-1	Collector Road A	Legend Linden	*Tilia americana 'DTR 123'*	35'	40' x 30'
	- Center median	Legend Linden	*Tilia americana 'DTR 123'*	35'	40' x 30'
NR-2	Neighborhood Route	Bloodgood London Plane	*Platanus x acerfolia 'Bloodgood'*	35'	50' x 40'
LO-2	Local Streets				
	- North/south streets	Tartarian Maple	*Acer tartaricum*	20'	25' x 20'
	- East/west streets	Pacific Dogwood	*Cornus nuttallii 'Starlight'*	20'	30 x 20'
N-3 - Southeast Neighborhood					
AR-1a	Arterial - Kaiser: Springville to Main Street designation	Village Green Zelkova	*Zelkova serrata 'Village Green'*	35'	40' x 40'
	- Center median	Village Green Zelkova	*Zelkova serrata 'Village Green'*	35'	40' x 40'
AR-1b	Arterial Kaiser: Main Street designation	Kwanzan Cherry	*Prunus serrulata 'Kwanzan'*	25'	30' x 20'
	- Center Median	Kwanzan Cherry	*Prunus serrulata 'Kwanzan'*	25'	30' x 20'
AR-2	Arterial - Springville Road	Wright Brothers Sugar Maple	*Acer saccarum 'Wright Brothers'*	35'	50' x 35'
CL-1	Collector - Road A	Legend Linden	*Tilia americana 'DTR 123'*	35'	40' x 30'
	- Center median	Legend Linden	*Tilia americana 'DTR 123'*	35'	40' x 30'

Neighborhood/Street Cross Section		Common name	Latin name	Spacing	Mature Height/ Width
NR-3	Neighborhood Route	Scarlet Oak	*Quercus coccinea*	35’	50’ x 40’
LO-3	Local Streets				
	- North/south streets	Black Tupelo	*Nyssa sylvatica*	25’	35’ x 20’
	- East/west streets	Snowcloud Serviceberry	*Amelanchier laevis ‘Snowcloud’*	25’	25’ x 15’
N-4 - Central Neighborhood					
AR-1a	Arterial - Kaiser: Springville to Main Street designation	Village Green Zelkova	*Zelkova serrata ‘Village Green’*	35’	40’ x 40’
	- Center median	Village Green Zelkova	*Zelkova serrata ‘Village Green’*	35’	40’ x 40’
AR-1b	Arterial Kaiser: Main Street designation	Kwanzan Cherry	*Prunus serrulata ‘Kwanzan’*	25’	30’ x 20’
	- Center median	Kwanzan Cherry	*Prunus serrulata ‘Kwanzan’*	25’	30’ x 20’
CM	Commercial Streets	Kwanzan Cherry	*Prunus serrulata ‘Kwanzan’*	25’	30’ x 20’
NR-4	Neighborhood Route	Greenspire Linden	*Tilia cordata ‘Greenspire’*	35’	40’ x 30’
PB	Park Blocks	Frontier Elm	*Ulmus ‘Frontier’*	30’	40’ x 30’
LO-4	Local Streets				
	- North/south streets	Shademaster Honey Locust	*Gleditisia triancanthos ‘Shademaster’*	25’	45’ x 35’
	- East/west streets	Heart Throb Dogwood	*Cornus kousa ‘Heart Throb’*	25’	20’ x 20’

