



FROG POND AREA PLAN

Creating a great community



FROG POND AREA PLAN

A Concept Plan for Three New Neighborhoods in East Wilsonville

Final Area Plan

Approved by the Wilsonville City Council November 16, 2015

Prepared by



A VISION FOR FROG POND IN 2035

The Frog Pond Area in 2035 is a Wilsonville community with attractive and connected neighborhoods. The community’s hallmarks are its walkable and active streets, variety of quality homes, and connected trails and open spaces. Frog Pond’s excellent schools and parks are focal points of the community. Frog Pond is “just a short bike, walk, or bus trip” from all parts of Wilsonville – a highly valued part of the larger city.

Funding for the Frog Pond Area Plan was provided by a Metro Community Planning and Development Grant and the City of Wilsonville.





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Executive Summary

A VISION FOR FROG POND IN 2035

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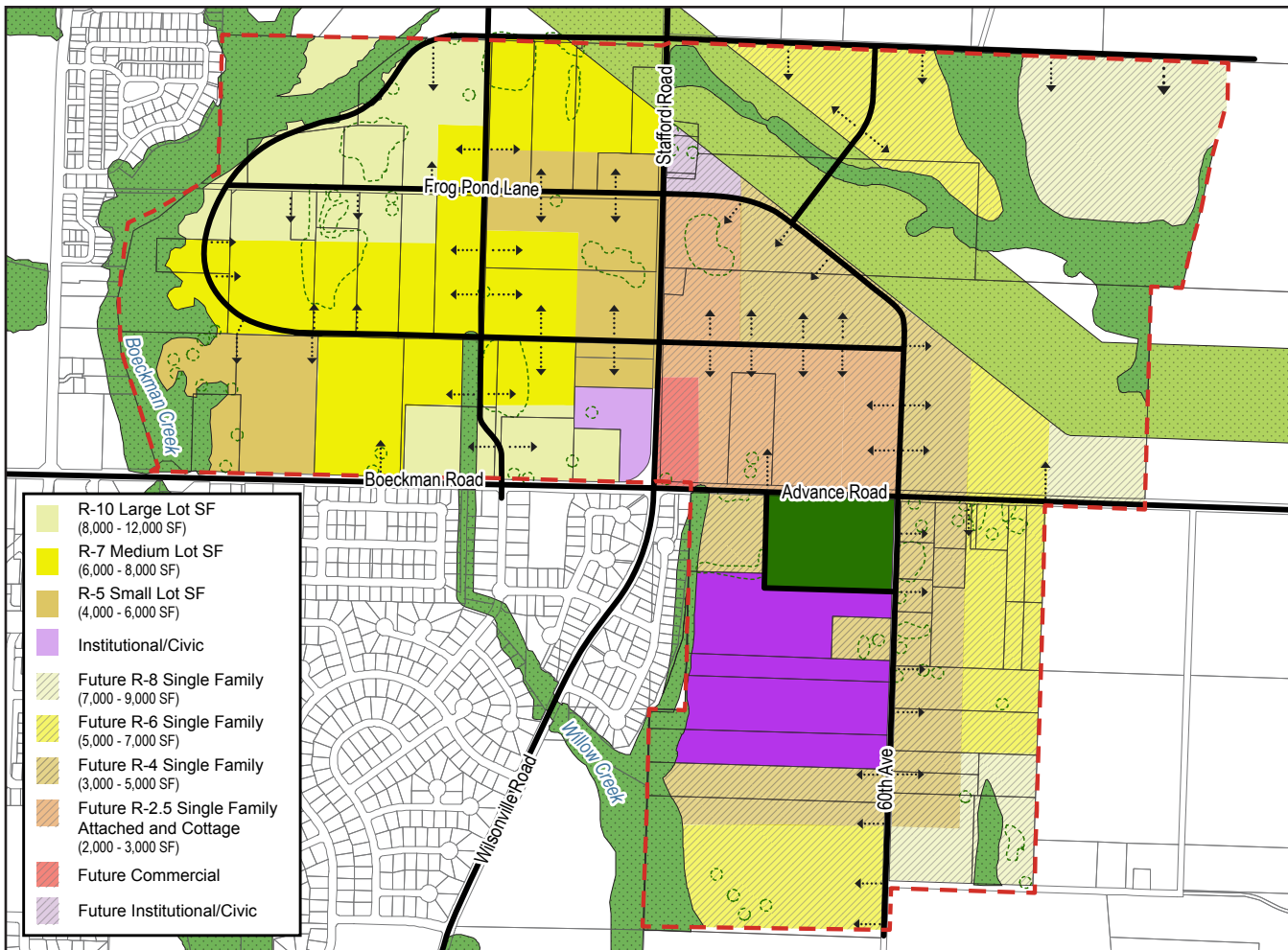
KEY FEATURES OF THE FROG POND AREA PLAN

- **One cohesive plan** to guide growth within the current Urban Growth Boundary and potential additions from the Advance Road Urban Reserve.
- **Four integrated framework plans** for land use and community design, transportation, parks and open space, and infrastructure (water, stormwater, and sewer systems).
- **Three walkable and connected neighborhoods**, with a set of parks and trails within and between the three areas.





Executive Summary



The West Neighborhood: a new neighborhood for Wilsonville - in the current UGB and adjacent to the Boeckman Creek Corridor - comprised entirely of single-family detached homes in the large, medium, and small lot residential categories; land for an estimated 610 homes; along with civic uses, trails, and two neighborhood parks.

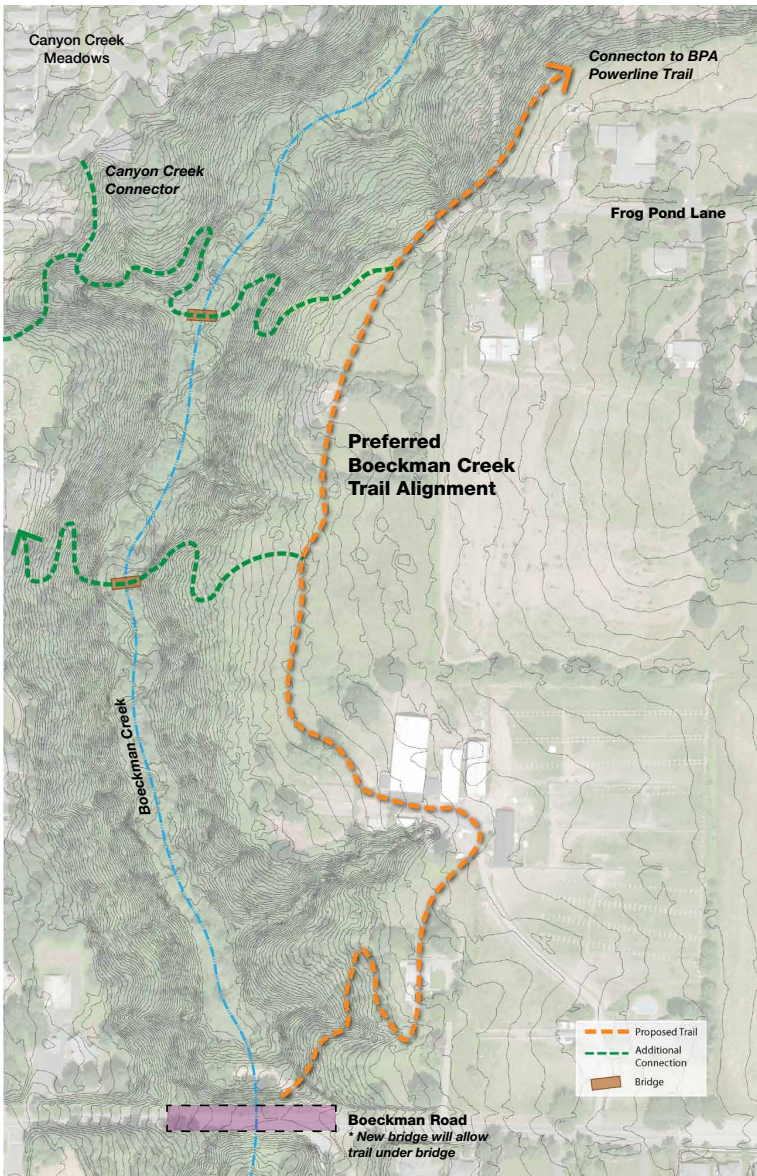
The East Neighborhood: a future neighborhood in the urban reserve adjacent to the BPA powerline/open space corridor; comprised of a variety of housing choices that includes Attached/Cottage Single Family; land for an estimated 682 to 846 homes¹; a 3.5 acre neighborhood commercial center to provide small scale retail and a community gathering place; civic/cultural uses at the historic Frog Pond Grange; and one neighborhood park.

The South Neighborhood: a future neighborhood - in the urban reserve - anchored by civic uses that include a new middle school (opening 2017), primary school (future), and 10-acre community park (future); and comprised of a variety of detached housing choices and land for an estimated 476 homes.

¹ There are two options proposed for future residential capacity of the East Neighborhood. For more information, see "Range of Options for East Neighborhood," on page 24.



- When Frog Pond’s planned 1,932 homes are added to today’s housing inventory, the City’s housing mix will change from its current 57% multifamily and 43% single family to 47% multi-family and 53% single family (not including other development or redevelopment that is likely to occur).
- Two civic/institutional nodes will provide additional community gathering places: the Frog Pond Grange and Community of Hope Church site.
- Community design principles and illustrative demonstration plans which will guide future development to create a livable, walkable, high-quality community.
- A street framework plan that promotes connectivity, circulation, safety and complete streets for walking, biking, vehicles and transit.
- A preliminary transit circulation concept for South Metro Area Regional Transit (SMART) to serve the area.
- Design concepts for future improvements to Stafford Road as a gateway to Wilsonville.
- A safe and functional bicycle and pedestrian network that identifies designated routes, both on-street and off-street.
- A comprehensive trails plan, including the Boeckman Creek Trail, the BPA Easement Trail, South Neighborhood School Connection Trails; and the 60th Avenue Trail.
- Initial concepts and evaluation of a potential undercrossing under Advance Road at the entry to the schools and community park.
- An evaluation of how the Area Plan can support and provide Safe Routes to Schools.
- A two-park concept for the West Neighborhood that includes the option of a trailhead park at the western edge where the neighborhood meets the Boeckman Creek Corridor.



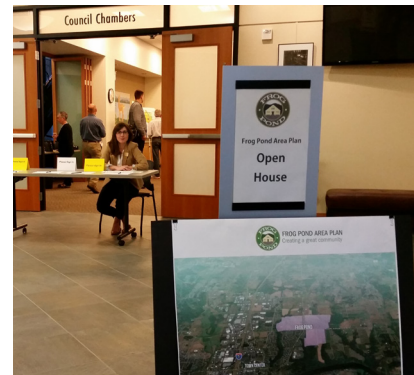


Executive Summary

- Planning-level layouts and cost estimates for water, sanitary sewer and storm water infrastructure to serve the entire area.
- A storm water plan that incorporates low-impact development techniques: retention ponds; bioswales; pervious paving; rain gardens; tree canopy; and green roofs.
- A comprehensive infrastructure funding plan identifies 40 projects that will provide transportation, water, sewer, storm water and parks to the area. For each project, the plan identifies project costs, who will lead construction, and funding responsibilities.

COMMUNITY INVOLVEMENT

The Frog Pond Area Plan was prepared with extensive involvement of the Wilsonville community. The open and inclusive process began in the spring of 2014 and continued through the summer of 2015. The process included a community kick-off meeting, an 18-member Task Force (four meetings), a 13-member Technical Advisory Committee (three meetings), two open houses, and two on-line surveys. At the mid-point of the process, a joint work session of the Planning Commission and City Council was held. Prior to hearings, two work sessions were held with the Wilsonville Planning Commission, followed by two work sessions with the City Council. Throughout the various meetings, options were presented, follow-up analysis and dialogue was conducted, and the plan was changed to incorporate community input. The project team conducted





stakeholder interviews and many individual meetings with groups and individuals. Public information was provided at many levels, including the project web site, updates in The Boones Ferry Messenger, email informational updates, and mailed notices for events.

IMPLEMENTATION AND NEXT STEPS

The four major steps for implementation are:

1. Create and adopt a Master Plan, with implementing Comprehensive Plan and Zoning Code updates, for the area within the current UGB (2016). The Master Plan will establish property specific Comprehensive Plan map designation(s), the intended zones, and future zoning boundaries for the West Neighborhood. The Master Plan will provide additional detail (as-needed) for streets, blocks, pedestrian and bicycle facilities, parks and open space, and infrastructure; design guidelines; and, an infrastructure funding plan. New plan and zoning code language will also be developed during the Master Plan process, guided by the zoning strategy included in this Area Plan.
2. Utilize a two-step approach for entitlements. Step 1 is the initial adoption of the Comprehensive Plan map designations and the package of plan and code amendments – this step will be completed by the City at the end of Phase 2 of the Area Plan process (Summer 2016). Step 2 is the application of property-specific annexations, re-zoning, and concurrent PDR reviews – these will occur incrementally over time at the initiation of property owners.
3. Continue coordination with Metro on future consideration of urban reserves. The timing of the addition of the Frog Pond Advance Road Urban Reserve Areas into the UGB is uncertain. The City of Wilsonville’s position regarding the Frog Pond urban reserves is: (1) it is appropriate land for future residential neighborhoods for the city; (2) the area is “next in line” to be added to the city after the West Neighborhood; and (3) there is no firm timeline for addition of the East and South Neighborhoods to the City as it is dependent upon future regional growth management decisions.
4. Further evaluate, during future master planning, two elements of the land uses in the East and South Neighborhoods: (1) the location of the neighborhood commercial area; and (2) the residential densities for the attached row homes and cottages land use category.



Executive Summary

At the time of adoption there were two general proposals regarding residential land use in the East and South Neighborhoods. The first proposal was the Planning Commission-recommended option (Option G), with the condition to re-examine the R2.5 densities and commercial site location at a future date of master planning. The second proposal was that there should be a minimum lot size of 4,000 square feet. The Council considered these proposals carefully, along with all of the rationale, implications and issues. Working from the premises that: (1) both points of view should be honored and represented in the Plan; (2) many years will pass before final decisions need to be made; and (3) the range of housing choices and price ranges should increase in the future when these neighborhoods are developed – the Council struck a balance. The balance was to include both options in the Plan with a commitment to revisit the densities and commercial site in the future as part of master planning. An additional idea was added to consider, during Master Planning, neighborhood scale mixed use, where residential would be allowed over the retail in the commercial center.

Introduction



The Frog Pond Area is an integral part of Wilsonville's past, present, and future. It is one of the oldest parts of the community – the area was first settled in the 1850's with the establishment of the Frog Pond School, later the Frog Pond Grange. Presently, in 2015, it is an important eastern edge of the City's Urban Growth Boundary (UGB) and the focus of a robust community discussion about creating Wilsonville's next great neighborhoods. The future is what this Area Plan is all about: ensuring a vision that creates, over the coming decades, new neighborhoods that are highly livable and a treasured part of the larger City.



TWO AREAS, TWO TIMEFRAMES FOR GROWTH, ONE PLAN

Land Inside the UGB – Near-Term Residential Land Supply

About 220 acres out of the 500-acre planning area are inside the UGB. The UGB contains the City's urban land supply – those lands intended for new homes, parks, schools, and other needs of a growing city. The two areas within the UGB are:

- “Frog Pond West” - In 2002, Metro Council added the 181-acre area (west of Stafford Road and north of Boeckman Road) to the UGB. The City is responsible for completing a concept plan for that area by the end of 2015.
- The School-Park property - In 2013, 40 acres of land south of Advance Road and west of 60th Avenue were added to the UGB. A new middle school, a future primary school, and a 10-acre park with sports fields are planned for this area.

The land inside the UGB will be available for development following the completion of concept and master planning, and annexation. The timeframe for development is estimated to be up to 20 years.

Land Designated Urban Reserve – The Long-Term Future

The land adjacent to the UGB (about 280 acres) is designated Urban Reserve by Metro. Urban Reserve lands are those that will someday be considered for inclusion in the UGB as part of Wilsonville, and a concept plan is needed to provide the necessary information and analysis for such a consideration. The Urban Reserve lands are a long term land bank. When could development in the Urban Reserve area happen? This is difficult to predict because land must be added to the UGB first, which could take many years. It is reasonable to predict that the first development of the Frog Pond Urban Reserve land will likely sequentially follow Frog Pond West and be at least 5 to 10 years away.

One Cohesive Plan

The Frog Pond Area Plan is based on the premise that it makes sense to prepare a single concept plan for the combined 500-acre area within the UGB and Urban Reserves. The schools, parks, streets, trails, and other neighborhood elements



will all be part of the same community, which reinforces the need for a cohesive plan to knit them together. Advance planning at a concept level – before Urban Reserves are even considered for addition to the UGB – will help create that cohesive community over the long term, save money through efficient infrastructure planning, and provide involvement and certainty for all involved.

THE PLANNING PROCESS

Looking Back

Planning for the Frog Pond Area as part of Wilsonville began with the City’s first city plan in 1971, where it was shown as a residential area. The context for that vision evolved over time through the introduction of statewide planning, Wilsonville’s first comprehensive plan, the inclusion of the area in the UGB, and the designation of urban reserves. Figure 1 depicts key milestones during the four decades that led up to concept planning for Frog Pond.



Figure 1. Wilsonville Planning Milestones

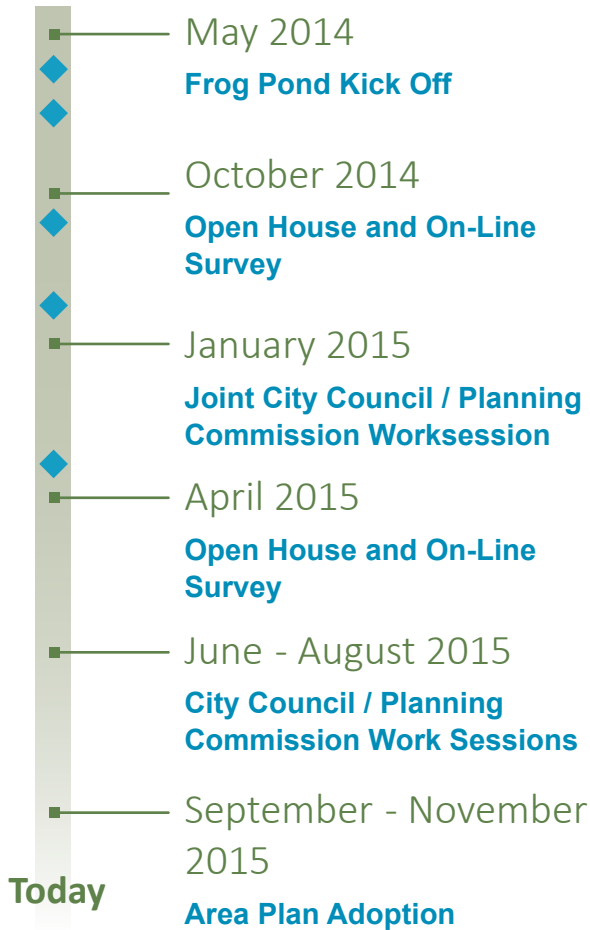




Figure 2. Frog Pond Planning Milestones

Community Involvement

June 2014



◆ TAC/Task Force Meeting

This Area Plan reflects many voices from the Wilsonville community. It was created through an open and inclusive process that began in the spring of 2014 and continued through the summer of 2015. The process included a community kick-off meeting, an 18-member Task Force (four meetings), a 13 member Technical Advisory Committee (three meetings), two open houses, and two on-line surveys. At the mid-point of the process, a joint work session of the Planning Commission and City Council was held. Prior to hearings, two work sessions were held with the Wilsonville Planning Commission, followed by two work sessions with the City Council. The project team conducted stakeholder interviews and many individual meetings with groups and individuals. Public information was provided at many levels, including the project web site, updates in The Boones Ferry Messenger, email informational updates, and mailed notices for events. Figure 2 summarizes the steps and major points of outreach.

The Guiding Principles for the Area Plan included the following Process Principles:

- Provide early and ongoing opportunities for stakeholders to raise issues and concerns.
- Facilitate equitable and constructive communication between the public and project team.
- Empower residents to become involved with the project.
- Provide the public with balanced and objective information to help the public understand issues, alternatives, opportunities, and solutions.
- Aim to create the best product, a model that could be used in other communities.



Background and Context



OPPORTUNITIES AND CONSTRAINTS

The Regional Context – Natural Areas

The City of Wilsonville as a whole, and the Frog Pond planning area in particular, are surrounded by a rich array of natural areas, parks, agricultural lands, and rural open spaces.

The Willamette River corridor in particular has many green spaces along its banks near the planning area, including Corral Creek Natural Area, Memorial Park, Molalla River State Park, Weber Farm Natural Area, Hebb Park, and several natural areas downstream of Canby which lead to Willamette Falls. The Willamette River lies less than a mile from the southern boundary of the planning area.

The Natural Areas Map (Figure 3) also illustrates the significant green spaces on the west side of Wil-



Background and Context

sonville that are a short bike ride away from Frog Pond, including Graham Oaks Nature Park and the Coffee Creek wetlands.

Wilsonville is both part of the greater Willamette Valley region and its own distinct city. Traveling south from Tualatin on I-5 or Boones Ferry Road, the pattern of developed and undeveloped areas reinforces this distinction. The journey along SW 65th Avenue or SW Stafford Road is even more striking – there is countryside and rural housing for large areas between east Tualatin, West Linn, and the Frog Pond area. The regional context map of urban and rural areas (Figure 4) illustrates: (1) the current “countryside north of Wilsonville” will likely evolve into planned urban communities as the urban reserves develop over the next 40 to 50 years, and (2) the “country-edge” along the east side of SW Stafford Road to the north of Kahle Road is a key urban-rural transitional area. It is an “Undesignated Area” adjacent to Urban Reserves and Rural Reserves.¹ The map also reveals that the City of Canby is only two miles from Frog Pond as the crow flies, but much further by road or ferry due to the Willamette, Pudding and Molalla Rivers.

City Context

The City context map illustrates Frog Pond’s proximity to, and opportunity for becoming an extension of, the existing city. During the planning process, discussions focused on connections – how can Frog Pond become a new, great, livable, and well-connected part of the city? The Town Center, for example, is under a mile away and easily accessed via Canyon Creek Road. The Town Center is just one of several key areas east of I-5 that are within a short bike ride, South Metro Area Transit (SMART) bus trip, or drive from Frog Pond.

Planning Area

The 497-acre study area is a logical and intuitive extension of the City of Wilsonville. Historically, it was part of the Wilsonville area’s early settlement pattern, with some key gathering places for the rural farming community, such as the Grange Hall (originally the Frog Pond School) and the Frog Pond church (immediately south of the study area). Physically, it is adjacent to key streets, existing neighborhoods, and natural areas. Even the shape of the study area wraps around the edge of the community. The study area is naturally comprised of three parts: the area west of Stafford Road; the area east of Stafford Road and north of Advance Road; and the area south of Advance Road. Dimensionally, each of these areas is approximately ¼ mile from center to edge, a comfortable 5 to 10 minute

¹ Urban Reserve areas are meant to provide land for future expansions of the Urban Growth Boundary (UGB) over the next 50 years, as needed. Rural Reserve areas are not eligible for inclusion in the UGB for the next 50 years – their agricultural / forest status is protected for that time. Undesignated areas may be considered for future UGB expansion, but are not a priority.

