

NEIGHBORHOOD DESIGN PRINCIPLES



Disconnected



Connected and Safe

NEIGHBORHOOD DESIGN PRINCIPLES



Integrated Stormwater Treatment



Access to Open Space & Nature

NEIGHBORHOOD DESIGN PRINCIPLES



Trees Enhance Livability



Sense of Community

NEIGHBORHOOD DESIGN PRINCIPLES



Integrated Parks

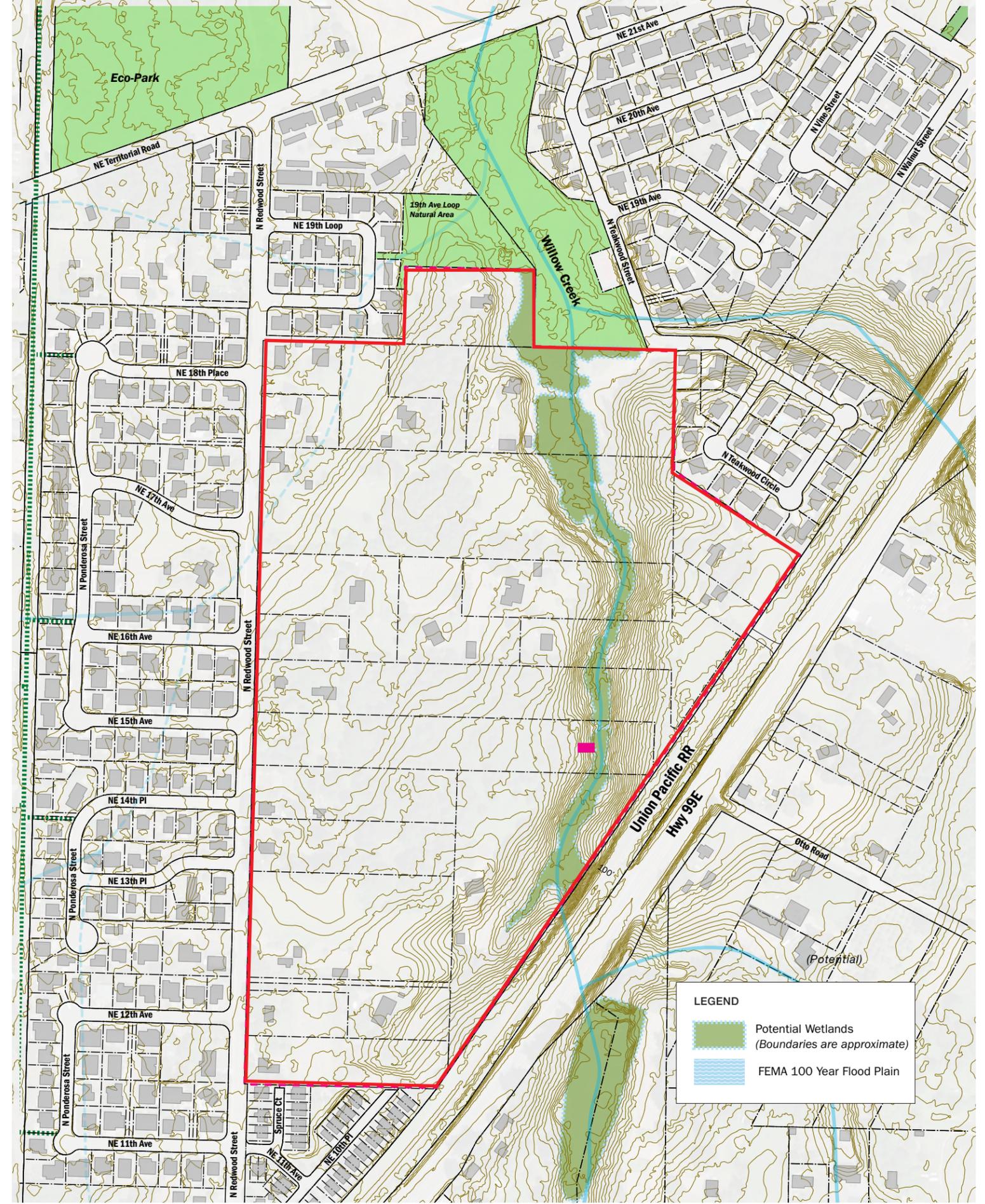


Provide Housing Choices

Natural Conditions

Reconnaissance-level review

- Willow Creek ponding, poorly-defined channel
- Springs and seeps
- Well-drained soils
- Water quality relatively high, well vegetated slopes in the watershed
- Habitat quality moderately high
- Riparian understory infested with ivy, threat to habitat and trees
- Reed canarygrass in wetlands
- Recommend ODFW involvement