Table 2: North Bethany Street Tree Guide

Latin/Common Name	Zone	Height & Spread (feet)	Shape	Foliage	Fall Color	Flower	Notes
Acer griseum **Paperbark Maple**	5	25 x 20	Upright, spreading rounded crown	Dark green	Red		Trifoliate leaves give delicate texture. Exfoliating orange-brown/cinnamon-brown bark creates year-round interest.
Acer saccharum 'Wright Brothers' **Wright Brothers Sugar Maple**	3	50 x 30	Oval	Green	Orange, red, scarlet		Fast growing, hardy and reported to be resistant to scorch and frost cracking.
Acer tartaricum **Tartarian Maple**	3	25 x 20	Oval to rounded; low branched	Medium green	Yellow to orange-red	Attractive red samaras	Handles tough sites. Bright red samaras add summer color.
Amelanchier laevis 'Snowcloud' **Snowcloud Serviceberry**	4	25 x 15	Upright, oval	Dark green, red tint in spring	Scarlet	White in clusters	Selected for upright, tree form growth. Strong growing, makes for a good small street tree.
Cercis Canadensis **Eastern Redbud**	5	25 x 30	Multi-stem or low branching	Medium green	Yellow	Reddish purple in bud, rosy pink when open	Profuse flowers that bloom in April or May before leaves drop.
Cornus kousa 'Heart Throb' **Heart Throb Dogwood**	5	20 x 20	Rounded	Dark green	Deep red	Deep rose pink	Large deep reddish to rose pink flower brachts form flower heads up to four inches in diameter.
Cornus nuttallii 'Starlight' **Starlight Pacific Dogwood**	3	30 x 20	Upright, oval	Deep green	Red	Large, creamy white	Hybrid of the Pacific and Chinese dogwood, the tree has shown resistance to mildew and anthracnose.
Gleditisia triancanthos 'Shademaster' **Shademaster Honey Locust**	4	45 x 35	Vase shaped to rectangular	Fine textured, medium green	Yellow		Upright ascending then spreading branches. An excellent street tree, its upright branch structure lends itself to pruning for traffic clearance.
Nyssa sylvatica **Black Tupelo**	5	35 x 20	Pyramidal when young, spreading and irregular with age	Dark green, glossy	Hot coppery red		Brilliant fall color, ranging from scarlet to maroon, yellow and orange. Fissured gray bark provides winter interest. Adaptable to urban conditions.
Parrotia persica **Persian Parrotia**	5	30 x 20	Broadly pyramidal to round	Green textured	Yellow, orange, red	Showy red stamens	Low branched small tree with unusual form. Early blooming flowers.

Latin/Common Name	Zone	Height & Spread (feet)	Shape	Foliage	Fall Color	Flower	Notes
Platanus x acerfolia 'Bloodgood' **Bloodgood London Plane**	5	50 x 40	Broadly pyramidal	Large, medium to dark green	Yellow		Naturally shedding bark creates dappled brown and cream pattern.
Prunus subhirtella 'Autumnalis Rosea' **Autumn Flowering Cherry**	5	25 x 22	Upright spreading with slender branches	Medium green	Yellow to bronze	Semi-double to double, light pink	Unusual for its November blooms that occur after its spring blooms.
Prunus serrulata 'Kwanzan' **Kwanzan Cherry**	5	30 x 20	Stiffly vase-shaped	Dark green	Bronze-orange to orange red	Double, rosy pink in clusters	Double pink flowers make it the showiest cherry in spring.
Quercus coccinea **Scarlet Oak**	4	50 x 40	Upright spreading, open broadly oval	Dark green glossy	Red		Autumn brings deep, brilliant shades of red.
Quercus rubra **Red Oak**	4	50 x 45	Rounded	Dark green	Red		Large, fast growing, broad-headed tree.
Styrax japonicas 'JFS-E' **Snow Charm Japanese Snowbell**	5	20 x 20	Rounded	Dark green	Yellowish	Pure white, bell shaped	Reliable and easy to grow; resists twig dieback; traditional form.
Tilia americana 'DTR 123' **Legend Linden**	4	40 x 30	Broadly pyramidal	Medium green	Yellow		Strong grower with clean glossy leaves that resist rust problems. Winter buds and twigs are bright vermillion.
Tilia cordata 'Greenspire' **Greenspire Linden**	4	40 x 30	Pyramidal, symmetrical	Dark green	Yellowish		Strong central leader, uniform branch arrangement and symmetrical, pyramidal form.
Ulmus 'Frontier' **Frontier Elm**	4	40 x 30	Broadly oval	Glossy green	Burgundy		Tolerant of Dutch Elm disease and Phloem Necrosis.
Zelkova serrata 'Village Green' **Village Green Zelkova**	5	40 x 40	Vase shaped, rounded	Deep green	Rusty red		More upright and faster growing than species. Foliage is very dense, dark green and presents clean appearance.