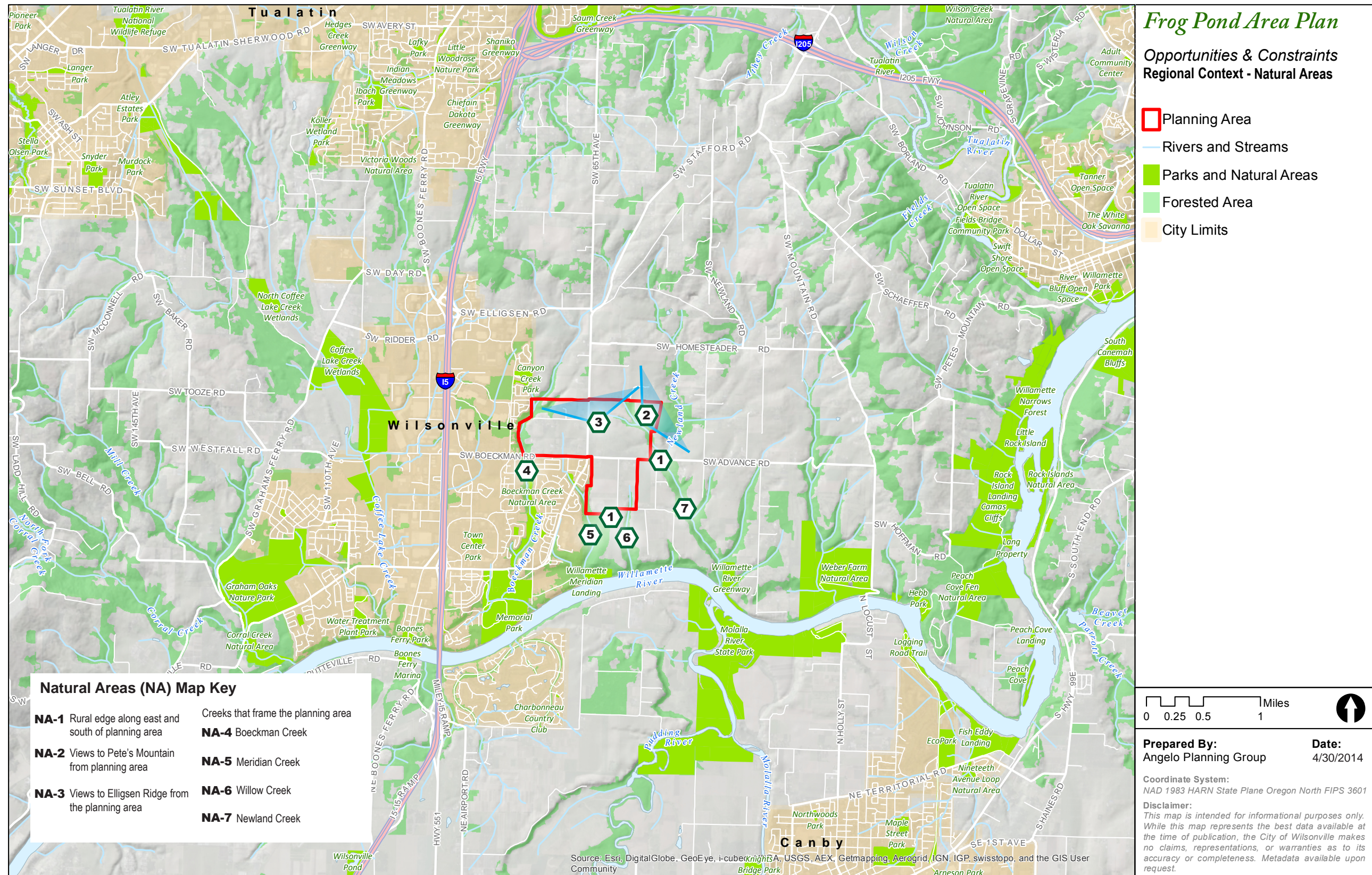


Figure 3. Regional Context - Natural Areas



Background and Context

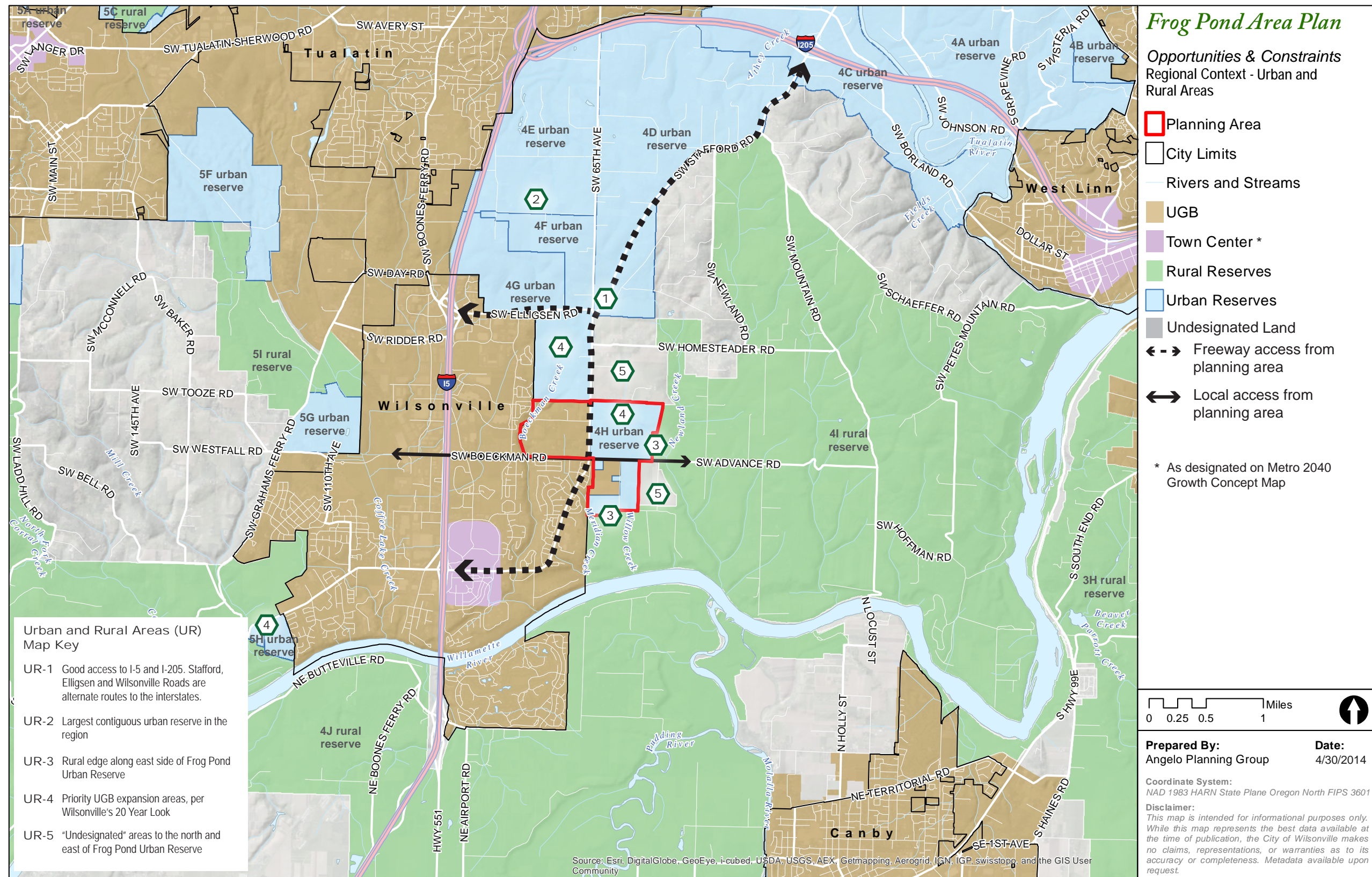


Figure 4. Regional Context - Urban and Rural Areas

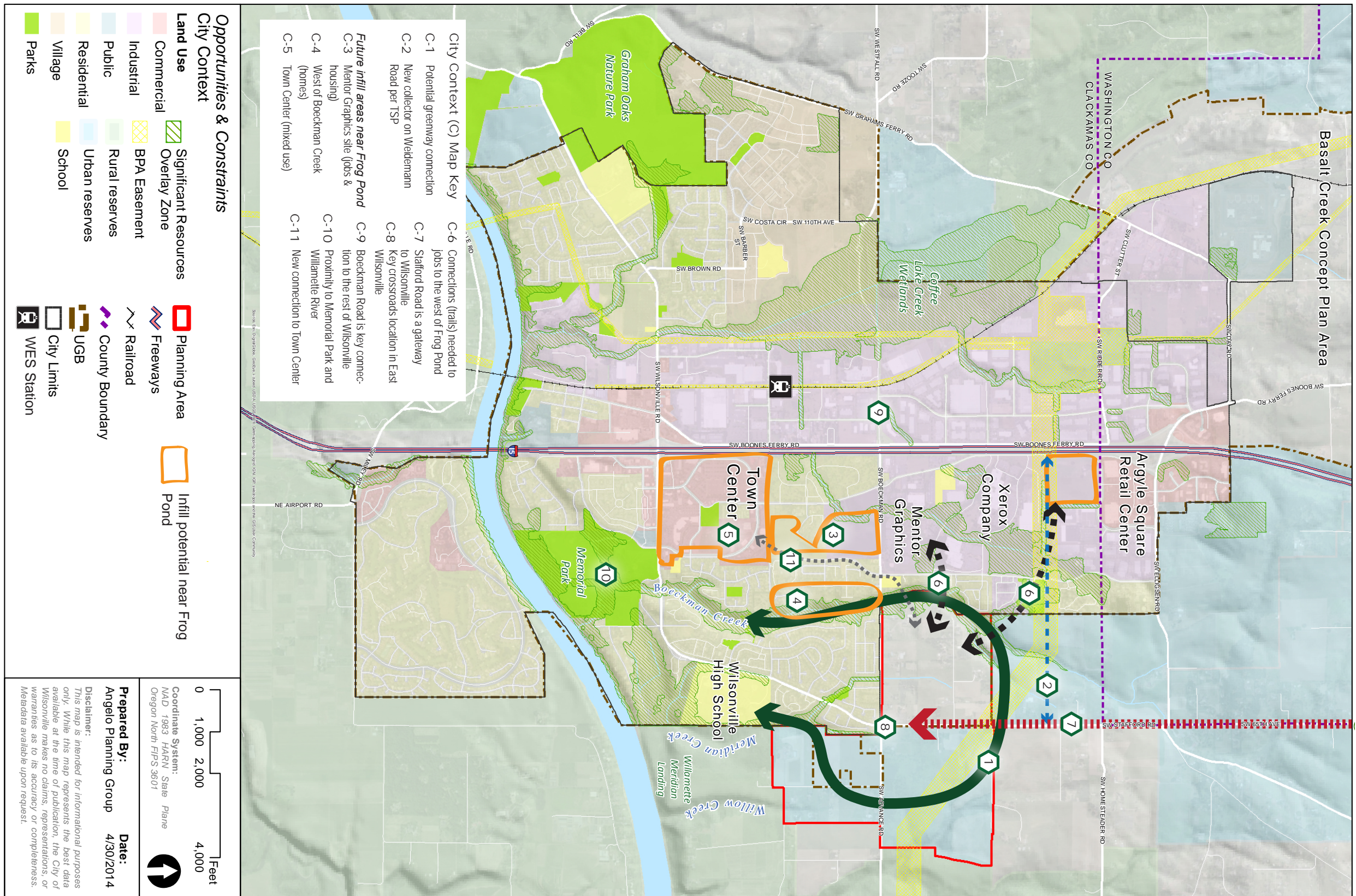


Figure 5. City Context

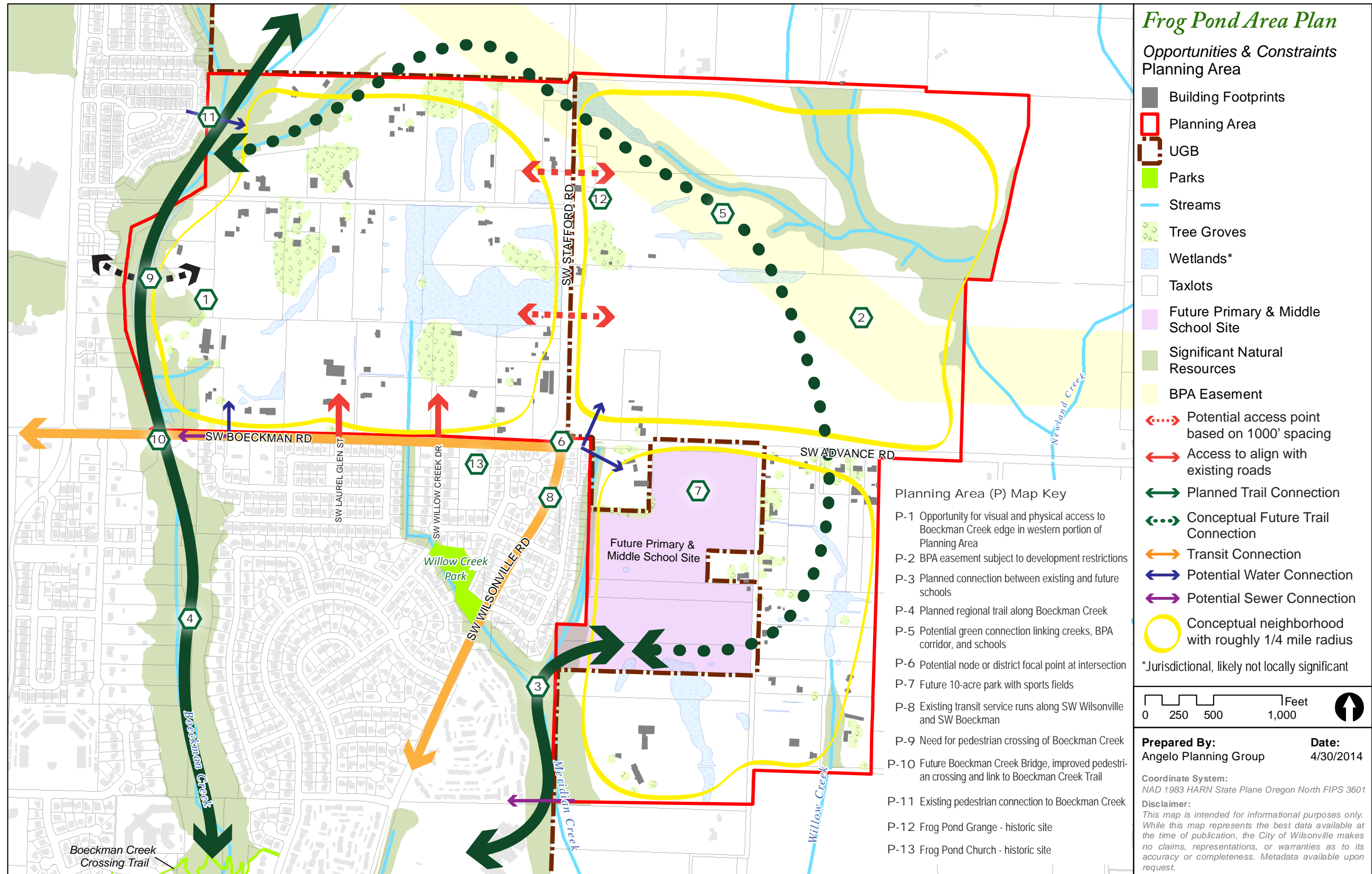


Figure 6. Planning Area Context



walking distance. There is an opportunity to design three distinct-yet-connected neighborhoods within the planning area.

The tree groves within the planning area provide a key visual asset, and are a link to the historic character of the area. To the extent existing, mature trees can be retained and protected as annexation and development occurs, it will contribute to the character and desirability of the neighborhoods. The city has existing annexation policies that incentivize (but do not mandate) tree retention.

Likely future connection points to existing transportation, water, and sewer systems are identified in Figure 6. Roadway connections will likely align with existing connections along Boeckman Road or meet spacing standards along Stafford Road. City water and sanitary sewer services do not extend into the planning area at this time; however, water and sewer connection points are available along Boeckman Road as well as on the west side of Meridian Creek.

Planning Area Scale Comparison

The planning scale comparison in Figure 7 illustrates the potential for creating walkable neighborhoods in the Frog Pond area. The 180-acre Frog Pond UGB area is approximately the size of the western half of Villebois in Wilsonville.

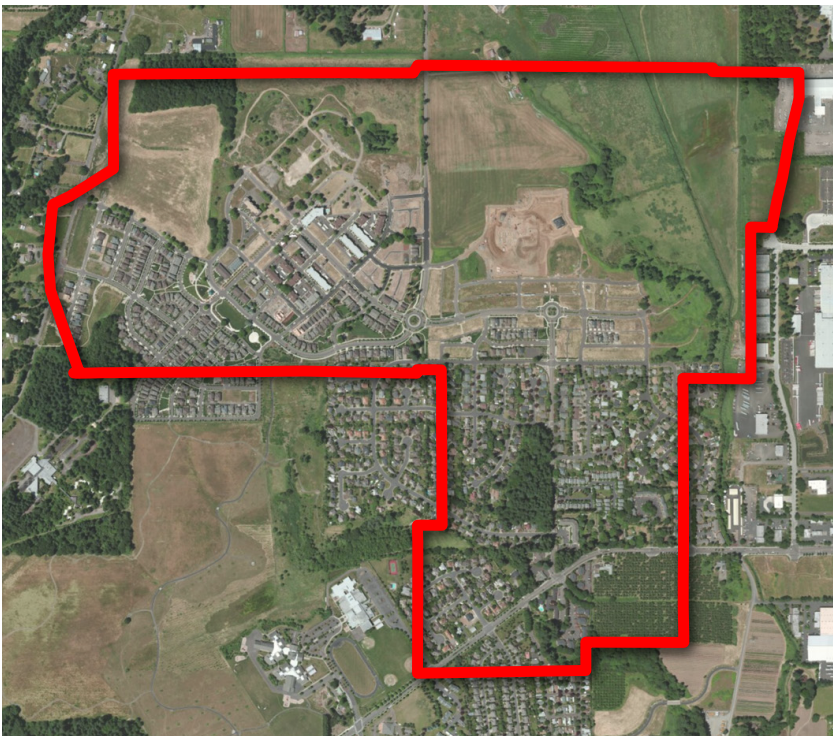


Figure 7. Frog Pond Planning Area (red boundary) compared to Wilsonville's Villebois and Vicinity



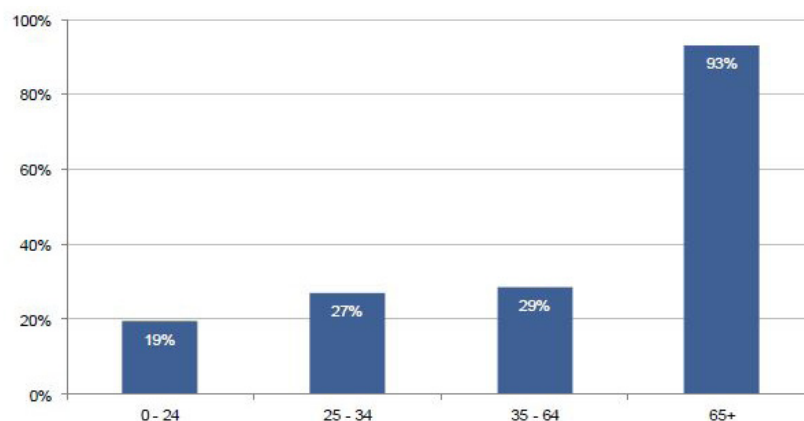
MARKET ANALYSIS²

Demographic Context

Wilsonville is one of the Portland region's fastest growing cities. Metro has projected that the city's households will grow at 1.8 percent annually through 2035, faster than the region and other nearby cities such as Tualatin and Sherwood. The city may grow faster than this rate: between 2000 and 2012, Wilsonville's households grew at a rate of 2.8 percent per year, despite the recession. Therefore, there will almost certainly be demand for housing, and potentially commercial development, in Wilsonville and Frog Pond during the next two decades.

Wilsonville's residents are more likely to have a bachelor's or advanced degree than residents of the region, they earn slightly more than households in the region, and they are more likely to work in white collar jobs. Wilsonville has large shares of both young adults and senior residents, while the city has a smaller share of households headed by middle-aged adults compared to the region.

Analysis by Metro, the State of Oregon, and the US Census Bureau indicate that America's demographics are changing, and growth in the Frog Pond market area is likely to include a wide variety of household types. The most dramatic growth will come from the 65+ senior population, which is expected to increase by 93 percent between 2015 and 2035. By comparison, no other age group is expected to grow by more than 29 percent during the same time period. In addition, "non-traditional" household types such as families with out children, single-parent



Source for both figures: Long-term Oregon State's County Population Forecast, 2010-2050, Office of Economic Analysis, State of Oregon, 2013; Leland Consulting Group.

Figure 8. Forecasted Percent Population Increase by Age Group
(2015 to 2035, Washington and Clackamas Counties combined)

2 For detailed information see Appendix C – Leland Consulting Group Market Study



households, and single-person households will be important components of growth and therefore will shape real estate demand in Frog Pond. Sixty-eight percent of Wilsonville’s current households are one or two people; such smaller households have been growing as a share of the country’s population since the 1970s, a trend that is expected to continue.

Housing market analysis

Based on Wilsonville’s Residential Lands Study, demographic projections, past housing built in Wilsonville, and other factors, the Frog Pond market analysis first recommended that Frog Pond be planned for a relatively broad mix of housing types including a variety of detached single-family, attached single-family, and even multifamily homes. The market analysis noted:

“The primary housing type should be single-family detached homes within a variety of lot sizes, since such homes continue to be the choice of most American households. Because one and two-person households make up the majority of market area households, and because of the dramatic growth of the senior population, LCG recommends that the program contain a significant share of small lot single-family homes (lots between 2,500 and 4,000 square feet), as well as multifamily and attached housing. Developers generally support a diversity of housing within a large community such as Frog Pond, since such a broad mix of housing will accommodate a wider segment of the population, and therefore speed sales and absorption.”

The market study also spoke to neighborhood quality, citing:

“Recent surveys and research by the National Association of Realtors (NAR), Urban Land Institute (ULI), and others show that the amenities associated with complete and walkable neighborhoods are important in addition to the home itself. These popular amenities include shops within an easy walk, places to walk for exercise, public transportation, and sidewalks. Such features should be taken into account in the design of the community.”