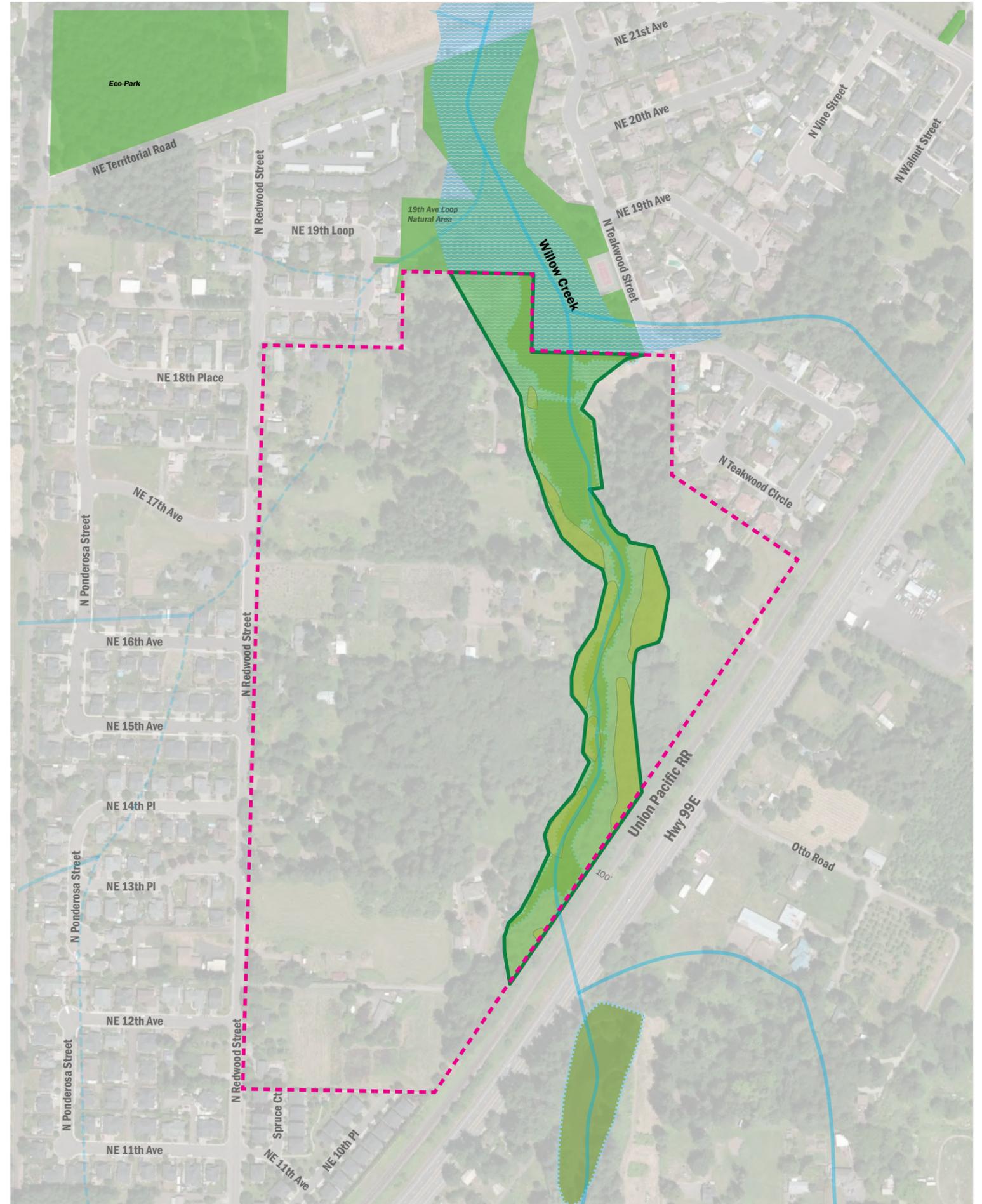
NORTH REDWOOD DEVELOPMENT CONCEPT

Environmental Factors



Combined Willow Creek Environmental Areas
(includes lowland areas adjacent to wetlands. No setbacks assumed yet but this area is approx 50' setback)

~9.2 ac



Park Formula

***(Maximum units in a plat) x (persons/unit) x 0.01
(acreage to be dedicated)***

LDR/R-1: 36.3 ac (total acres minus streets)

36.3 ac / 7000 sf minimum lot size = 226 units

226 x 2.7 people per unit = 610

610 x 0.01 = 6.1 park acres.