As the housing element of the plan was developed, community perspectives were

The neighborhood has a mix of houses and stores and other businesses that are easy to walk to.



The neighborhood has houses only and you have to drive to stores and other businesses.

Source: National Community Preference Survey, National Association of Realtors, October 2013.

Figure 9. Community Preferences Survey Results



Market Analysis

integrated with market trends. This was one of the more challenging issues during the development of the plan. Many community members voiced the perspective that Frog Pond should be planned for several segments of the market that are somewhat different than what the market data showed: lower densities, higher income demographics, and in particular, a high percentage of lots 10,000 square feet and greater. Those favoring lower densities felt strongly that larger lots were a missing part of the land supply in Wilsonville and demand was very strong for this housing type. After a comprehensive review of options, the final plan incorporated a hybrid approach, where lower densities are planned for the area within the UGB, and a greater mix of single-family housing opportunities would be available over time in the urban reserves (See Housing Strategy – page 23 of this report). Multi-family housing was removed from the plan due to the high percentage of multifamily units in Wilsonville’s existing housing mix.

Retail market analysis

The Frog Pond Area will build out along the edge of an existing urbanized city and region. As mentioned above, nearby goods and services are an amenity desired by homebuyers. The time-tested adage is “retail follows rooftops,” so retail development only takes place when there is a sufficient population of likely shoppers in the area. As a potential retail location, Frog Pond benefits from being situated along two arterial roads, Boeckman/Advance Roads and Stafford/Wilsonville Roads, which will provide some drive-by traffic. Retail in Frog Pond can also serve existing neighborhoods adjacent to the west and southwest.

Based on an evaluation of current and projected future retail spending, the market analysis first projected that Frog Pond could potentially support a retail center anchored by a small to medium-size grocery store (60,000 square feet or more) at project build out, in approximately 2035. If such a center cannot be attracted, the recommendation was for a smaller center of between 10,000 and 30,000 square feet. A variety of factors will affect retail feasibility, particularly whether or not other retail is built near Frog Pond during the next 20 years, the number of homes in the area, and retail development formats in the future.

With concerns about the feasibility and potential success of retail in the planning area, the retail market analysis was supplemented with an evaluation of comparable small centers in the Portland area and at Northwest Crossing in Bend (See Technical Appendix K). Based on this review, and the projected total housing being lower than first analyzed, a smaller center capable of supporting up to 38,000 square feet of retail on approximately 3.5 acres was included on the demonstration plan in the future East Neighborhood. Regardless of the size and scale of retail, the focus should be on establishing a retail/commercial hub development that provides some goods and services for local residents, while also creating a gateway, center, sense of place, and social hub for the area.

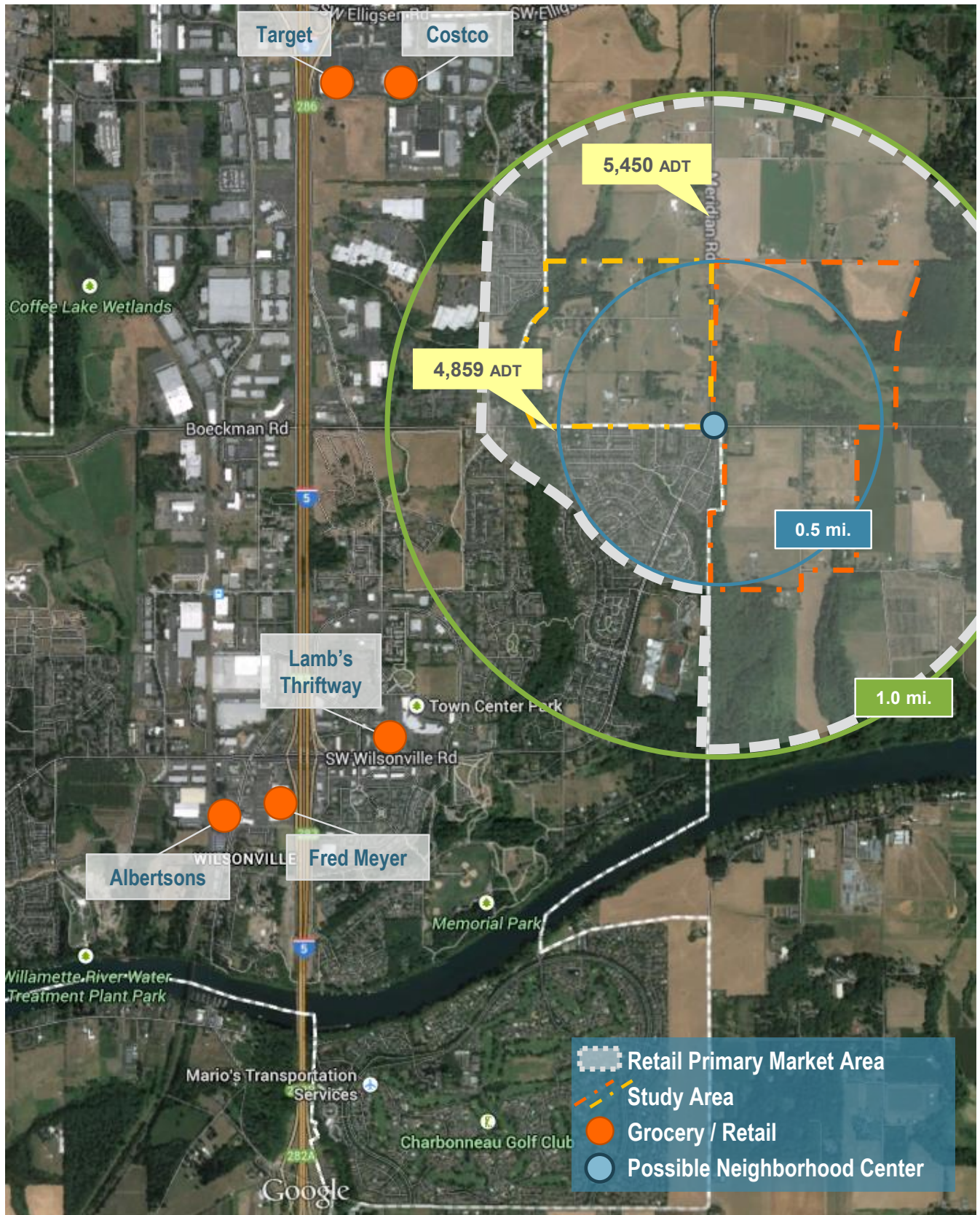


Figure 10. Frog Pond Retail Context



Market Analysis

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Vision and Guiding Principles

A VISION FOR FROG POND IN 2035

The Frog Pond Area in 2035 is a Wilsonville community with attractive and connected neighborhoods. The community's hallmarks are its walkable and active streets, variety of quality homes, and connected trails and open spaces. Frog Pond's excellent schools and parks are focal points of the community. Frog Pond is "just a short bike, walk, or bus trip" from all parts of Wilsonville – a highly valued part of the larger city.

ENVISIONING FROG POND IN 2035

Early in the process, the Frog Pond Task Force and Technical Advisory Committee met together to envision the potential future for the Frog Pond Area. They brainstormed answers to this question: "Imagine you must leave Wilsonville to live on a beautiful South Sea island. You return in 20 years and the plan has been successfully implemented. You like what you see. What do you see?" Their ideas formed the basis for the Frog Pond Vision and Guiding Principles, which were approved by the City Council on August 14, 2014. The Vision Statement provides a verbal snapshot of the Frog Pond Area in 2035. It summarizes the desired character of the community as an integral part of Wilsonville and sets the framework for the guiding principles of the Frog Pond Area Plan.



GUIDING PRINCIPLES FOR WILSONVILLE'S NEXT GREAT NEIGHBORHOODS

The following Guiding Principles capture the intended outcomes of the Area Plan, building on the vision. These principles guided the evaluation of plan options and issues throughout the planning process.

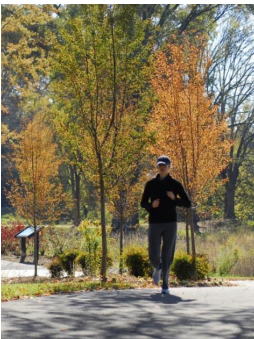


Create great neighborhoods

Frog Pond's homes, streets, open spaces, neighborhood-scale retail, and other uses fit together into walkable, cohesive, and connected neighborhoods. Frog Pond is a fun place to live.

Create a complete streets and trails network

Streets are designed for safe and enjoyable travel by bike, on foot, or by car. A great network of trails is provided. Safe crossings and connections are provided throughout the street and trail network.



Provide access to nature

The creeks and natural areas provide opportunities to see and interact with nature close to home.

Create community gathering spaces

Beautiful parks, quality schools, and other public spaces serve as community centers and gathering places. The land uses, transportation, and open space around the Advance Road school and park sites support a compatible neighborhood plan in that area. The Frog Pond Grange, and adjacent uses, fit together as a focal point of the community.

Provide for Wilsonville's housing needs

A variety of attractive homes are provided to fulfill the City's housing needs and align with the market. Single-family homes, including some on large lots, are a significant part of the mix. Neighborhoods are designed to be multi-generational and offer a diversity of attractive housing options at a variety of prices.



Create a feasible implementation strategy

A realistic funding plan for infrastructure, smart and flexible regulations, and other strategies promote successful implementation of the plan.



Frog Pond is an extension of Wilsonville

Frog Pond is truly connected – it is an easy and safe walk, drive, bike trip, or bus ride to other parts of Wilsonville, and Frog Pond feels like a well-planned extension of the city.



Retain trees

Mature native trees are integrated into the community to enhance the area’s character and value.



Honor Frog Pond’s history

A sense of history is retained, recognized, and celebrated.

Provide compatible transitions to surrounding areas

New urban land uses are good neighbors to adjacent rural land uses, future developable areas, and existing neighborhoods. The plan provides for future growth of the City into adjacent urban reserves.



Promote healthy, active lifestyles

Extensive walkways, community gardens, recreational facilities, and other elements support active and healthy lifestyles.

Integrate sustainability

The plan integrates solutions which address economic, environmental and social needs. Frog Pond is a sustainable community over the long term.

Coordinate with Wilsonville’s transportation network

The plan is consistent with the Wilsonville Transportation System Plan for all modes of travel: trails, bikeways, SMART, and automobiles. Traffic impacts are managed for key streets and intersections, including the I-5 interchanges.





THE FOUR FROG POND FRAMEWORK PLANS

The Frog Pond Area Plan is comprised of four framework plans:

Land Use and Community Design Framework

Defines the major land use types and the core principles and guidelines for community design that will create livable neighborhoods.

Transportation Framework

Defines location, type, and design goals for key streets and intersections. Conceptual routing for future transit is also described. To complete the multi-modal objective, the Transportation Framework also defines the location, type, and design goals for key bike-ways, pedestrian routes, and trails.

Park and Open Space Framework

Integrates natural resources, defines parks, and links open spaces within and adjacent to the planning area.

Infrastructure Framework

Defines the planning level location, type, and cost of major water, sanitary sewer, and storm water infrastructure.

The term “framework” is used to indicate that the recommendations are made at a concept level in anticipation of: (1) more detailed master planning prior to development; and, (2) flexibility to adapt to future conditions and more detailed information. Together, the four framework plans are intended to create a complete community as envisioned by the Frog Pond vision statement.

Land Use and Community Design



CREATING GREAT NEW NEIGHBORHOODS IN EAST WILSONVILLE

From a physical planning perspective, the Frog Pond Area has excellent potential for developing into compact, walkable neighborhoods. The areas west of Stafford Road, east of Stafford Road, and south of Advance Road have clear and definable “edges” formed by existing streets, public uses, and open spaces; flat land that is easily traversed by foot or bike; and short distances (no more than a half-mile across) between these edges. This short distance is particularly important: it provides the opportunity to walk or bicycle from one’s home to any destination in the neighborhood in about 5-10 minutes. Building on these physical attributes, the Plan is organized into three neighborhoods - West, East, and South - collectively called the Frog Pond Area. See Figure 11 and the descriptions below for a description of the neighborhoods comprising the whole Frog Pond planning area.

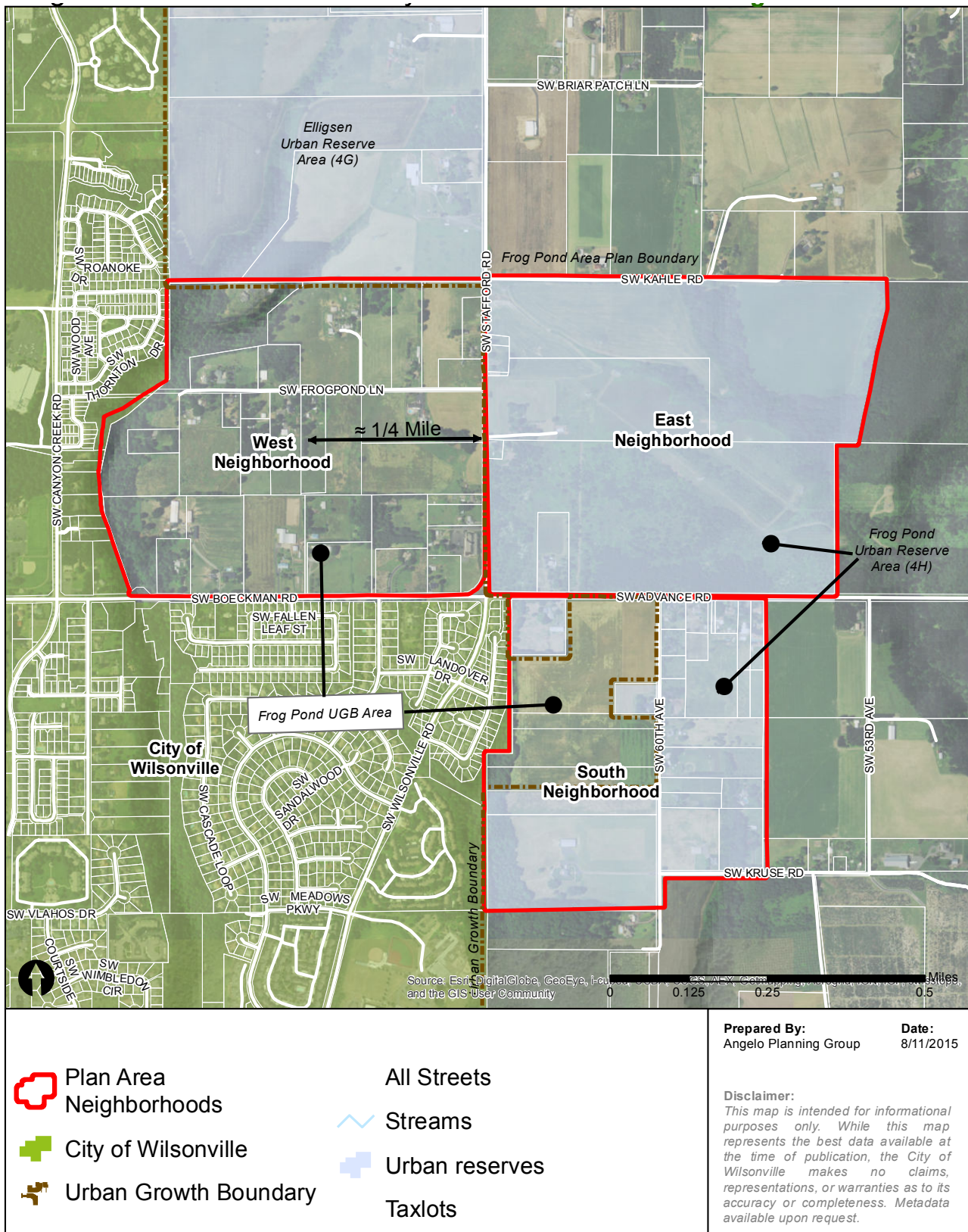


Figure 11. Neighborhood Framework



West Neighborhood – The West Neighborhood is framed by the beautiful conifers on the steep slopes of the Boeckman Creek canyon, the open spaces and agricultural fields beyond the UGB, the historic Frog Pond Grange, Stafford Road, and the existing city along Boeckman Road. It is about one-quarter mile from its center to each of these edges. The land is generally flat and will be very walkable if a strong network of streets and paths are created, as called for in the plan. In 2015, there are 26 different ownerships spread across 32 tax lots, with an average parcel ownership size of 5 acres. This level of parcelization is an important constraint. If each property were to be proposed with a small, individual and uncoordinated development project, it will be challenging to achieve a connected and walkable pattern of streets and blocks.

East Neighborhood – The East Neighborhood is principally framed by Stafford Road, Advance Road, and the BPA Powerline Corridor / Newland Creek. In addition, there are two buildable areas along Kahle Road a short walk from neighborhood amenities to the west and south across the BPA powerline corridor. The land slopes south and east toward Newland Creek at grades in the 4% range, outside of riparian areas. With an average parcel ownership size of 25 acres, the area has excellent potential for larger, master planned neighborhood development.

South Neighborhood – The South Neighborhood is bound by Willow Creek to the West, Advance Road to the north, the UGB/rural areas to the east, and the UGB/rural areas to the south. Forty acres of the South Neighborhood is already inside the UGB for the planned schools and a community park. These uses will provide a strong civic presence for the neighborhood, and connect it to rest of the community through the many community activities that will be held at the park and schools. Creating a connected street pattern will be slightly challenged by the size and configuration of parcels east of 60th Avenue, unless property consolidations occur. The area is flat and walkable.

RESIDENTIAL LAND USES

Strategies for Frog Pond’s Mix of Housing: A Phased Approach

During the development of the Area Plan, there was broad agreement on the elements in the vision and guiding principles that call for: a variety of quality homes; a significant amount of single-family homes including homes on large lots; and, a housing mix designed to be multi-generational and offer a diversity of options at a variety of prices. There was a range of opinions and robust discussion regarding exactly what housing mix was best to achieve the vision. Some participants advocated for larger lots, generous yards, opportunities to “move



Land Use and Community Design

up” in Wilsonville, and a higher income demographic. Others wanted a greater housing range that would accommodate a wider mix of incomes and residents, and strong consideration of housing affordability. After exploring many options and implications for infrastructure funding and development feasibility, the City chose a hybrid plan, with the following housing strategy:

- A. **Plan for only detached housing within the West Neighborhood**, i.e. within the existing Frog Pond UGB Area, in order to meet the near-term need for single family detached housing identified in the City’s Residential Lands Study, and be responsive to objectives cited by advocates for lower density and larger lots.
- B. **Plan for slightly higher densities and more housing variety**, including attached housing in the future East Neighborhood (Urban Reserve 4H). This will provide a *future* opportunity for a variety of housing choices that are aligned with the demographic trends and housing needs identified in the market analysis. The East Neighborhood will provide four residential designations, allowing (collectively) for townhomes, cottage lots, small lot residential, duplexes, medium lot single family, as well as large lot single family.
- C. **In the future South Neighborhood (in Urban Reserve 4H), plan for densities between those estimated in the other neighborhoods.** This will provide for housing types that are compatible with the adjacent schools, help broaden the overall housing mix and affordability, and allow for transition to lower urban densities adjacent to the rural reserve. Within the South Neighborhood, there will be at least three residential designations provided: small, medium, and large lot.
- D. **Range of Options for East Neighborhood.** At the time of adoption there were two general proposals regarding residential land use in the East and South Neighborhoods. The first proposal was the Planning Commission-recommended option (Option G), with the condition to re-examine the R2.5 densities and commercial site location at a future date of master planning. The second proposal was that there should be a minimum lot size of 4,000 square feet. The Council considered these proposals carefully, along with all of the rationale, implications and issues. Working from the premises that: (1) both points of view should be honored and represented in the Plan; (2) many years will pass before final decisions need to be made; and (3) the range of housing choices and price ranges should increase in the future when these neighborhoods are developed – the Council struck a balance. The balance was to include both options in the Plan with a commitment to revisit the densities and commercial site in the future as part of master planning. An additional idea was added to consider, during Master Planning, neighborhood scale mixed use, where residential would be allowed over the retail in the commercial center.



The Land Use Framework and Residential Designations

The Land Use Framework in Figure 12 depicts the planned residential designations for the Frog Pond Area. It distinguishes between designations for lands within the current UGB, and, future designations for lands within the Urban Reserve. The plan also shows non-residential land uses (described in the next section of this report), major open spaces, and framework streets .

The West Neighborhood includes three residential designations.

- **Large Lot Single Family:** These lots range from 8,000 to 12,000 SF with a maximum net density of 4.4 units per acre.
- **Medium Lot Single Family:** These lots range from 6,000 to 8,000 SF and have a maximum net density of 6.2 units per acre.
- **Small Lot Single Family:** These lots range from 4,000 to 6,000 SF and have a maximum net density of 8.7 units per acre.

The East and South Neighborhoods have four residential designations. They generally have smaller lot sizes than those in the West Neighborhood, and are identified by the word “Future” in the designation.

- **Future Large Lot Single Family:** These lots range from 7,000 to 9,000 SF, with a maximum net density of 5.4 units per acre.
- **Future Medium Lot Single Family:** These lots range from 5,000 SF to 7,000 SF and have a maximum net density of 7.3 units per acre.
- **Future Small Lot Single Family:** These lots range from 3,000 to 5,000 SF and have a maximum net density of 10.9 units per acre.
- **Future Attached/Cottage Single Family:** These lots range from 2,000 to 3,000 SF and have a maximum net density of 17.4 units per acre.

Table 1 describes the projected capacity of each Frog Pond neighborhood by residential land use designation.



Table 1. Land Use Metrics and Capacity (“Option G”)

Residential Designation		West Neighborhood Units	East Neighborhood Units	South Neighborhood Units	Frog Pond Total Units	East+ South Units	Average Lot Size (SF)	Max Units/ ac net
West Neighborhood	R-10 Single Family (8,000 - 12,000 SF)	124	-	-	124	-	10,000	4.4
	R-7 Single Family (6,000 - 8,000 SF)	281	-	-	281	-	7,000	6.2
	R-5 Single Family (4,000 - 6,000 SF)	205	-	-	205	-	5,000	8.7
East & South Neighborhood	Future R-8 Single Family (7,000 - 9,000 SF)	-	120	28	148	148	8,000	5.4
	Future R-6 Single Family (5,000 - 7,000 SF)	-	125	162	287	287	6,000	7.3
	Future R-4 Single Family (3,000 - 5,000 SF)	-	165	286	451	451	4,000	10.9
	Future R-2.5 (2,000 - 3,000 SF)	-	436	-	436	436	2,500	17.4
Total Units		610	846	476	1,932	1,322		
Overall net density		6.3	10.6	8.8	8.4	9.90		

Table 2. Land Use Metrics and Capacity (“Option H” - No R2.5 in East Neighborhood)

Land Use Designation (Residential Only)	Lot Size (SF)	Units/acre net	West Neighborhood Units	East Neighborhood Units	South Neighborhood Units	Frog Pond Total Units	East + South Units
R10 Single Family	10,000	4.4	124	-	-	124	-
R7 Single Family	7,000	6.2	281	-	-	281	-
R5 Single family	5,000	8.7	205	-	-	205	-
Future R8 Single Family	8,000	5.4	-	120	28	148	148
Future R6 Single Family	6,000	7.3	-	125	162	287	287
Future R4 Single Family	4,000	10.9	-	437	286	723	723
Future R2.5 Single Family	2,500	17.4	-	-	-	-	-
Total Units	-	-	610	682	476	1,768	1,158
			West Neighborhood	East Neighborhood	South Neighborhood	Frog Pond Total	East + South
Overall net density			6.3	8.6	8.8	7.7	8.67

Housing Affordability and Paying for Infrastructure

Land cost, home construction cost, and infrastructure costs all play a role in housing affordability. As part of the evaluation of options for the housing element of the Area Plan, two analyses were prepared to address housing affordability, development feasibility and how to pay for infrastructure.¹ The results of those reports, cited below, were used to model how the Frog Pond Area Plan will affect home prices. Considerations for the West Neighborhood differ from those of the East and South Neighborhoods.

¹ Please see: Appendix H, Frog Pond Area Plan: Infrastructure Funding Plan, Leland Consulting Group, June 3, 2015; Appendix G, Frog Pond Area Plan: Land Development Financial Analysis, Leland Consulting Group, June 3, 2015. See also the Implementation Chapter of this report.

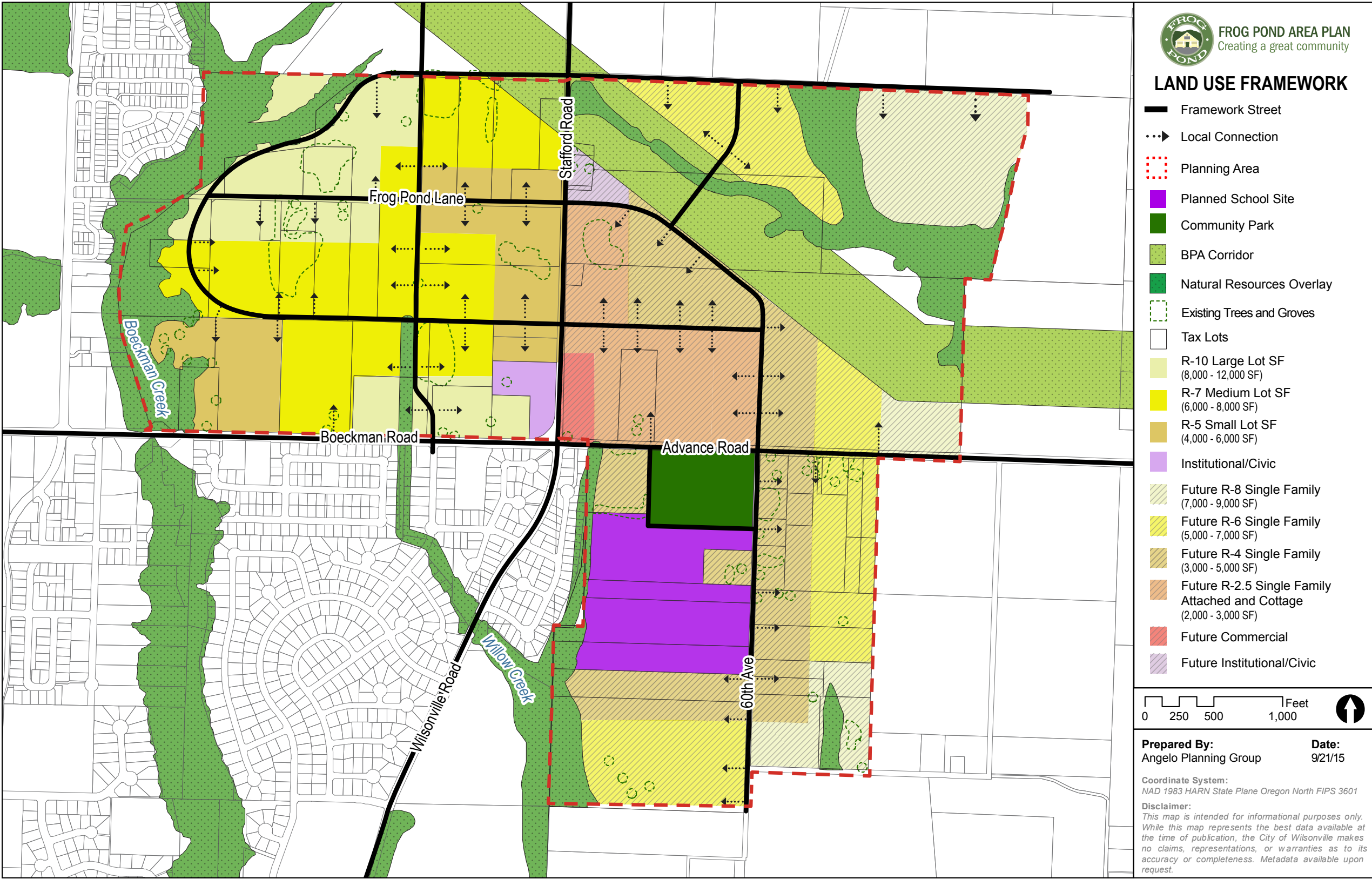
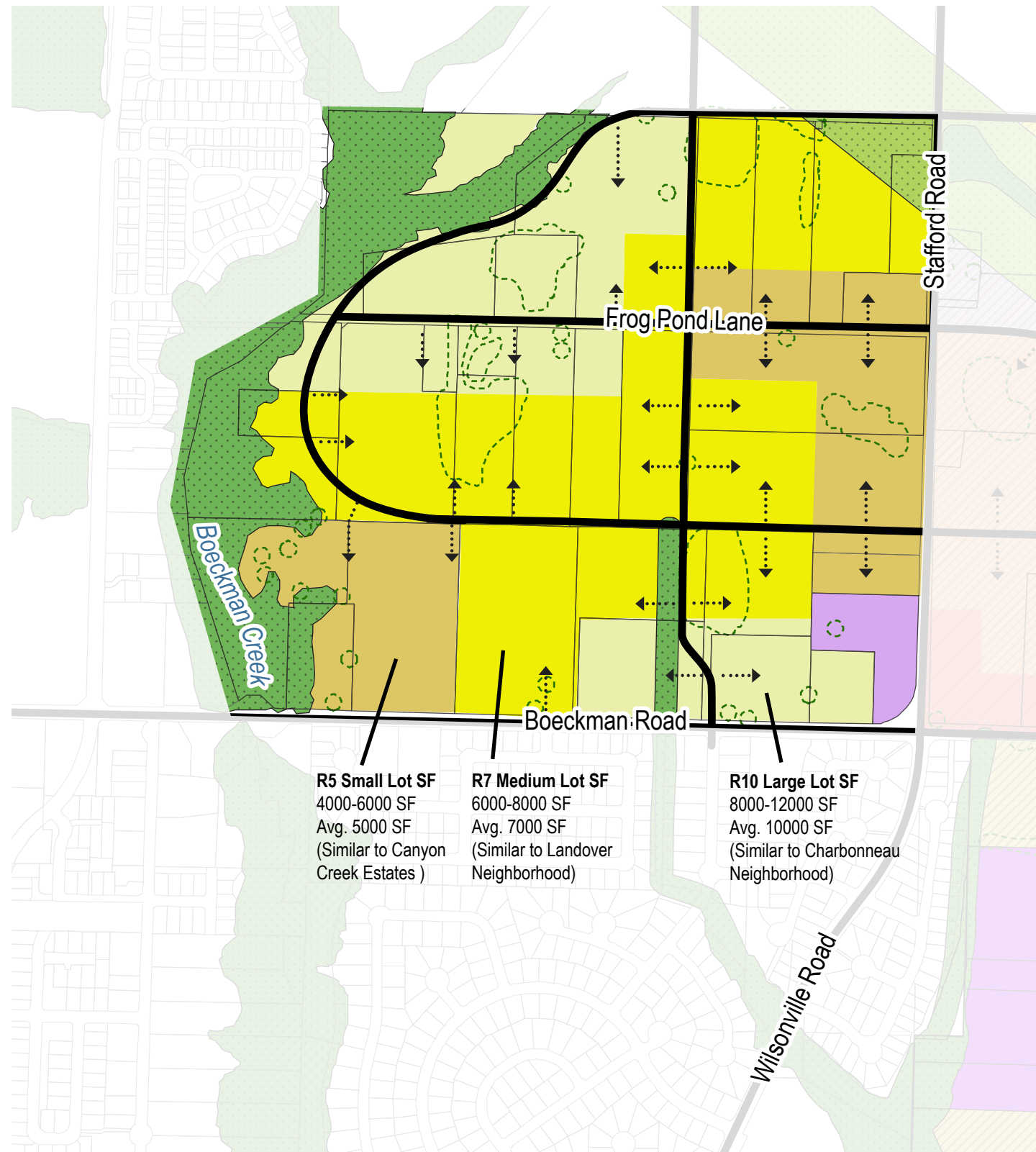


Figure 12. Land Use Framework



R5 Small Lot SF
4000-6000 SF
Avg. 5000 SF
(Similar to Canyon
Creek Estates)

R7 Medium Lot SF
6000-8000 SF
Avg. 7000 SF
(Similar to Landover
Neighborhood)

R10 Large Lot SF
8000-12000 SF
Avg. 10000 SF
(Similar to Charbonneau
Neighborhood)

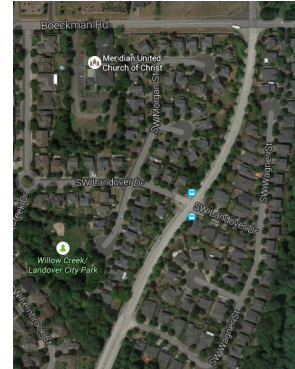
NEIGHBORHOOD COMPARISONS

R10 Large Lot SF - Comparable to Charbonneau



Avg. Lot Size: 9256 SF
Range: 7500-15000 SF
Net Density: 4.7 Units/Acre

R7 Medium Lot SF - Comparable to Landover Neighborhood



Avg. Lot Size: 6690 SF
Range: 4100 - 11000 SF
Net Density: 6.5 Units/Acre

R5 Small Lot SF - Comparable to Canyon Creek Estates Neighborhood



Avg. Lot Size: 5186 SF
Range: 4500 - 7800 SF
Net Density: 8.39 Units/Acre

Figure 13. Land Use Framework (West Neighborhood)



In the West Neighborhood:

- The West Neighborhood must pay for its own infrastructure because there is no guarantee of when (or even if) the East and South Neighborhoods will develop. There is an estimated \$10.6 million in “framework” infrastructure projects that are needed to serve the Frog Pond West Neighborhood which are not expected to be funded by individual development projects or the City’s Capital Improvement Program (CIP). These projects, such as the Stafford Road and Boeckman Road urban upgrades and two neighborhood parks, will benefit all properties in the West Neighborhood.
- When the \$10.6 million described above is divided by the number of lots estimated for the West Neighborhood, the result is a cost per lot that will need to be funded through an instrument such as a reimbursement district. The estimated reimbursement cost per lot in the West Neighborhood would average \$17,431 per lot.
- Given these infrastructure costs and the land use assumptions, the project team modeled the “Required Home Price” needed for homes in each land use category to make development feasible. These are shown in Table 3 below.

Residential Designations and Character in Frog Pond West

- **Large Lot Single Family:** These are spacious homes on large lots that are generally affordable to those with a combined household income of greater than \$150,000. These homes meet the needs of business owners and executives and those looking to “move up” while staying in Wilsonville.
- **Medium Lot Single Family:** These lots are affordable to those making between \$100,000 and \$150,000 per year, which is a large portion of Wilsonville households. Homes average 2,700 SF on 7,000 SF lots.
- **Small Lot Single Family:** These homes would also be affordable to families earning between \$100,000 and \$150,000. Homes average 2,350 SF on 5,000 SF lots.

The implications of these housing costs are that the West Neighborhood would be considered affordable to households with an annual income of \$100,000 and above, as shown in Table 4.

In the East and South Neighborhoods:

- There is an estimated \$11.6 million in “framework” infrastructure projects that are needed to serve the Frog Pond East and South Neighborhoods which are not expected to be funded by individual development projects or the CIP. These projects, such as the East Neighborhood Park, benefit all properties in the East Neighborhood.



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- When the \$11.6 million described above is divided by the number of lots in the East and South Neighborhoods (with consideration for non-residential development allocation), the result is a cost per lot that will need to be funded through an instrument such as a reimbursement district. The reimbursement cost per lot for the East and South Neighborhoods would average \$7,500 per lot.
- A “required home price” model was not created for the East and South Neighborhoods, due to the uncertainties inherent in land economics for properties that may be developing 10 or more years from now.

Table 3. Required Home Price in West Neighborhood

Designation	Required Home Price - West Neighborhood
Small Lot Single Family	Lot size: 5,000 SF Home Size: 2,365 SF Required Home Price: \$439,700
Medium Lot Single Family	Lot Size: 7,000 SF Home size: 2,790 SF Required Home Price: \$576,000
Large Lot Single Family	Lot Size: 10,000 SF Home size: 3,500 SF Required Home Price: \$775,400

Table 4. Percent of Households by Income Range and Home Purchase Price, Wilsonville, 2014

Household Income Category		Percent of Households	Typical Monthly Mortgage Payment		Home Purchase Price Range	
Low	High					
\$0	\$15,000	12%	\$0	\$310	\$0	\$60,000
\$15,000	\$25,000	9%	\$310	\$520	\$60,000	\$100,000
\$25,000	\$35,000	10%	\$520	\$730	\$100,000	\$140,000
\$35,000	\$50,000	12%	\$730	\$1,040	\$140,000	\$200,000
\$50,000	\$75,000	14%	\$1,040	\$1,560	\$200,000	\$300,000
\$75,000	\$100,000	14%	\$1,560	\$2,080	\$300,000	\$395,000
\$100,000	\$150,000	20%	\$2,080	\$3,130	\$395,000	\$600,000
\$150,000	\$200,000	5%	\$3,130	\$4,170	\$600,000	\$795,000
\$200,000		4%	\$4,170	\$0	\$795,000	+

Source: US Census, ESRI Business Analyst, Leland Consulting Group.



Implementing Wilsonville’s Housing Needs Analysis

The 2014 Wilsonville Housing Needs Analysis (also known as the Wilsonville Residential Land Study) was completed in 2014 and assumed that the majority of housing in Frog Pond would be single-family detached housing at between 5.8 and 8.5 net units per acre. This is consistent with the development outlined in this plan.

As of 2014, Wilsonville’s housing stock is roughly 43% single family (including single family attached homes, single family detached homes, and mobile homes) and 57% multifamily (including duplexes, condos, and apartments). The development of Frog Pond will have the effect of shifting the citywide mix of single family and multifamily housing closer to a 50/50 percent balance. Table 5 describes this change in detail.²

Table 5. Changes in Housing Mix of Wilsonville due to Frog Pond Development

	Existing Units (2014)	West Neighborhood Buildout (+610 SF Units)	Full Frog Pond Buildout (+1932 SF units)
Single Family Units	4,329 43%	4,939 47%	6,261 53%
Multifamily Units	5,630 57%	5,630 53%	5,630 47%
Total Units	9,959 100%	10,569 100%	11,891 100%

Achieving the Vision through Great Design

Community Design Principles

Wilsonville has a long tradition of thoughtful review of urban and architectural design elements in new development. This has resulted in a high-quality urban fabric and residential development that maintains value and consistently attracts homebuyers. The City’s expectations for design are captured in the Comprehensive Plan:

“Implementation Measure 4.1.5.ii - The design of developments within the community can be regarded from two viewpoints: the design of structures as they relate to site and function (architectural design) and, their relationship to the surrounding area (community design). Both aspects shall be considered to be of equal importance. Good architectural design is necessary to provide

² This analysis does not include other possible changes in the city or additional planning areas.



Land Use and Community Design

visual variety and allow for individual identity. At the same time, good community design provides a sense of unity with other development while eliminating conflicting appearances.” (Comprehensive Plan, page D-29)

The Community Design Principles listed in Table 6 have been created to guide the Frog Pond Area Plan and the implementing master plans, policies and regulations that will be prepared in future years. The principles apply to all land uses and public realm improvements.

Demonstration Plans

Two “demonstration plans” were prepared to illustrate application of the Community Design principles and help envision quality development in the Frog Pond area. The demonstration plans are conceptual and intended to be illustrative and guides to future development—not as specific development proposals.

The West Demonstration Plan illustrates approximately 34 acres in the West Neighborhood. It features the following:

- A 2-acre neighborhood park as a focal point and community gathering space for residents.
- A clear network of walkable blocks, enabling safe and comfortable walking routes for neighbors of all ages and abilities. These streets are also scaled to minimize development costs while further reducing vehicle speeds and enhancing safety.
- Front entries and porches facing the park and streets, with alleys used on some blocks to reduce the number of front driveway curb cuts, increase on-street parking, and emphasize a high-quality pedestrian environment.
- Street trees forming “canopies” over the streets over the long term, and many other trees in yards and open spaces.
- A wide range of lot sizes - large, medium, small, cottage – arranged so that transitions between uses are gradual and compatible.

The East Demonstration Plan (Figure 15) is a conceptual layout for a 55-acre area north of Advance Road in the future East Neighborhood. Like the West Neighborhood Demonstration Plan, it is intended to illustrate how the Community Design Principles can be applied, with specific emphasis on demonstrating the potential variety of building types within the Attached/Cottage Single Family area and incorporation of the neighborhood commercial area. This East Demonstration Plan features:



- Two focal points and community gathering spaces: the 2.5 acre neighborhood park and the neighborhood commercial area.
- A clear network of walkable blocks, which are “permeable” to pedestrians through the use of small open spaces, pedestrian paths, and alleys.
- A series of green edges and public spaces adjacent to the BPA powerline corridor to provide visual and physical access to the corridor and Newland Creek to the east.
- Five to seven building types within the Attached/Cottage Single Family area: townhomes (two types) with alternating setbacks, cottages facing streets, cottages facing greens, duplexes facing streets, and duplexes at corners.
- Front doors that face Advance Road to provide “eyes on the street and park” and increase the quality and safety of walking along Advance Road.
- Direct and convenient street alignments for the extension of 60th Avenue and the “School Street” to mark these routes as key streets for safe routes to schools, walking, biking, and/or transit. These streets will also serve to ‘knit’ together the entire Frog Pond area with key streets connecting the schools area with the area west of Stafford Road.

Table 6. Community Design Principles

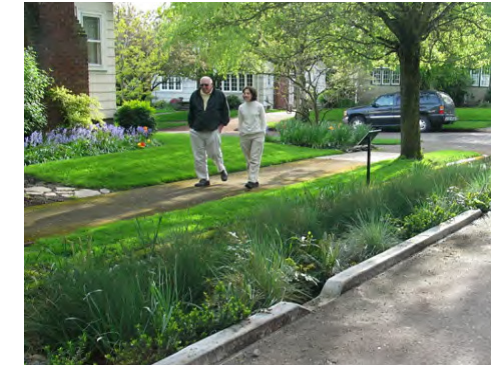
Community Design Principles
<ul style="list-style-type: none"> • Create a network of walkable blocks • Create community focal points at the schools, parks, civic nodes, and neighborhood commercial center • Provide safe intersections and safe routes to school • Provide a variety of housing types and forms at the block scale • Provide pedestrian-oriented and human scale architectural design • Create compatible transitions between different building forms • Create compatible transitions at the urban-rural interface • Provide physical and visual access to nature • Preserve key natural features and integrate them into new development • Design storm water features as amenities



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Street Trees
(Provide canopy over street for shade, pedestrian comfort, and rainwater absorption)



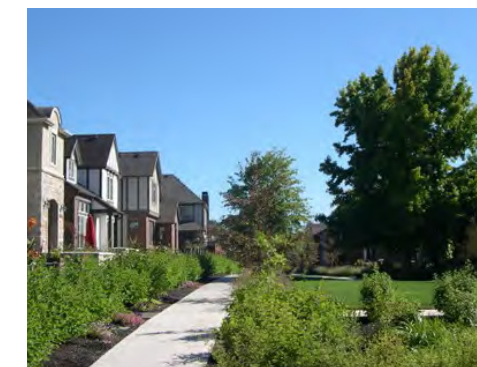
Stormwater Bioswale
(Natural detention and filtration of on-street rainwater)



Large Lot Single Family



Medium Lot Single Family
(With mature tree protected in front yard)



Homes Facing Park



Neighborhood Park

Community Design Framework Demonstration Plan: Single Family Neighborhood

Figure 14. West Neighborhood Demonstration Plan

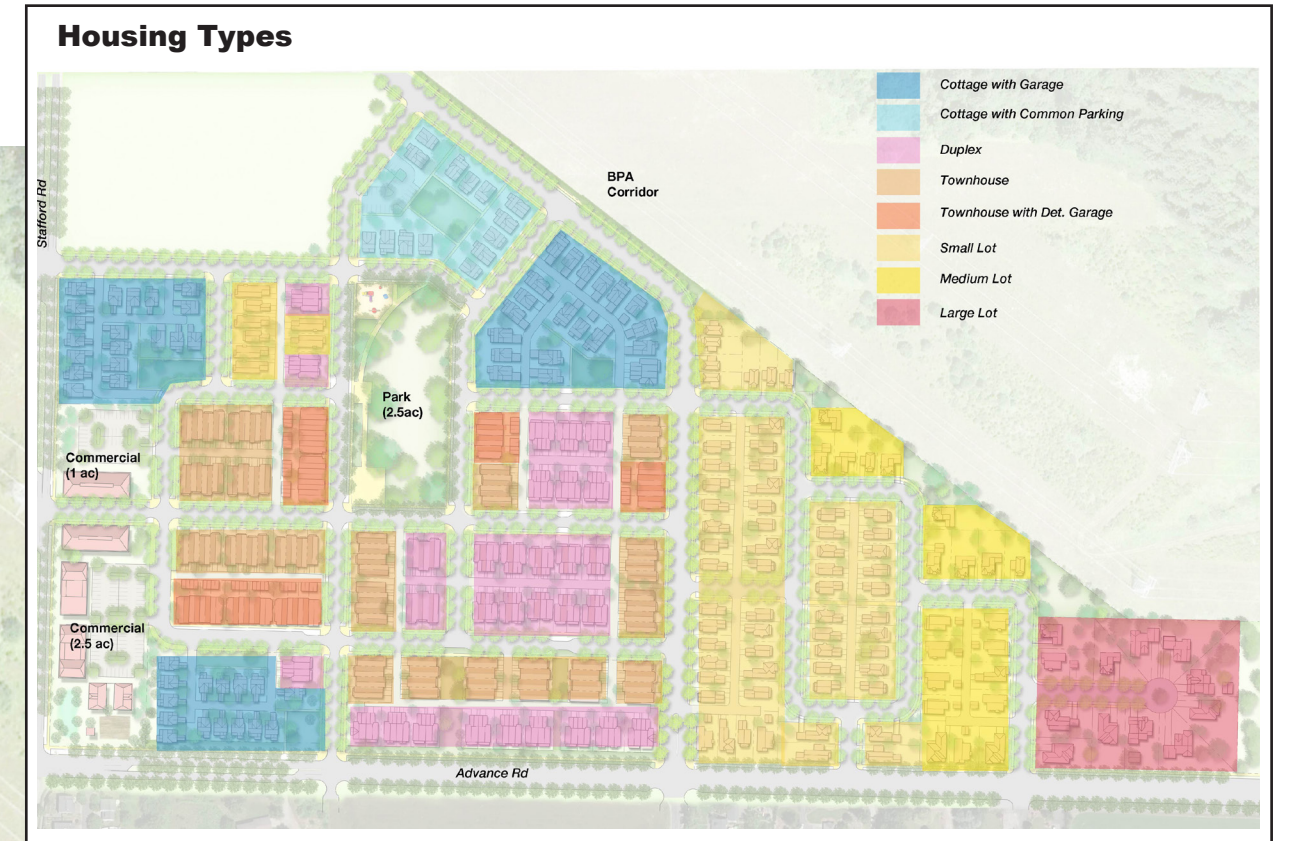


Figure 15. East Neighborhood Demonstration Plan



NEIGHBORHOOD COMMERCIAL IN THE FUTURE EAST NEIGHBORHOOD

The Land Use Framework includes at 3.5 acre site designated as Future Commercial, located at the northeast corner of the Stafford-Wilsonville-Boeckman-Advance Road intersection. Consideration of local retail in the plan began early in the process through the adoption of the guiding principle titled **“Create Great Neighborhoods,”** which reads:

“Frog Pond’s homes, streets, open spaces, neighborhood-scale retail, and other uses fit together into walkable, cohesive, and connected neighborhoods. Frog Pond is a fun place to live.”

The overall vision for the neighborhood commercial center is that it is a place that provides local goods and services within easy access of the local neighborhoods, has a high quality and pedestrian-oriented design, and serves as a gathering place for the community. Due to its small scale and local orientation, it will not compete with other commercial areas in Wilsonville.

A market study was conducted to evaluate the demand and rationale for neighborhood scale retail in the Frog Pond area. The study found³:

“The Frog Pond Area community will build out along the edge of an existing urbanized city and region. Nearby goods and services are an amenity that residents will want; however, ‘retail follows rooftops’—in other words, significant retail development only takes place when there is a significant population of likely shoppers in the area. As a potential retail location, Frog Pond benefits from being situated along two arterial roads, Boeckman/Advance Roads and Stafford/Wilsonville Roads, which will provide some drive-by traffic. Retail in Frog Pond can also serve some adjacent existing communities to the west and southwest.

Based on an evaluation of current and projected future retail spending, LCG projects that Frog Pond could potentially support a small to medium-size grocery-anchored retail center (60,000 square feet or more) at full project build out in approximately 2035. If such a grocery-anchored center cannot be attracted, Frog Pond could support a smaller center of between 10,000 and 30,000 square feet. A variety of factors will affect retail feasibility, particularly whether or not other retail is built near Frog Pond during the next 20 years, the number of homes in the area, and retail development formats in the future. Regardless of the size and scale of retail, the focus should be on establishing a retail/commercial hub development that provides some goods and services for local residents, while also creating a gateway, center, sense of place, and social hub for the area.”

3 *Frog Pond Area Plan Market Analysis, pg 6. Leland Consulting Group, August 2014*



Land Use and Community Design

A follow-up review of comparable centers was conducted to supplement the market study and set the final size for the center.⁴ Based on this review, it was determined that a smaller, unanchored center was more typical in today's market and appropriate to the Frog Pond neighborhood context. The center included in the plan can accommodate an estimated 38,000 square feet of retail, small office, and neighborhood services such as a day care center.

Multiple options for locating the center were considered. The proposed location was chosen based on the following factors:

- The site is central to all three new Frog Pond neighborhoods and many customers within easy walking distance.
- It is proximate (i.e. within a 15 minute walk) to existing Wilsonville residents.
- Transit currently serves the area, and will potentially be routed along Advance Road in the future.
- The site is highly visible, which is a key market consideration.
- Existing and future pass-by traffic is the highest in the area.
- Neighborhood commercial is a complementary use and accessible to the planned community park and future homes in the East and South Neighborhoods.

During the adoption of the Area Plan, there was not full consensus on the location of the neighborhood commercial site. It was agreed that the selected site would be subject to further evaluation during future master planning, after the land is brought into the Urban Growth Boundary.

Neighborhood Commercial Demonstration Plan and Design Guidance

Figure 16 depicts a demonstration plan that was prepared for the Neighborhood Commercial center as part of the overall East Demonstration Plan. Two buildings are oriented along a new access road extending perpendicular from Stafford Road, forming a mini Main Street. The traffic analysis for the plan supports a full movement intersection at this location. Two additional buildings are oriented to Stafford Road for visibility, with parking interior to the site. The southern end of the site is envisioned to be open, potentially including a community garden, public art, storm water facilities, and pedestrian seating and lighting as well as a landscaped buffer from proposed homes to the east. Figure 17 depicts design guidelines and images for the center. This commercial site layout is preliminary and subject to refinement during future master planning. At that time, the location of the commercial site is also subject to further evaluation.

4

See Technical Appendix K, *Neighborhood Retail Nodes*, Leland Consulting Group, July, 2015.



CIVIC LAND USES

The following civic land uses are included on the Land Use Framework:

- Frog Pond Grange
- Community of Hope Church
- Community Park
- School Site

In addition, three neighborhood parks are planned (two in the West Neighborhood and one in the East Neighborhood). Please see page 60 for a description of those parks.

Both Frog Pond Grange and Community of Hope Church are designated Institutional/Civic on the Land Use Framework. This designation recognizes the important community role that these sites serve now and should serve in future years. The intended uses include religious, cultural (including theater and the arts), educational, and community service uses, not including retail. Residential use would be allowed in combination with a primary civic use. The Frog Pond Grange is a particularly important site due to its historical significance and role as the namesake for the area. The demonstration plan (Figure 18) envisions retention of the grange, a new community building nearby, a small environmental center, trailhead, parking, and extensive open space adjacent to the BPA powerline easement. The grange currently supports live performances and other cultural activity, and may have the potential to be a significant cultural and arts center in the future.

A demonstration plan was also prepared for the Community of Hope site (Figure 19). It shows the potential for two new buildings oriented to the corner of Stafford and Boeckman Roads, a small plaza, access from the West Neighborhood, and adjacent residential uses.

The Community Park and School sites were added to the UGB in 2013, and annexed to the City in 2015. The Community Park, a 10-acre site, will be developed for sports fields and other active recreation serving all of Wilsonville. As of the writing of this Area Plan, the timing for development of the park has not been determined. The 30-acre school site is owned by the West Linn-Wilsonville School District and will be home to a new middle school and primary school. The middle school is scheduled for opening in 2017. The primary school will be added in the future when the district determines there is a need.

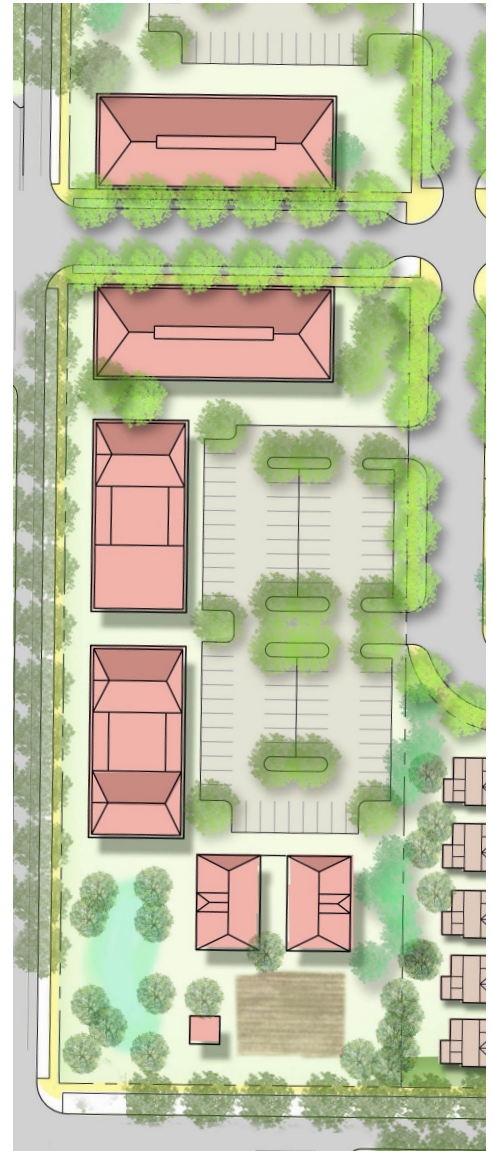
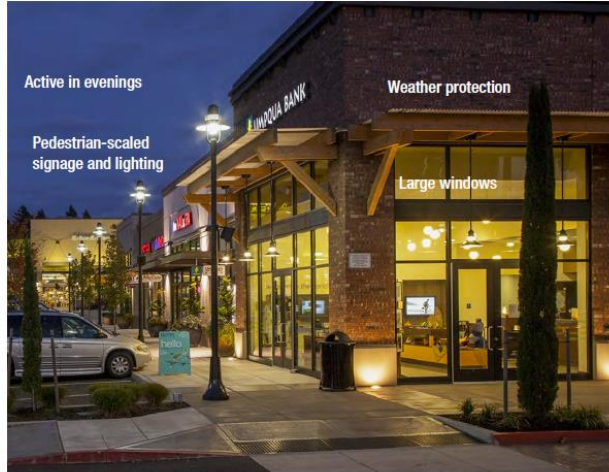


Figure 16. Example Commercial Center Layout



Small retail blends with nearby homes



Neighborhood-scale commercial building



Sidewalk seating



Old Town Wilsonville



Lake Oswego

Additional Design Considerations for Neighborhood Compatibility

- dark sky lighting
- thoughtful vehicular and pedestrian access
- screened loading areas
- reasonable hours of operation
- limitations on certain uses
- height and screening standards
- generous landscape
- high-quality design

Figure 17. Neighborhood Commercial Design



Aerial view of Grange



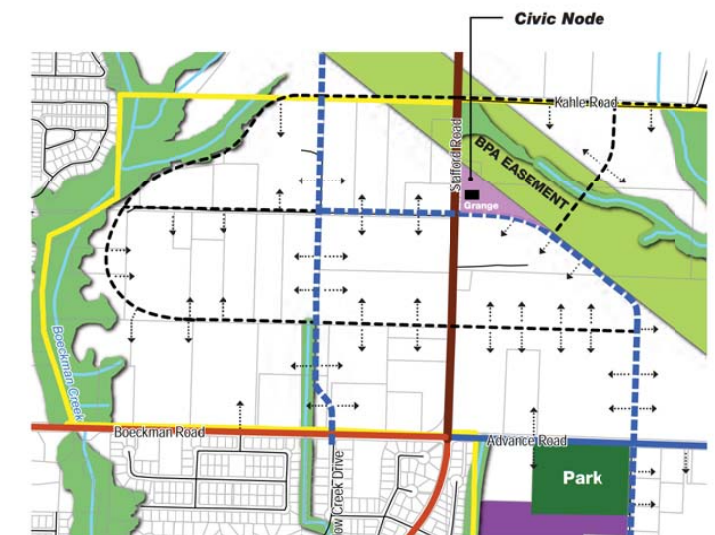
Grange site from Frog Pond Lane



Historic Grange can be repurposed like Wilsonville's Old Town Church.

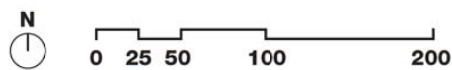


Small Environmental Learning Center



Key Map

Frog Pond Grange Civic Node Program and Access Study



11.18.2014

Figure 18. Frog Pond Grange Civic Node



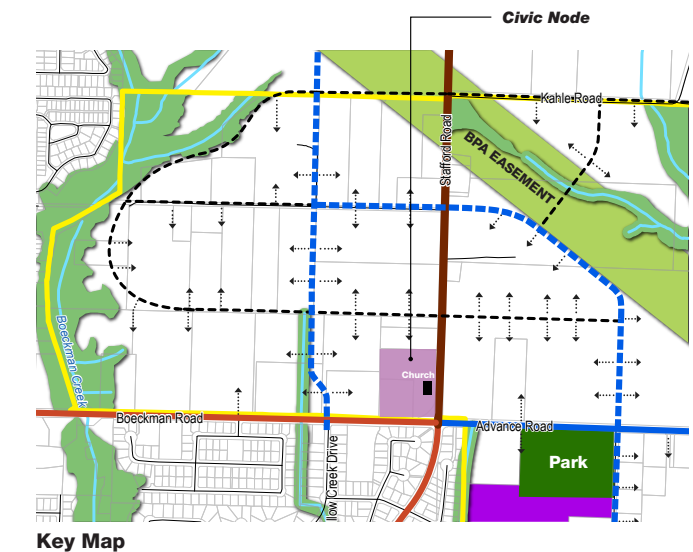
Aerial view of site, showing existing Lutheran Church



Civic Buildings on a small public plaza



Small daycare and community use building



Four Corners Civic Node Program and Access Study

4.2.2015

Figure 19. Four Corners Church Civic Node

Transportation Framework



FROG POND'S TRANSPORTATION STRATEGY - CONNECTIVITY, CIRCULATION, AND SAFETY

The vision and strategy for the Frog Pond Area is to create three distinct neighborhoods that are connected to each other and to the rest of Wilsonville through a transportation framework that is safe and convenient whether one is traveling by foot, bike, SMART transit, or car. The planning process analyzed three alternative transportation and land use layouts and made additional refinements to arrive at the proposed transportation framework, shown in Figure 20. The street plan is comprised of existing and new arterial streets, collector streets, and framework streets that are intended to be provided in the approximate locations shown on Figure 20. There will also be additional local streets, which have proposed connections to framework streets as shown with arrows on the figure; however, their precise alignment will be established through the development of individual properties.



Transportation Framework

Safe and convenient non-automotive access is a high priority for the City of Wilsonville. The Transportation Framework emphasizes high quality pedestrian routes to planned school and park sites in the South Neighborhood, as well as the numerous other park and trail amenities in the Frog Pond Area. The West Linn-Wilsonville School District's Safe Routes to School program has been part of the planning process for the Frog Pond area and will build upon the Transportation Framework by providing additional detail and site specific recommendations.

TRANSPORTATION ANALYSIS

Traffic Volumes and Operations

A transportation impact analysis was conducted as part of the Frog Pond Area Plan. This section summarizes the findings of that analysis.

Future traffic forecasts were performed for a 2035 horizon year based on Metro population and land use assumptions for the region, with the exception of the Frog Pond Area Plan, which was revised based on the proposed land uses. The majority of traffic growth between 2014 and 2035 is expected to occur to the north of Frog Pond because of additional growth in the area and the increasing importance of the Stafford Road connection to I-205.

Future intersection operations were analyzed for the site accesses and major intersections in the Frog Pond Area vicinity. Stafford Road was found to perform adequately as a three-lane roadway, however, it will be approaching its capacity beyond 2035 and the City should retain the option to widen it to 5 lanes in the future. To accommodate safe and efficient operations for traffic turning into and out of the East and West Neighborhoods, it is important to have a traffic signal at one of the Stafford Road accesses. Because of the high volumes to and from the north and desired traffic signal spacing, the preferred signal location is the middle access (rather than the south access). This middle access provides good connectivity to the heart of the East and West Neighborhoods and aligns with Collector streets as assumed in the Option A and C grid street framework. Even with the traffic signal, the unsignalized access north of the signal is expected to exceed the City of Wilsonville's level of service D performance standard due to increased delay. Therefore, drivers wanting to turn left onto Stafford Road are likely to reroute to the signalized access.

Intersection operations were also analyzed at key off-site study intersections, including both I-5 interchange areas, the Stafford Road/65th Avenue/Elligsen Road junction, and other key east side intersections. With the completion of all High Priority Projects identified in the Wilsonville Transportation System Plan, these areas are expected to meet applicable mobility targets and operating standards

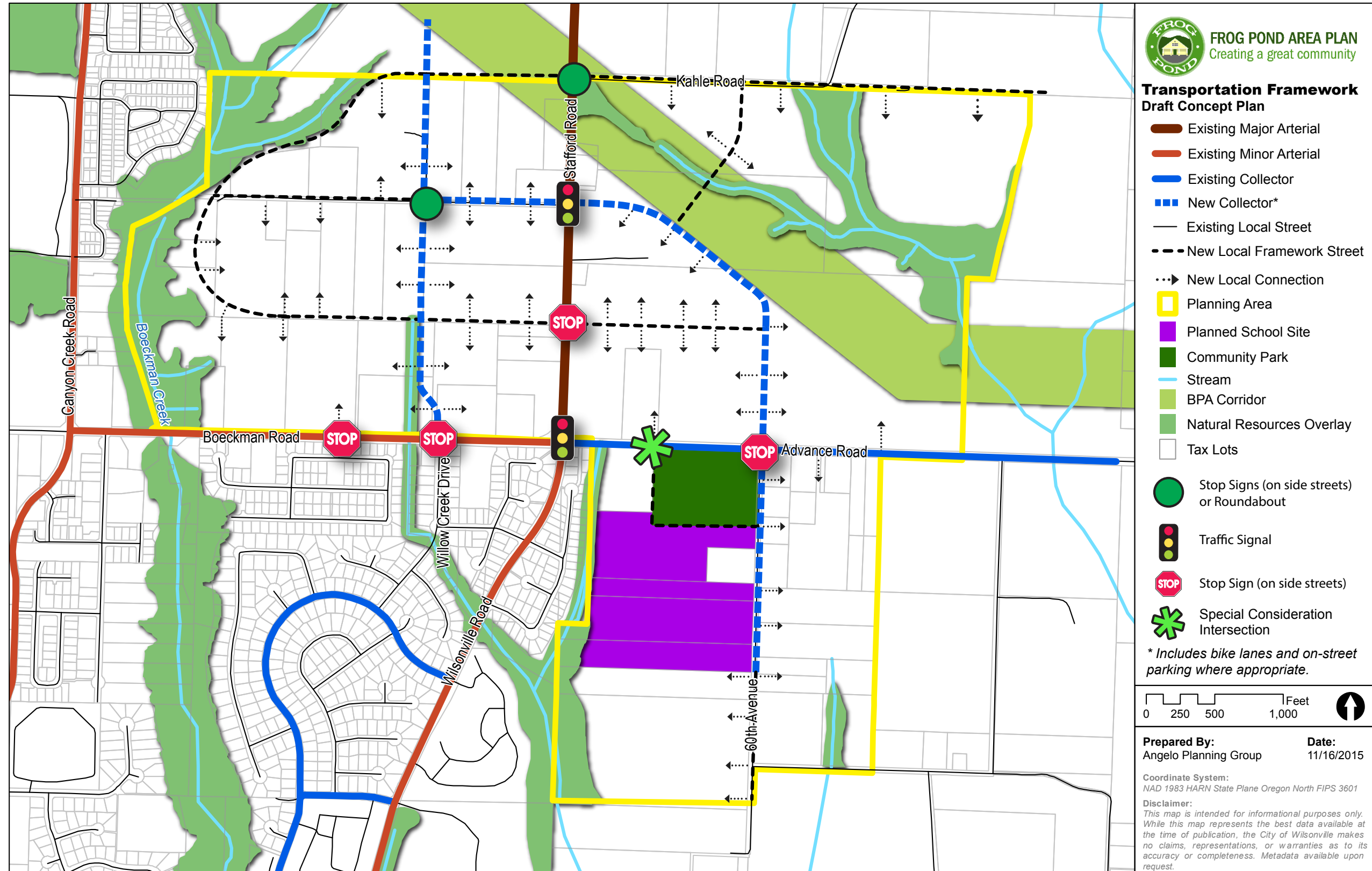


Figure 20. Transportation Framework - Streets

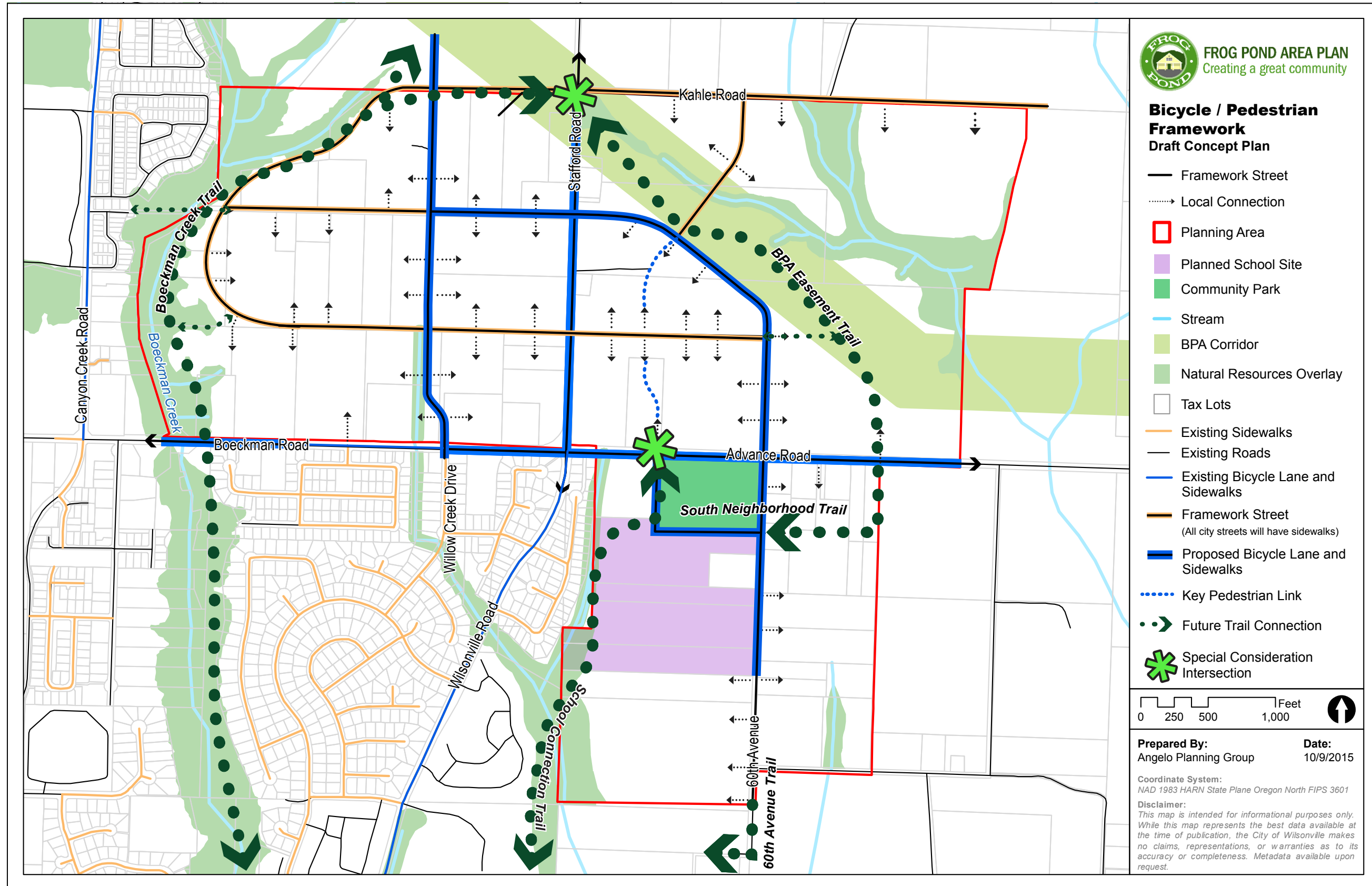


Figure 21. Transportation Framework - Bicycle and Pedestrian Routes



through the year 2035 as required by the City of Wilsonville, Clackamas County, and the Oregon Department of Transportation (ODOT). The analysis assumed growth consistent with Metro forecasts, build out of the current Wilsonville urban growth boundary, and a Maximum Build Out scenario for the Frog Pond Area that exceeds the amount of growth identified in the final land use framework proposal.

As a Major Arterial, Stafford Road has been envisioned to eventually become a five-lane roadway. However, the City of Wilsonville's policy intent is to have Stafford Road be a three-lane facility in order to reduce speeds, increase safety for pedestrians and bicyclists, and beautify the street as an important gateway into Wilsonville. While a three-lane roadway is expected to provide adequate capacity over the 20-year planning horizon, Stafford Road would be approaching its three-lane capacity limit beyond the 20-year timeframe. By acquiring adequate right-of-way for the future five-lane facility consistent with the Major Arterial classification and designing a three-lane roadway that can easily be widened, the City would ensure it can support future development in its northeast area and can also have improved access to the future growth areas.

Transportation Planning Rule Compliance

Full development of the Frog Pond Area Plan will, in the future, require bringing the Urban Reserve lands into the Metro Urban Growth Boundary (UGB) and adoption of amendments to the Wilsonville Comprehensive Plan to apply Wilsonville land use designations to the area. At that time, full compliance with Oregon's Transportation Planning Rule (ORS 660-012) will need to be demonstrated as part of the findings for the Comprehensive Plan amendments. The TPR requires that UGB expansions and associated Comprehensive Plan changes avoid causing a significant effect to the transportation system. This means the transportation improvement projects currently included in Wilsonville's Transportation System Plan (TSP) must still be sufficient to meet applicable operating standards and mobility targets or that additional improvements must be identified and conditioned on the development or added to the TSP.

As described above, twenty-year traffic scenarios (i.e., 2035, which is also the TSP horizon year) were performed for a range of land use scenarios that were considered in preparing the Frog Pond Area Plan. The results indicate that the I-5/Wilsonville Road and I-5/Elligsen Road interchange ramps will continue to meet ODOT's applicable mobility targets. In addition, the improvements identified in the TSP for the study intersections throughout Wilsonville would be sufficient to accommodate the project traffic levels, with the exception of the Stafford Road/Frog Pond Lane intersection. This intersection would require the addition of a traffic signal. Because this intersection is within the Area Plan, the traffic signal is easily included as a required improvement associated with the Area Plan. Therefore, the Frog Pond Area Plan and its associated improvements will have no significant effect and



Transportation Framework

this plan complies with the TPR.

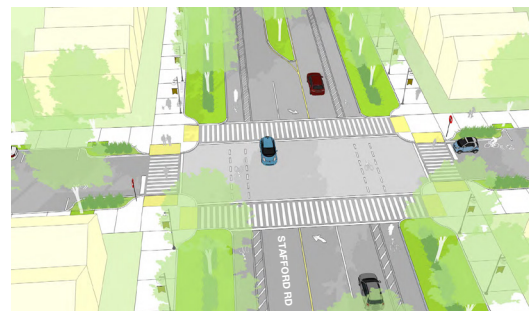
When the Comprehensive Plan is amended to adopt the areas currently with the Urban Growth Boundary, the City will need to update its TSP to include the additional traffic signal at the Stafford Road/Frog Pond Lane intersection and the new Collector roads through the West Neighborhood to allow these improvements to be system development charge (SDC) creditable.

Street Classifications and Design

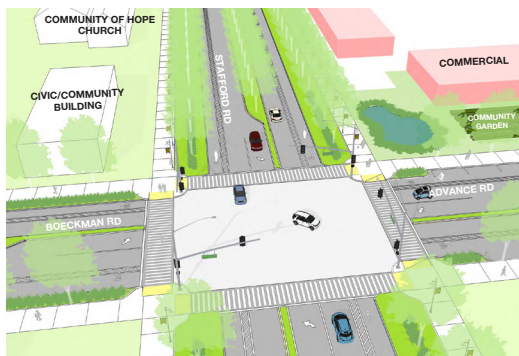
Existing streets in the Frog Pond area will be upgraded to the applicable City of Wilsonville standards consistent with the roadway's functional classification, and will include sidewalks and in some cases bike lanes. Stafford Road is classified as a Major Arterial and is planned for three lanes (one travel lane in each direction and a center turn lane as needed) to accommodate through traffic and the build-out of the Frog Pond area. Even though the standard cross section for a Major Arterial includes five lanes, the City strongly supports retention of Stafford Road as a three-lane facility because it is such an important gateway into the City and will need to be as safe as possible for pedestrians. However, the Area Plan assumes that buildings will be set back sufficiently in case Stafford Road needs to



1 New Neighborhood Collector Intersection



2 New Local Street Intersection



3 Boeckman Road/Advance Road Intersection



Key Map

Figure 22. Stafford Road Intersection Concepts



be widened to five lanes in the future due to growth of background traffic and the future development of Urban Reserves. Boeckman Road is a Minor Arterial, and the transportation analysis (See Appendix D) demonstrated it will have adequate capacity with the standard three lanes and bike lanes. Advance Road will remain a Collector road (3 lanes with bike lanes) through 60th Avenue, then transition to 2 lanes with bike lanes east of 60th Avenue, providing access and on-street parking (where appropriate) to serve adjacent land uses.

New collector roads are planned to provide connections within and between the three neighborhoods. As shown in Figure 20, the collectors run: from Boeckman Road at Willow Creek Drive to the northern edge of the West Neighborhood; along or adjacent to Frog Pond Lane to Stafford Road and continuing east to the BPA power lines; and north from 60th Avenue at the planned park site north to the BPA power lines.

In addition to the arterials and collectors described above, the Transportation Framework includes framework streets. These are included to supplement the higher classification streets, setting the next level of connectivity, circulation, and safety. The east-west framework street that parallels Boeckman and Advance Road will both enhance travel and provide a visual and physical connection to Boeckman Creek for West Neighborhood residents. At the west end of this street, it arcs to the north, which is intended to provide a public edge to the creek area along the street, a linear park, Boeckman Creek Trail, or some combination of these facilities. This edge will be further defined in the master planning process – the high level concept is for the street to play a role in providing neighborhood access and connection to the Boeckman Creek corridor. Other examples of framework streets include the western half of Frog Pond Lane and the street running to the north end of the West Neighborhood that eventually connects to Kahle Road.

The Transportation Framework includes streets labeled as “new local connections.” These are intended to depict the potential for a high level of connectivity through a network of blocks. The City’s street connection policies and code standards will establish the final requirements.

Additional information about the City’s road classifications and associated cross-section and other standards can be found in the Wilsonville Transportation System Plan (TSP).

Figure 23. Intersection Crossing Treatment Examples



Pedestrian Refuge at Roundabout



Bicycle Priority at Intersection



Curbless Street and Intersection



INTERSECTION TREATMENTS

Two new traffic signals are needed in the Frog Pond area: one at the “four corners” intersection of Advance Road/Boeckman Road and Stafford Road/Wilsonville Road; and, one at the intersection of Stafford Road/ Frog Pond Lane to facilitate turning movements into the East and West Neighborhoods. Attention to detail will be required to preserve walkability at intersections across major roads (see Figure 22 and Figure 24 for conceptual intersection designs along Stafford and along a new collector road). Additional intersection treatment examples are shown in Figure 23.

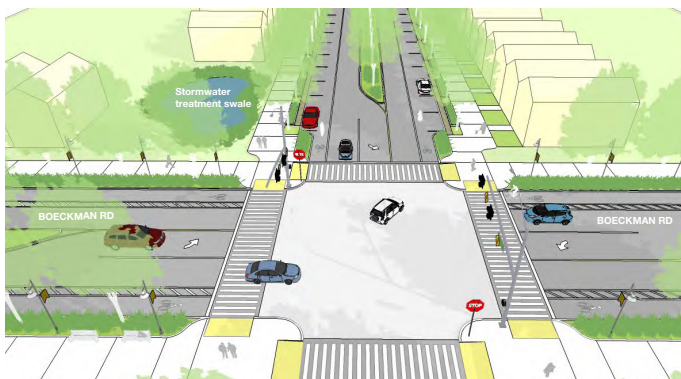
Stop signs will be installed on the side street approaches as shown on the Transportation Framework – Streets map (Figure 20), and roundabouts are an option where indicated. The intersection of Willow Creek Drive and Boeckman Road is an important pedestrian route to school and emergency vehicle route, and while it is shown as a “stop sign on side streets” intersection, it may also benefit from extra pedestrian crossing enhancements.



1 Collector Road Roundabout



Wilsonville Roundabout Example



2 Boeckman Road Intersection



Key Map

Figure 24. New Collector Road Intersection Concepts



GATEWAY TREATMENTS

The Frog Pond Area is currently a rural gateway into Wilsonville. Gateway improvements on Stafford and Advance Roads will help establish a unified identity for the three neighborhoods as well as provide a transition from the rural to the urban setting. The intersection at Stafford and Kahle Road (see Figure 25) has high potential for gateway improvement because of streets, trail crossing, and adjacent open space under the BPA powerlines all come together at that intersection. The proposed improvements to the “Boeckman Dip” at Boeckman Road and Boeckman Creek will provide a good opportunity for a gateway treatment in the bridge and streetscape design, which will help establish a community identity for the Frog Pond neighborhoods

BICYCLE AND PEDESTRIAN ROUTES

The Bicycle/Pedestrian framework map in Figure 21 describes the framework streets, bicycle lanes, and conceptual trails in the Frog Pond area. All city streets will have sidewalks, and the blue highlighted streets in the framework will have bicycle lanes.¹ Bicycle and pedestrian access to the planned school site and community park are a particularly high priority, along with high quality trail connections and safe crossings of major streets.

West Neighborhood: The Boeckman Creek Trail

The vision for the Boeckman Creek Regional Trail is for it to be both a neighborhood amenity and a key pedestrian connection to adjacent areas. South of Boeckman Road, the trail will run within the creek canyon along the sewer line easement. After passing under the future Boeckman Road bridge (which will be raised to address the “Dip”), the trail will climb to the top of bank along an existing access/maintenance road and run roughly along the edge of the vegetated corridor / Significant Resource Overlay Zone (SROZ) through the West Neighborhood. The trail alignment provides the opportunity for a linear park along this natural feature, with nodes of activity or pocket parks such as trailheads and play areas framed by the forest edge (see Figure 31 – Parks Framework). This location will ensure the trail is a neighborhood amenity and increase its use and safety. This trail will leave Boeckman Creek and traverse the northern edge of the West Neighborhood to link to the BPA corridor, intersecting Stafford Road at Kahle Road. As a regional trail, this should be paved at 12' in width, but stormwater runoff from the trail will need to be managed so as not to impact Boeckman Creek. Pervious pavement should be considered for this trail.

¹ SW 60th Street is identified as a collector with bike lanes from the intersection with Advance Road to the southern end of the School property in the South Neighborhood. South of the School Property, the street will be a Local Framework Street with shared-lane markers.



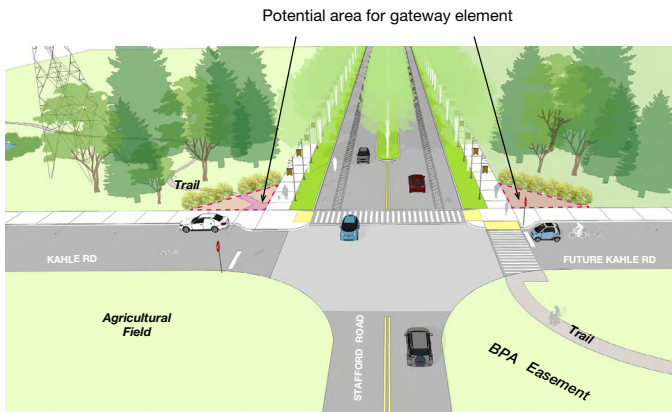
Figure 25. Stafford Road Gateway Concept



Seasonal color provides visual interest



Opportunity to highlight trail connection



Conceptual Gateway Intersection
SW Stafford & SW Kahle, looking south

- Facilitates transition from rural to urban setting
- Landscape and signage design should reflect the character of the planning area

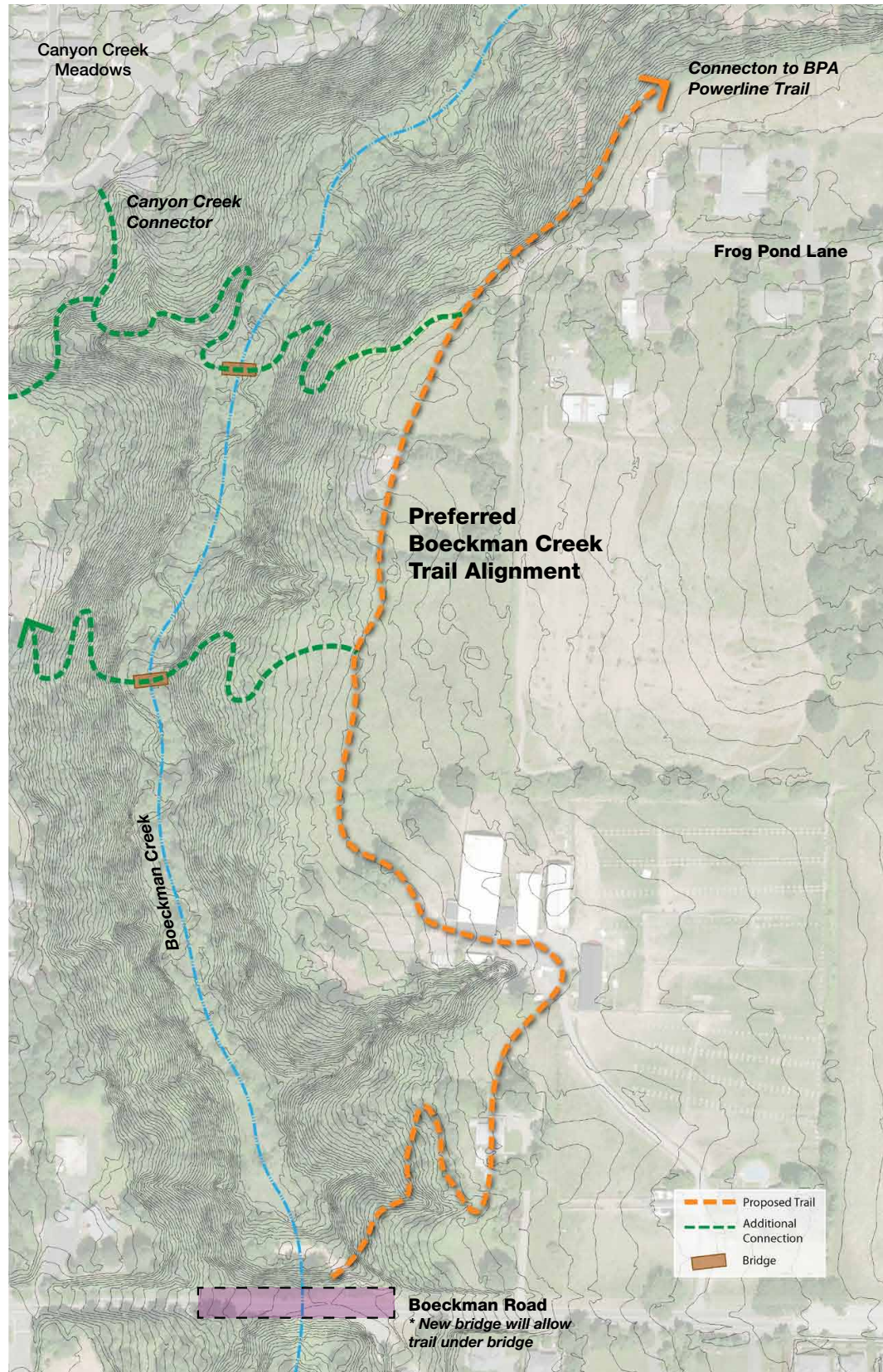


Vertical elements, landscape and signage mark transitions and gateways

Connections to the trail from the adjacent streets and from accessways between homes in residential developments should be provided as frequently as is practical in order to maximize bicycle and pedestrian connectivity and convenience. Some of these connections may be natural surfaces if they are too steep for bicycles. Connections across the creek to the West will improve pedestrian access from the Frog Pond area to Canyon Creek Road and nearby residential areas and businesses. At this time, only generalized connections have been identified, specific alignment studies will be needed as part of future work.

East Neighborhood: The BPA Easement Trail

In the East Neighborhood, where the BPA easement cuts through on a diagonal, a trail is proposed to run from the Kahle Road / Stafford Road intersection to Advance Road, continuing into the South Neighborhood. Connections from the adjacent streets to the west should be provided as frequently as is practical in order to maximize bicycle and pedestrian connectivity and convenience. Trails in all three neighborhoods will provide important Safe Routes to Schools opportunities.



Forest Trail



Creekside Trail



Upland Trail



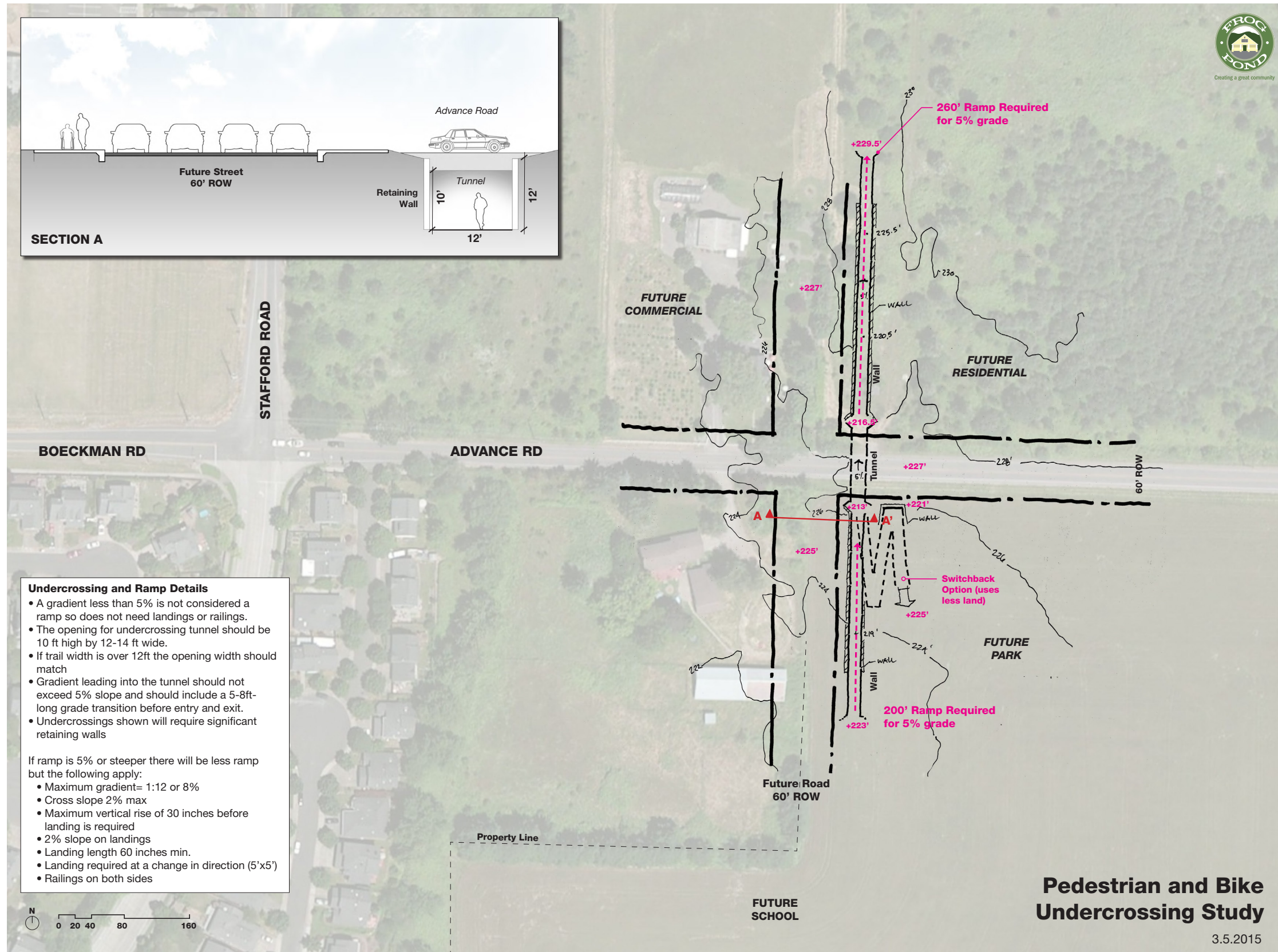
Trail connection to neighborhood



Homes on natural edge

Community Design Framework Demonstration Plan: Boeckman Creek Connections

Figure 26. Boeckman Trail Options



Undercrossing and Ramp Details

- A gradient less than 5% is not considered a ramp so does not need landings or railings.
- The opening for undercrossing tunnel should be 10 ft high by 12-14 ft wide.
- If trail width is over 12ft the opening width should match
- Gradient leading into the tunnel should not exceed 5% slope and should include a 5-8ft-long grade transition before entry and exit.
- Undercrossings shown will require significant retaining walls

If ramp is 5% or steeper there will be less ramp but the following apply:

- Maximum gradient= 1:12 or 8%
- Cross slope 2% max
- Maximum vertical rise of 30 inches before landing is required
- 2% slope on landings
- Landing length 60 inches min.
- Landing required at a change in direction (5'x5')
- Railings on both sides

Pedestrian and Bike Undercrossing Study

3.5.2015

UNDERCROSSING EXAMPLE 1: SR-14 Tunnel in Washougal, WA



Before: South side of SR 14



After: South end of SR 14 Pedestrian Tunnel, with stairs and ADA-accessible path connecting to fitness trail along the top of the Columbia River dike

UNDERCROSSING EXAMPLE 2: SR-14 Tunnel in Skamania County, WA



Figure 27. Potential Undercrossing Study



South Neighborhood: School Connection Trails

The trail from the East Neighborhood will link to a proposed trail along the eastern edge of the South Neighborhood that would provide an edge to the future urban area, and (through landscaping and appropriate fencing) help buffer and protect the farmland in the adjacent rural reserve area. The trail will connect to the community park and school property. An additional trail would link from the existing Wilsonville High School and Boeckman Creek Primary School across Meridian Creek to the future schools site, potentially co-located with infrastructure easements and associated creek crossings. The routing of the trails in the South Neighborhood are conceptual and subject to refinement as more specific planning is conducted.

60th Avenue Trail

The possibility of using the existing unimproved 60th Avenue right-of-way as a trail south of the Frog Pond Area, connecting to the Willamette River at Oregon State Parks' undeveloped Willamette Meridian Landing property, is an exciting opportunity for further exploration. Such a connection could provide a highly desirable link to the river and the future open space and recreational opportunities at Willamette Meridian Landing.

Figure 28. Existing BPA Corridor





Potential Undercrossing

The Pedestrian and Bicycle Routes map identifies two potential locations for a pedestrian undercrossing at major pedestrian access points between the three neighborhoods. The overall purposes of these undercrossing are to: (1) Facilitate safe street crossings for pedestrians and bicyclists, particularly to the proposed schools and community park south of Advance Road, and (2) Support the vision for the Frog Pond neighborhoods as one of Wilsonville's most walkable areas.

The Project Team produced a site study for a pedestrian undercrossing at the Advance Road location, shown in Figure 27. This connection would provide a safe, direct, and unique route under Advance Road to the schools and park. To create an Americans with Disabilities Act (ADA) compliant undercrossing, a straight access ramp of greater than 200 feet would be required on either side of the intersection, or a switchback access ramp with a wider footprint. Timing is also a challenge, as Advance Road will be improved in the next several years, but the development of the East Neighborhood is many more years in the future. To preserve the opportunity for an undercrossing, Advance Road should be designed so that an undercrossing can be added in the future.

As noted above, the recommendation at this time is to preserve the opportunity for an undercrossing by designing Advance Road so that an undercrossing can be added in the future. City staff should continue to work with the City Council regarding their direction and level of aspiration for this project. To address technical issues, further study, coordination, and design work needs to be done to determine the feasibility and cost of a pedestrian undercrossing in the Frog Pond area. An appropriate time for this work could be as part of the improvements to Advance Road for the planned park and school site.

Safe Routes to School

Overall, the Area Plan places a high priority of creating walkable neighborhoods and supporting Safe Routes to Schools (SRTS) planning and improvements. If these types of improvements are done successfully, it will help achieve the vision for the area. The West Linn-Wilsonville School District will be preparing a formal Safe Routes to Schools plan as part of their planning and development of the schools site in the South Neighborhood. The site will be developed initially for a middle school, with a primary school added in the future. The Area Plan team met with school district representatives to identify issues and opportunities for the Area Plan to recognize and incorporate. Building on that discussion, the following is a summary of issues and opportunities for SRTS in the Frog Pond Area:



- **Principles** – The National Center for Safe Routes to Schools uses the following principles in their work: Safety; Health; Community; and Choice.
- **Phasing** – As with all aspects of the Frog Pond Area Plan, improvements related to SRTS will evolve and be phased in over time. The initial planning will occur as part of the development of the new middle school, set to open in September, 2017.
- **Walking policy** – The district’s policy on walking to school generally precludes busing within 1 mile of schools, except where there are major impediments. This makes the walking and cycling routes in the Frog Pond area particularly important to improve appropriately for children walking and cycling to the new schools.
- **Key streets in existing neighborhoods** – The most direct routes, and therefore key streets for SRTS-related improvements in existing neighborhoods are: Wilsonville Road, Willow Creek Road, the south side of Boeckman between Willow Creek and Wilsonville-Stafford, and the south side of Advance Road between Wilsonville-Stafford and the entrance to the school site. All pedestrian crossings along these streets will be important, particularly the major intersection at Wilsonville-Stafford-Boeckman-Advance Roads.

Figure 29. Rapid Flash Beacons

Photo courtesy www.pedbikeimages.org / Michael Frederick



- **Key streets in the future (West)** – As the West Neighborhood develops, important walking routes will grow to include: the north side of Boeckman Road; the Willow Creek extension; the west side of Stafford Road; and the network of local streets between these streets.



Transportation Framework

- **Key streets in the future (East and South)** - As the East and South Neighborhoods develop, the north-south street that parallels Stafford and connects to the school access street will be the most direct route for children walking to school. 60th Avenue will serve a similar role in the South Neighborhood. The pedestrian and bike facilities on both sides of Advance Road will be important routes to the schools, the park, and general neighborhood circulation.
- **Special consideration intersection** – The intersection located approximately 660 feet east of the Wilsonville-Stafford-Boeckman-Advance Road intersection should receive special consideration for pedestrian safety. This will be a very active pedestrian area because of its “cross-roads” location near the schools, community park, retail area, and adjacent neighborhoods. Initial ideas include widened sidewalks and pedestrian areas, “zebra” cross-walk markings, signage and enhanced pedestrian lighting, rectangular rapid flash beacons, potential stop controls, and an undercrossing (see above discussion on the undercrossing).

Parks and Open Space Framework



NATURAL RESOURCES

The Frog Pond Area is surrounded by a rich array of natural areas, parks, agricultural lands, and rural open spaces. The Area Plan capitalizes on proximity to these areas with road and trail connections, and also focuses on the preservation of resources while providing public access (and visual access) to open space. The Frog Pond Area encompasses portions of Boeckman Creek, Willow Creek, Meridian Creek, and Newland Creek. These areas are identified as significant resources and will be protected by the City of Wilsonville’s Significant Resources Overlay Zone (SROZ), which limits potentially harmful development.



Park and Open Space Framework

There are several identified wetlands in the Frog Pond area, most of which are classified as “Non-Significant, Potentially Jurisdictional.” These are isolated non-riparian wetlands that are not located within a floodplain, and do not have hydrologic or water quality control functions. Development of wetlands will not be regulated by the City of Wilsonville, but may be subject to federal and state permitting requirements. There is one “significant” wetland, meeting city criteria, of about 2 acres in the Frog Pond area. However, it is located in the BPA corridor and will not be developed.

Existing tree groves within the planning area provide a key visual asset, and are a link to the historic character of the area. To the extent that existing, mature trees can be retained and protected as annexation and development occurs, it will contribute to the character, value and desirability of new neighborhoods. The city has existing annexation policies that provide incentives (but not mandates) for tree retention.

Parks and Open Space

Parks planned for the Frog Pond area are guided by the city’s Parks and Recreation Master Plan (2007). The Parks Framework for the Frog Pond Area is described in Figure 31. Two neighborhood parks are envisioned for the West Neighborhood. One neighborhood park could be located close to the Boeckman Creek Trail with an active trailhead, serving as a public focal point at the west end of the West Neighborhood. As part of the development, the Boeckman Creek corridor would be included in platted tracts with conservation easements over them. The trail will provide public access through an otherwise undeveloped open space corridor. Similar trailhead parks are shown in Figure 32. The trailhead park is an exciting option that received wide support during the Area Plan process. It is not the only option however; the alternative of a standard neighborhood park in the western area is still available to the City if deemed better in the future. The second neighborhood park in the West Neighborhood will be a standard 2-acre park in the east portion of the neighborhood.

Neighborhood Parks and Community Parks

Neighborhood Parks: Generally small in size, neighborhood parks are a combination of playground and park designed primarily for spontaneous, non-organized recreation activities.

Community Parks: Generally, community parks are larger parks that support organized activities and often have sport fields or other special facilities as their central focus. These parks can accommodate larger numbers of people and provide restrooms and parking.

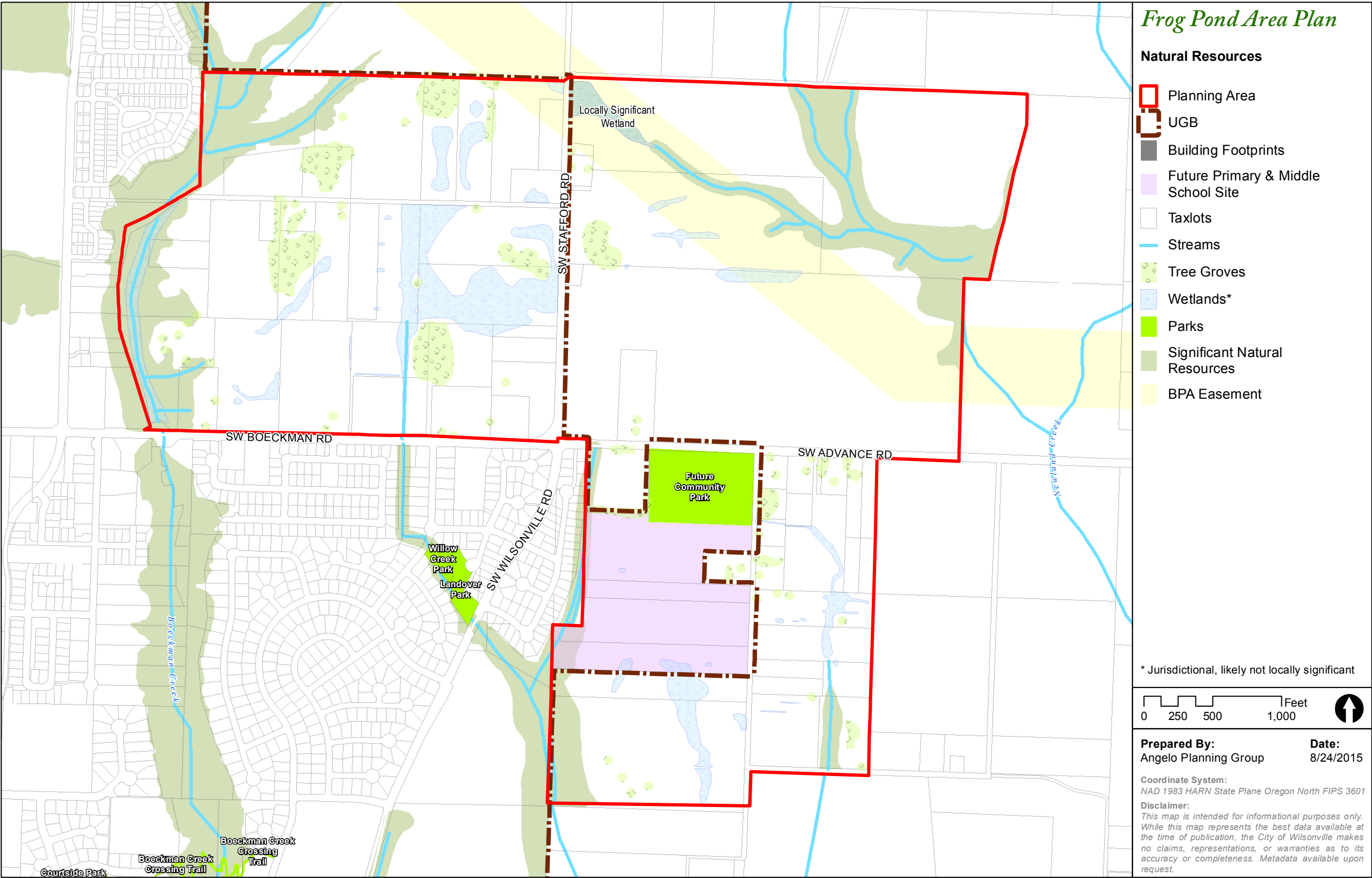


Figure 30. Natural Resources Map



Figure 31. Parks Framework

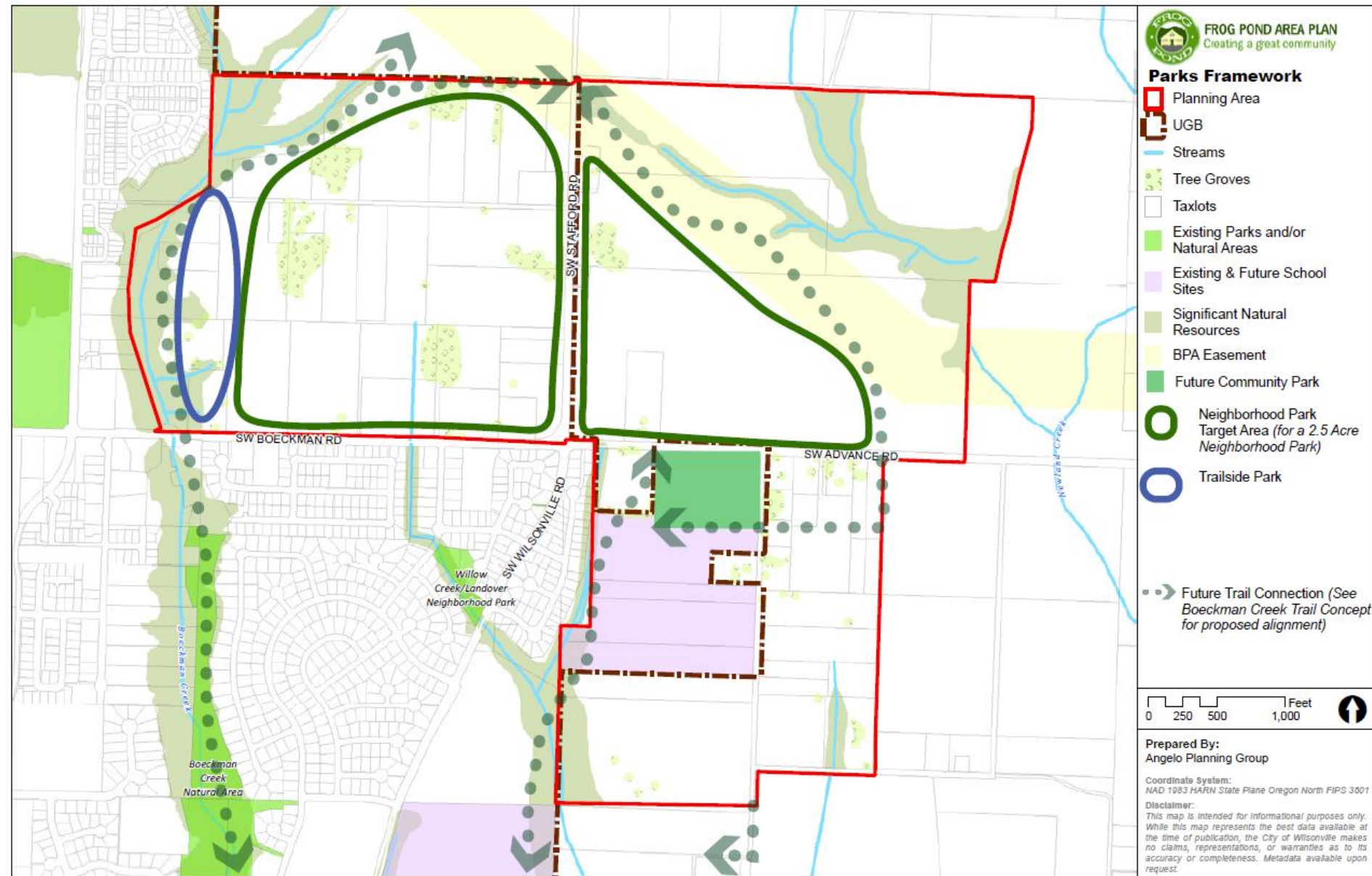


Figure 32. Trailhead Park Examples



Jackie Husen Park, bordering Cedar Mill Creek in Washington County.



Little Sugar Creek Greenway Park in Charlotte, NC.



The East Neighborhood will contain one 2-3 acre neighborhood park in addition to the powerline easement open space. Connections to the school and community park in the South Neighborhood, as well as topography and existing trees will be important considerations for the location and design of this park. The BPA powerline easement represents an opportunity for a ‘borrowed’ open space that is publicly accessible to residents. This will require further coordination with BPA.

The South Neighborhood contains a 10-acre community park adjacent to the future school site, which will meet the parks need for the neighborhood. These adjacencies are an excellent opportunity for shared recreational amenities such as reciprocal use of fields, gym space, pedestrian paths, and parking.

Throughout the Frog Pond area, future developments may provide additional smaller pocket parks and open space according to specific design plans and desires to enhance neighborhood desirability. Park and open space planning will continue as master plans are prepared for each neighborhood.

Figure 33. Park Examples and Design Concepts



Kids’ fountain in park plaza



Park events



Civic space and mature trees in neighborhood park



Neighborhood Center Plaza



Neighborhood Park



Trails



Park integrated with powerline easement



Park and Open Space Framework

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Infrastructure



SANITARY SEWER INFRASTRUCTURE

There are significant “off-site” improvements to the sanitary sewer system required by development in the Frog Pond area. The City of Wilsonville’s Collection System Master Plan concludes relocation and upgrades to the Memorial Park Pump Station (MPPS) and improvements to the Boeckman Trunk Sewer will be future necessary improvements in roughly the next 6 to 10 years . Upgrades to the MPPS are triggered once the Advance Road Middle School is completed and 40% of Frog Pond’s West Neighborhood has been developed. Upgrades to the Boeckman Truck Sewer are triggered once development within the East and South Neighborhoods is allowed to begin.



Water/Sewer/Stormwater Infrastructure

Design for “on-site” improvements for the Frog Pond Area is governed by rainfall derived inflow and infiltration (RDII), the area’s topography, and the City’s standards for minimum pipe slopes, sizes and cover. The location of sanitary sewer pipes is generally aligned with the framework streets, although some additional easements will be necessary.

Several parts of the East Neighborhood require pump stations for sanitary sewer, including both “lobes” off Kahle Road and the far southeastern corner of the East Neighborhood. An additional pump station is needed to serve the southern end of the South Neighborhood. The cost of these pump stations is assumed to be borne by the developer.

Costs reflecting sanitary sewer infrastructure necessary for the Frog Pond Area are presented in Table 7. Some sewer lines serving Frog Pond will need to be “oversized” relative to minimum standards in order to serve future growth and the development of the Elligsen Urban Reserve - their costs above the minimum standard is included in the “City (SDC) Share” column. Detailed assumptions can be found in the technical append

Table 7. Major and Framework Sanitary Sewer Infrastructure Cost Summary

Neighborhood	Total Cost	Developer Cost	City (SDC) share
West	\$3,300,000	\$3,100,000	\$200,000
East	\$7,800,000	\$7,670,000	\$130,000
South	\$1,950,000	\$1,915,000	\$35,000
Total Cost	\$13,050,000	\$12,685,000	\$365,000

WATER INFRASTRUCTURE

The design of water facilities in the Frog Pond area are generally governed by the minimum requirements for fire flow rates since they significantly exceed maximum daily domestic demands. The Frog Pond water system plan replicates the City’s current Water System Master Plan (WSMP), with modifications that account for topography and framework street alignments. Modeling from the WSMP indicates that the looped distribution system has been designed to meet all required standards, resulting in adequate fire flows. Full build-out of the Frog Pond area is anticipated to increase the City’s storage need by roughly 1.5 million gallons (MG), which would be met through the West Side Tank and 24-inch Transmission Main Project identified in the Wilsonville Water Master Plan (ID# 125). The west side tank project was indicated to cost nearly \$5.8 million and be needed by the year 2017; the City has determined that 25% of this project cost is attributable to development within the Frog Pond Area.



Costs for domestic water and fire infrastructure are presented below. Detailed assumptions can be found in Appendix E.

Table 8. Major and Framework Domestic Water and Fire Infrastructure Cost Summary

Neighborhood	Total Cost	Developer Cost	City (SDC) share
West	\$5,070,000	\$4,610,000	\$460,000
East	\$6,370,000	\$5,540,000	\$830,000
South	\$1,860,000	\$1,530,000	\$330,000
Total Cost	\$13,300,000	\$11,680,000	\$1,620,000

Water and sewer lines can generally be aligned with the framework streets of this plan, although some additional easements will be necessary. Both the water and sewer systems have major off-site improvements needed that are partially related to growth in Frog Pond, but are also needed to serve other parts of the city or to correct existing issues.

STORMWATER INFRASTRUCTURE

The approximate size and location of these set aside areas are shown on Figure 35, Figure 36, and Figure 37.

Stormwater management is anticipated to consist largely of roadside bioswales and detention basins to manage drainage originating from development. Drainage originating from private developments is expected to be managed by collection, treatment, and detention system constructed by the private developer in accordance with the City’s Public Works Standards (PWS) and Oregon Drainage Law.

Costs for these improvements are listed in Table 9 below. Detailed assumptions can be found in the technical appendix.

Table 9. Major and Framework Stormwater Infrastructure Cost Summary

Neighborhood	Total Cost	Developer Cost	City (SDC) share
West	\$8,660,000	\$8,520,000	\$140,000
East	\$8,290,000	\$8,080,000	\$210,000
South	\$4,310,000	\$4,310,000	\$0
Total Cost	\$21,260,000	\$20,910,000	\$350,000



Water/Sewer/Stormwater Infrastructure

An existing regional detention pond exists on the north side of Boeckman Road within the Boeckman Creek corridor. The flow control structure was constructed in 1997 and has been indicated by the City to receive drainage from developed areas along Canyon Creek Road up to Elligsen Road, including the Xerox and Mentor Graphics properties. In the absence of design calculations for sizing the pond, further analysis is recommended to understand if modifications can be made to the existing flow control structure. These alterations may allow the structure to manage stormwater originating from portions of the West Neighborhood, and presents an opportunity to eliminate the need for some additional flow control facilities.

GREEN INFRASTRUCTURE

Sustainable stormwater management is a key component of the Frog Pond Plan. The stormwater management approaches are anticipated to consist largely of a toolbox of approaches to treat, detain, and infiltrate runoff on-site. The City expects drainage originating from private development will be required to be managed by the private developer in accordance with the City's Public Works Standards and Oregon Drainage Law. The plans also assume new streets and on-site development will include low impact development (LID) techniques to the extent possible. The city's Stormwater Master Plan and Public Works Standards include a variety of LID options for stormwater management. Examples of low impact development as well as other types of green infrastructure are shown in Figure 34.



Figure 34. Green Infrastructure Examples



Pervious Paving
(Allows rainwater to percolate into soil)



Parking Lot Rain Garden
(Natural detention and filtration of parking lot rainwater)



Green Roof
(Reduces roof runoff and improves building insulation)



Retention Pond
(Holds rainwater in wetland environment)



Street Trees
(Provide canopy over street for shade, pedestrian comfort, and rainwater absorption)



Stormwater Bioswale
(Natural detention and filtration of on-street rainwater)



Water/Sewer/Stormwater Infrastructure

Figure 35. Infrastructure Framework - West Neighborhood

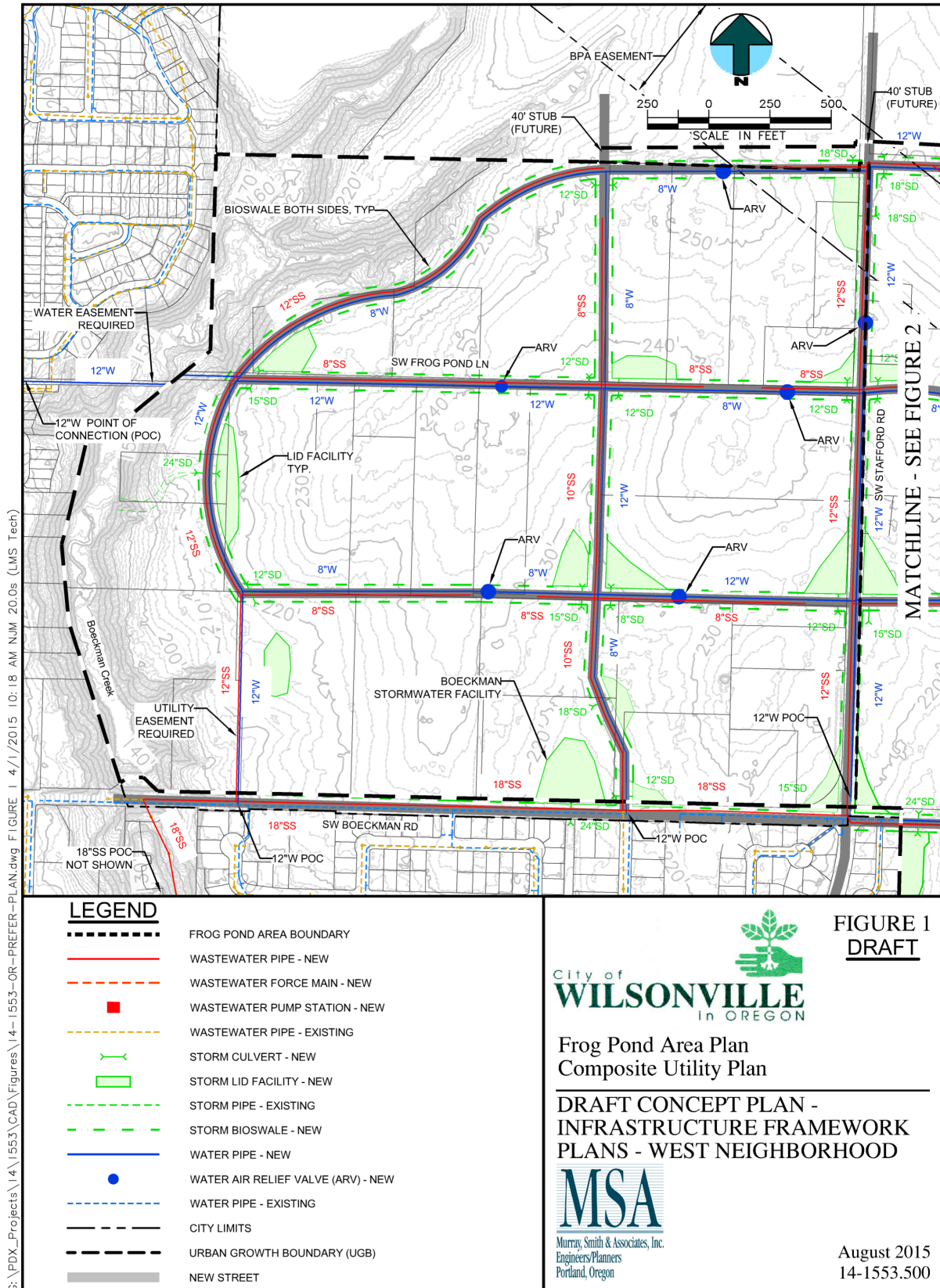




Figure 36. Infrastructure Framework - East Neighborhood

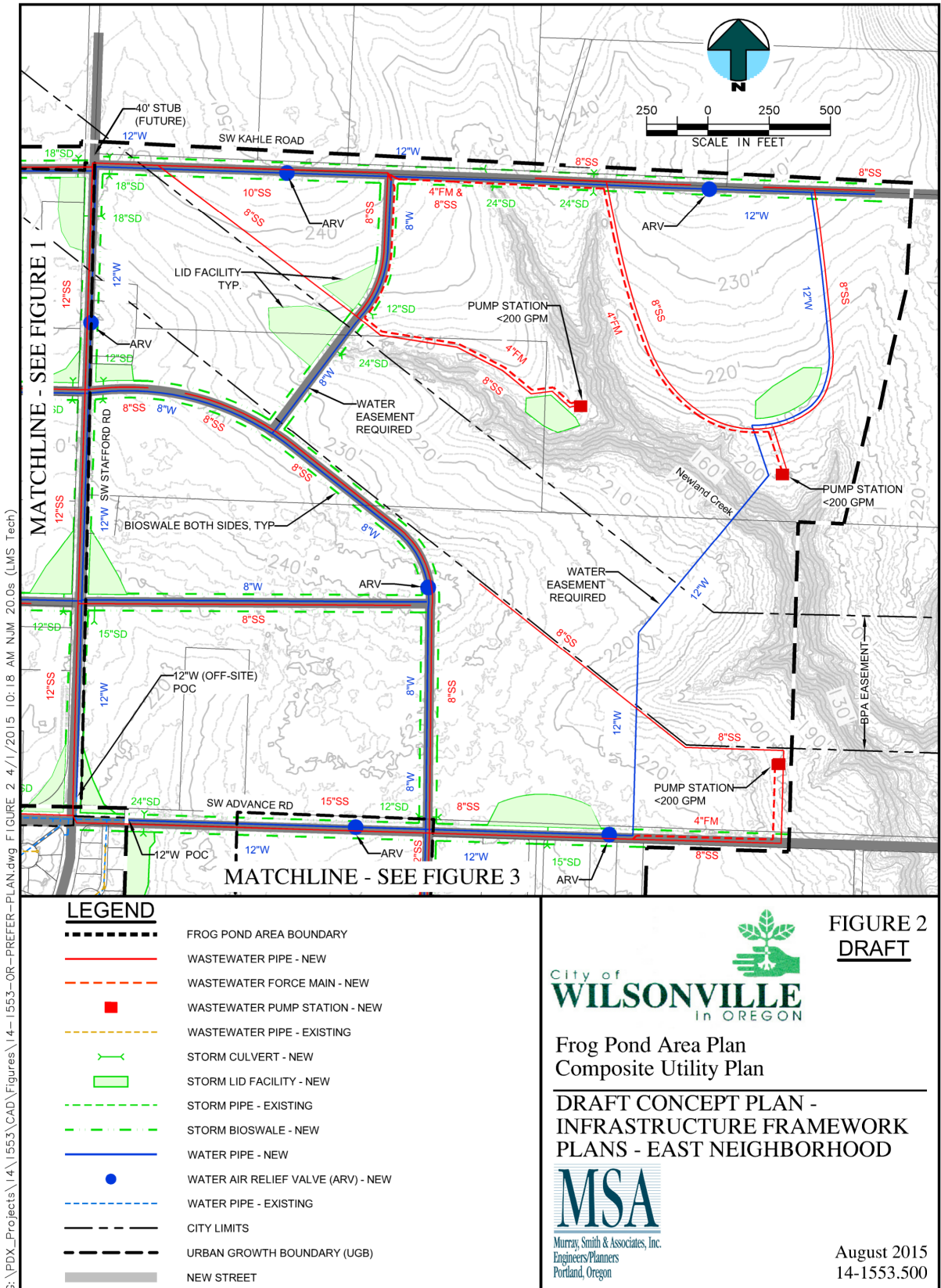
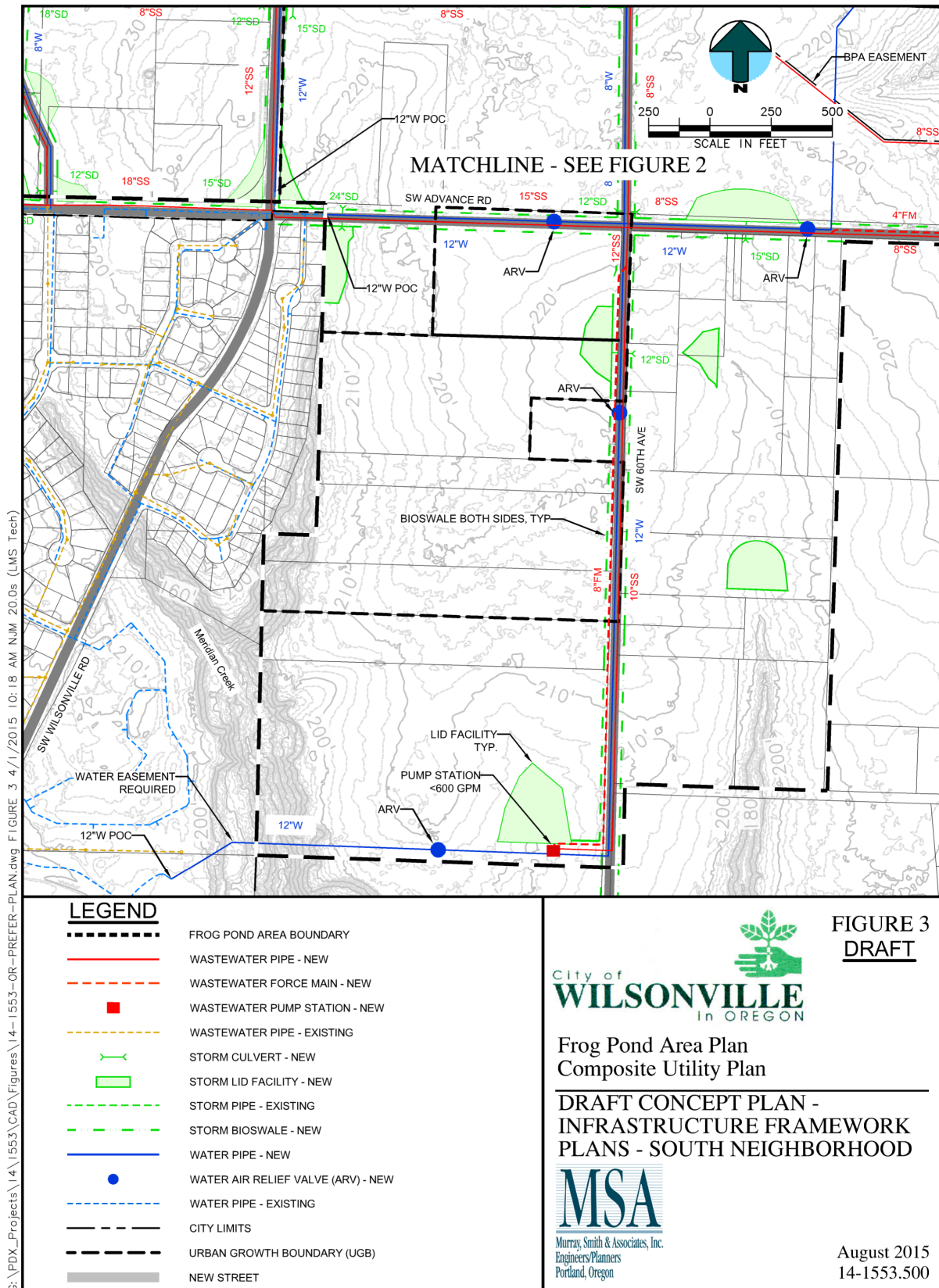




Figure 37. Infrastructure Framework - South Neighborhood



Implementation



ZONING STRATEGY

This section describes a strategy for future regulatory implementation of the Frog Pond Area Plan (Area Plan) and Master Plan. The term “zoning strategy” is used here as short-hand to reference the package of land use regulations needed for implementation, including amendments to the Wilsonville Comprehensive Plan, Transportation System Plan, Zoning Code, and related documents. The Frog Pond zoning strategy is the precursor to writing the actual regulations. The ideas described in this section were prepared early – as the Area Plan was being prepared – so the plan recommendations would be informed by ideas about their implementation.



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References to the Area Plan below refer to the concept plan for the entire 500-acre planning area. References to the Master Plan refer to the more detailed planning that will be done for Phase 2 of the project for the West Neighborhood, the area currently within the Urban Growth Boundary (UGB). The Frog Pond zoning strategy is preliminary and subject to refinement as the actual regulations are crafted in Phase 2 of the project.

General Goals

The regulatory implementation for the Frog Pond area should:

- A. Implement the Frog Pond vision and guiding principles.
- B. Create a system that can implement the vision with incremental development or a master-developer approach in the Frog Pond Area's West Neighborhood.
- C. Design a zoning structure that will ideally work in the short and long-term: first in the West Neighborhood, then in the East and South Neighborhoods, and ultimately in other future urban reserve areas.
- D. Adopt new base zones only if there is a compelling reason to. The more "new code" that is created, the more potential there is for unintended conflicts with existing code provisions (e.g. definitions).
- E. Craft the fewest number of rules to get the job done while meeting the City's expectations for quality development.

Recommendations

In alignment with the zoning strategy outlined above, the City should consider creating a hybrid of its Planned Development Residential (PDR) regulations and the Villebois regulations for the Frog Pond area. There are good elements to draw upon from each, and the local experience and familiarity with these regulations will be valuable for future implementation.

The following elements and ideas should be considered.

1. Adopt the Area Plan (500-acre planning area) as a supporting document of the Comprehensive plan that is guiding and not regulatory. The Area Plan will establish, for the entire 500-acre area, the: overall vision and guiding principles; framework plans for land use, streets, pedestrian and bicycle networks, infrastructure and community design; an infrastructure



funding strategy; and zoning strategy. The Area Plan would not have a regulatory role as part of the Comprehensive Plan. Rather, it is a guiding plan for subsequent Comprehensive Plan amendments, more detailed master plans, code amendments, and on-going infrastructure planning.

2. Adopt the Master Plan (UGB Area) as a supporting document that is regulatory. The Master Plan will establish property specific Comprehensive Plan map designation(s), the intended zones, and future zoning boundaries for the West Neighborhood. The Master Plan will also provide additional detail (as-needed) for streets, blocks, pedestrian and bicycle facilities, parks and open space, and infrastructure; design guidelines; and, an infrastructure funding plan. New zoning code will also be developed during the Master Plan process (see item 5 below for a high level description of the code).
3. Update/delete the “Area L” Comprehensive Plan Land Use Map designation and text to be consistent with the Area Plan.
4. Create and apply a new Comprehensive Plan designation called “Neighborhood” as the “base” plan designation for the West Neighborhood. The Neighborhood designation’s purpose will be to create complete and walkable new neighborhoods in Wilsonville. The City’s Residential designation is an option, but a new designation will better reflect the City vision for new neighborhoods in areas added to the UGB.
5. Adopt “fixes” to the problems previously identified by the City regarding the Planned Development Residential zones and utilize these revised PDR zones in the Frog Pond area. Add language to prohibit multi-family housing types in the PDR zones that are applied in the Frog Pond Master Plan (West Neighborhood). Table 10 lists a comparison between Comprehensive Plan densities, PDR zone densities and the working Frog Pond Area Plan designations.
6. Utilize the PDR regulations in the Wilsonville Development Code as the base zones to apply in Frog Pond West. Supplement the PDR regulations with design requirements intended to create quality development, consistent with the Master Plan. How to codify these supplemental standards needs to be determined. One option is to create a new chapter: “4.119 Standards Applying within the Neighborhood Comprehensive Plan designation.” The Village Zone and Villebois regulations provide good source material for the supplemental design requirements. However, the design standards to be applied in Frog Pond should be specifically tailored to Frog Pond.
7. Utilize a two-step approach for entitlements. Step 1 is the initial adoption



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of the Comprehensive Plan map designations and the package of plan and code amendments – this step will be complete at the end of Phase 2 of the Area Plan process (Summer, 2017). Step 2 is the application of property-specific zoning, annexations, and concurrent PDR reviews (Stage 1, 2, Site Design Review) – these will occur incrementally over time at the initiation of property owners. Table 1 compares the Wilsonville Comprehensive Plan designations and closest equivalent Frog Pond Area Plan land use designations.

Table 10. Comparison Table – Land Use Designations in the West Neighborhood

Comprehensive Plan Density	Zoning District	Closest Frog Pond Designation – as of August, 2015	Frog Pond Density – as of August, 2015
0-1 u/acre	PDR-1	-	-
2-3 u/acre	PDR-2	-	-
4-5 u/acre	PDR-3	Large Lot Single Family	4.4 u/acre
6-7 u/acre	PDR-4	Medium Lot Single Family	6.2 u/acre
10-12 u/acre	PDR-5	Small Lot Single Family	8.7 u/acre*

* The Small Lot Single Family falls within the density gap between the PDR 4 and PDR 5 Comprehensive Plan densities which will be remedied in Phase 2.

INFRASTRUCTURE FUNDING

The City of Wilsonville places a high priority on well-planned, efficient infrastructure to serve community goals. Toward that end, the Frog Pond Area Plan includes an Infrastructure Funding Plan. Please see Appendix H for the full text of the Infrastructure Funding Plan. The funding plan implements the project’s Guiding Principle titled “Create a feasible implementation strategy,” which states: *“A realistic funding plan for infrastructure, smart and flexible regulations, and other strategies will promote successful implementation of the plan.”*

The Infrastructure Funding Plan includes costs, revenue sources and funding strategies for water, sanitary sewer, storm water, transportation, and parks. Following are the key findings and recommendations from the plan.

Funding strategies vary depending on the category and scale of infrastructure. “Local” infrastructure will be paid for by developers. “Framework” infrastructure (e.g. the Boeckman Road urban upgrade) will generally be shared between developers and the City when oversizing is involved, or, funded through



area-wide instruments such as reimbursement districts. “Major off-site” infrastructure will generally be built and paid for by the City through the Capital Improvement Projects (CIP) program, utilizing grants and other innovative sources where possible.

There are more than 40 different infrastructure projects proposed for the 500-acre Frog Pond Area. The costs of these facilities were estimated by the project team in collaboration with the City. Each of these facilities falls into one of the three categories listed above. A complete list of the infrastructure facilities and the recommended funding strategy for each is presented in Appendix H.

This funding strategy defines two “reimbursement areas”—one for the West Neighborhood (“RA-W”) and one for the combined East and South (“RA-E”) Neighborhoods—along with several infrastructure funding strategies that could be used in these areas. In each reimbursement area, a number of framework infrastructure projects will benefit properties throughout the area. For example, upgrades to Boeckman and Stafford Roads, and two new Neighborhood Parks, will benefit the entire West Neighborhood (and the City as a whole), and their cost cannot be carried by any single property owner. Therefore, the costs of these projects should be equitably distributed among multiple property owners, since there is currently no major, well-capitalized master developer capable of undertaking major infrastructure improvements within Frog Pond.

The primary tools for framework projects in reimbursement areas are developer-initiated reimbursement districts, local improvement districts (LID), and city-initiated reimbursement districts. These options can also be mixed and matched—both reimbursement districts and LIDs could be implemented to fund different projects in RA-W and RA-E. Both reimbursement districts and LIDs are tools where infrastructure is built up front by a developer or the City, and the developer or City is then reimbursed over time for the cost via fees or assessments from property owners within the district.

The total cost of framework projects proposed to be paid for through reimbursement districts or LIDs is estimated to be \$10.6 and \$11.0 million respectively in the RA-W and RA-E; these projects will therefore be a significant funding obligation in the future. Infrastructure projects within RA-W will be needed with nearer term development in the West Neighborhood. Improvements within the RA-E will only be needed if the urban reserve lands are brought into the UGB.

Development in the Frog Pond area will generate significant System Development Charge (SDC) revenue for the City’s Capital Improvement Program (CIP), ranging from \$50.6 in million in revenues for the City’s Capital Improvements Program. If projected revenues from all three Frog Pond neighborhoods (West, East, and South) are taken into account, total SDC revenues



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should exceed allocated CIP costs.

The proposed reimbursement areas will likely pass on most of the framework infrastructure costs to the developers and homebuilders who invest in Frog Pond via a cost allocation (fee or assessment) for each unit of housing. As noted above, there is an estimated \$10.6 million in infrastructure projects that are needed to serve the Frog Pond West neighborhood which are not expected to be funded by individual development projects. The reimbursement cost per lot for the West Neighborhood is estimated at \$17,431 per lot. The East and South Neighborhoods have \$11.6 million in infrastructure projects funded through reimbursement districts. This amount calculates to \$7,500 per lot – significantly less due to the higher densities planned for the East and South Neighborhoods.

GOVERNANCE AND URBAN SERVICES

The providers of governance and urban services for the Frog Pond area will be the same as it is for Wilsonville as a whole. Table 11 summarizes current and future service providers.

Table 11. Governance and urban services for the Frog Pond area

Urban Service	Current Provider	Future Provider
Jurisdiction	Clackamas County	City of Wilsonville
Long range planning	City of Wilsonville	City of Wilsonville
Development review	Clackamas County	City of Wilsonville
Parks	None	City of Wilsonville
Transportation/Public works	Clackamas County	City of Wilsonville
Library	City of Wilsonville	City of Wilsonville
Fire and emergency services	Tualatin Valley Fire and Rescue	Tualatin Valley Fire and Rescue
Law enforcement	Clackamas County Sheriff	Clackamas County Sheriff via contract as Wilsonville Police
Schools	West Linn-Wilsonville School District	West Linn-Wilsonville School District
Electrical power	PGE	Portland General Electric



Urban Service	Current Provider	Future Provider
Natural gas	NWN	NW Natural Gas
Infrastructure: water and sewer	Wells and septic systems	City of Wilsonville

MASTER PLAN

The City of Wilsonville prepares master plans as an implementing tool for concept plans. The Frog Pond Area Plan establishes the overall vision, guiding principles, and framework plans for land use, community design, transportation, natural resources, parks, and utility infrastructure. The Area Plan also provides high level infrastructure funding strategies. The Frog Pond Master Plan will describe the next level of detail: property-specific Comprehensive Plan and zone map designations, comprehensive plan policies, zoning code regulations, and other implementation strategies needed to set the stage for annexation and development. Upon adoption of the Frog Pond Area Plan, the City will initiate Phase 2 of the project: a master plan for the West Neighborhood. Looking ahead, the City anticipates preparing master plans for the East and South Neighborhoods if/when they are brought into the UGB.

FUTURE UGB AMENDMENTS

As of the writing of this report, the timing of the addition of the Frog Pond area urban reserve areas into the UGB is uncertain. The Metro Council is currently discussing a recommendation from the Metro Chief Operating Officer to not expand the UGB at this time and begin the next urban growth management cycle after urban and rural reserves have been acknowledged in all three counties in the region.¹ At this time, all urban reserves in Clackamas County are under remand from the Oregon Court of Appeals.

The City of Wilsonville’s position regarding the Frog Pond urban reserves is: (1) it is appropriate land for future land supply for the city; (2) the area is “next in line” to be added to the city after the West Neighborhood; and (3) there is no firm timeline for addition of the East and South Neighborhoods to the City – the City will revisit that issue in response to future regional planning decisions.

¹ “2015 Urban Growth Management Decision: recommendations to the Metro Council from Metro’s chief operating officer”, July 2015.



FROG POND AREA PLAN

Creating a great community