MDR/ R1.5: 15 ac (total acres minus streets)

15 ac / 5000 sf minimum lot size = 131 units

131 x 2.7 people per unit = 353

353 x 0.01 = 3.5 park acres.

HDR R-2: 1.8 ac (total acres minus streets)

1.8 ac / 3000 sf minimum lot size = 26 lots

28 x 2.7 people per unit = 71

58 x 0.01 = 0.7 park acres.

POTENTIAL PARK ACREAGE: 10.3 acres

Canby - Traditional Block



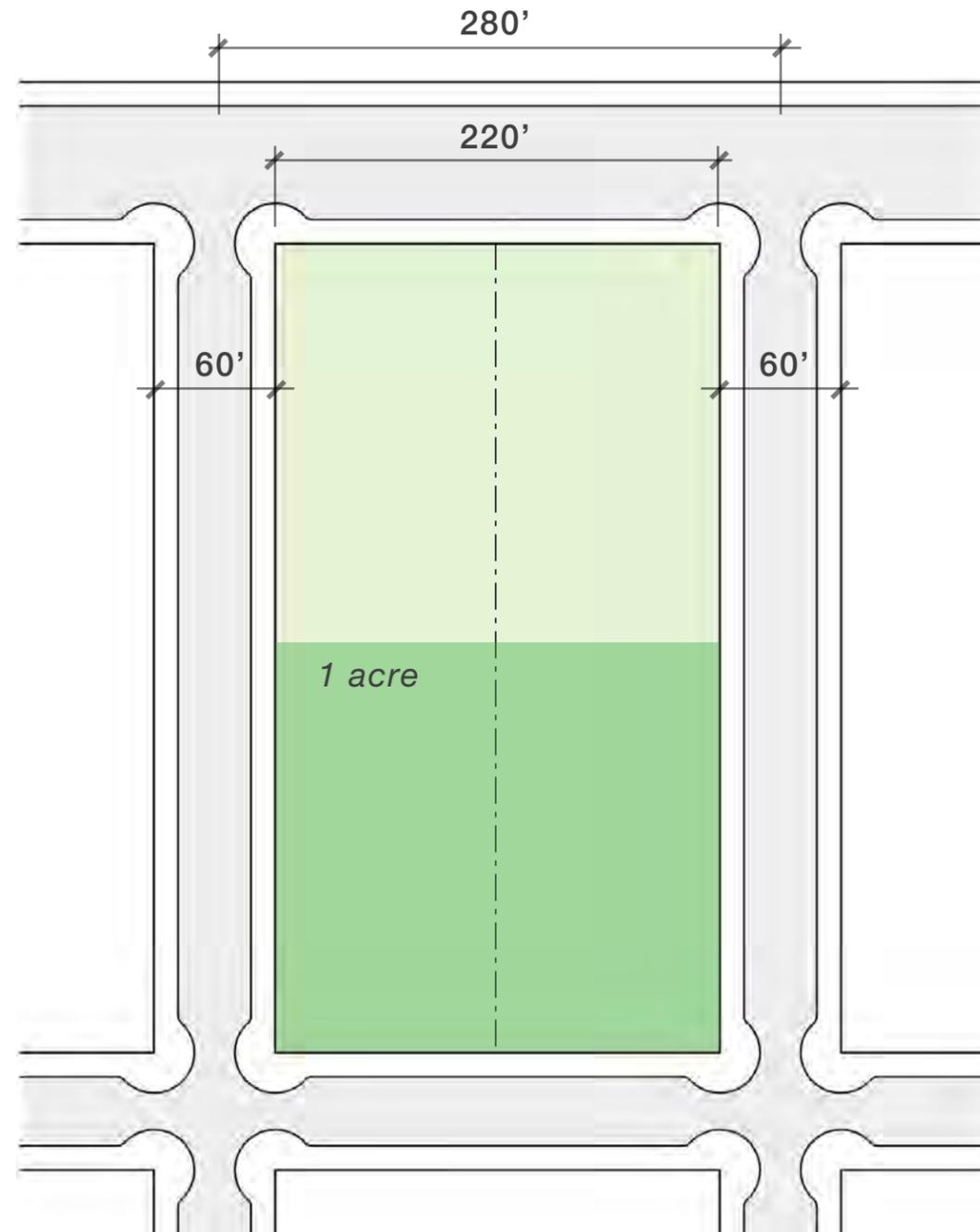
West of N Redwood - Typical Block



New Community - 280' blocks

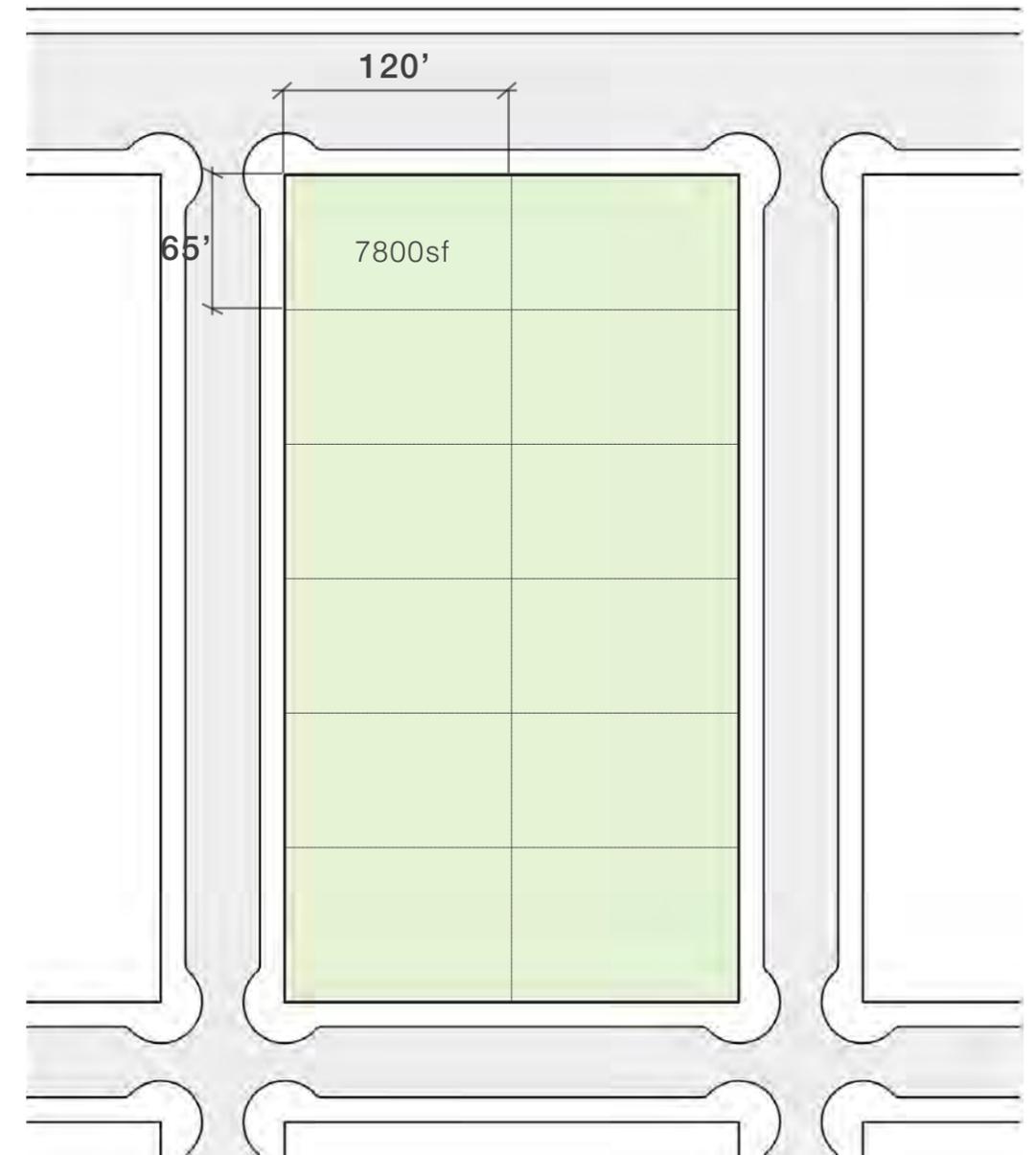
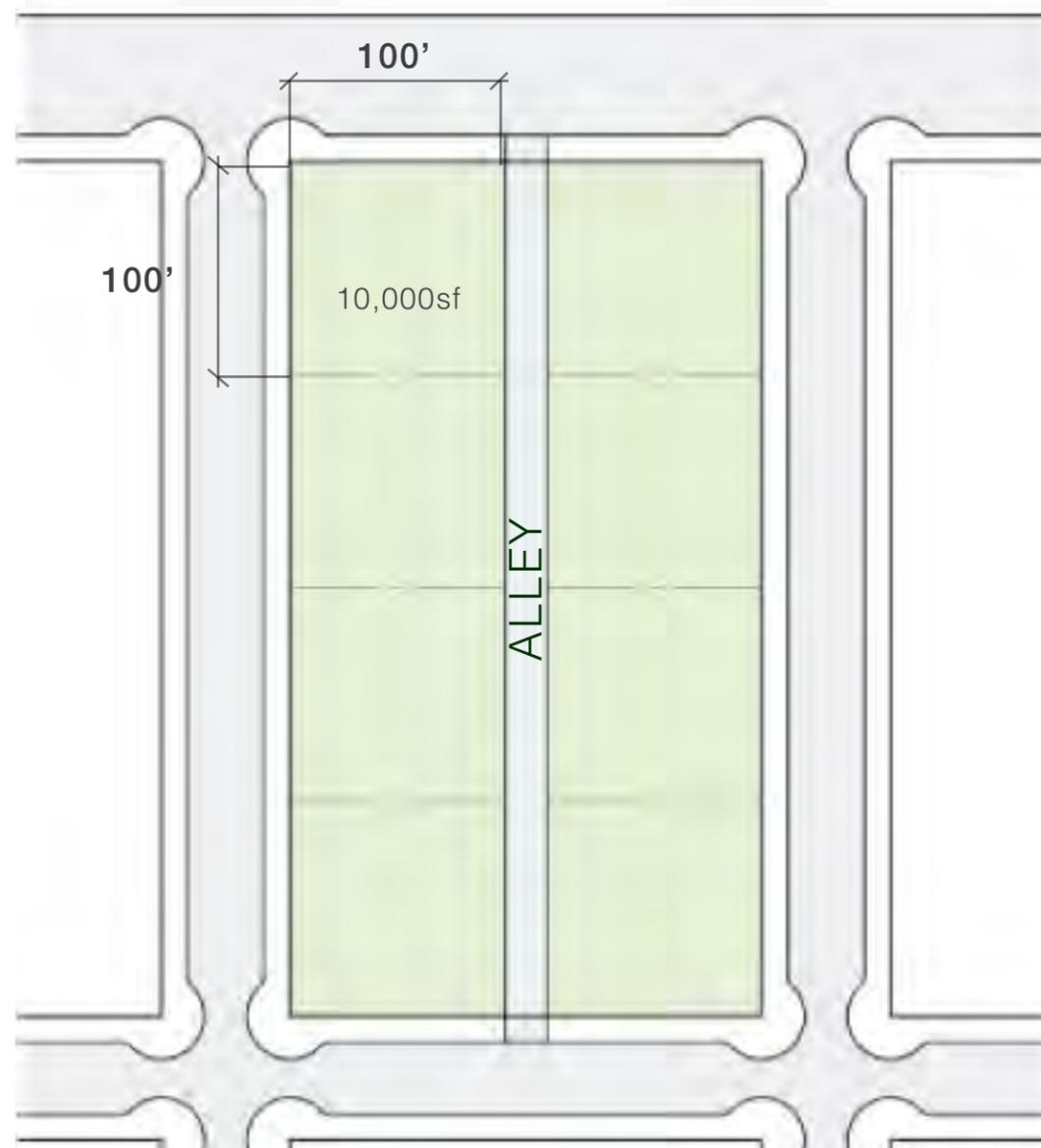


A Block Prototype



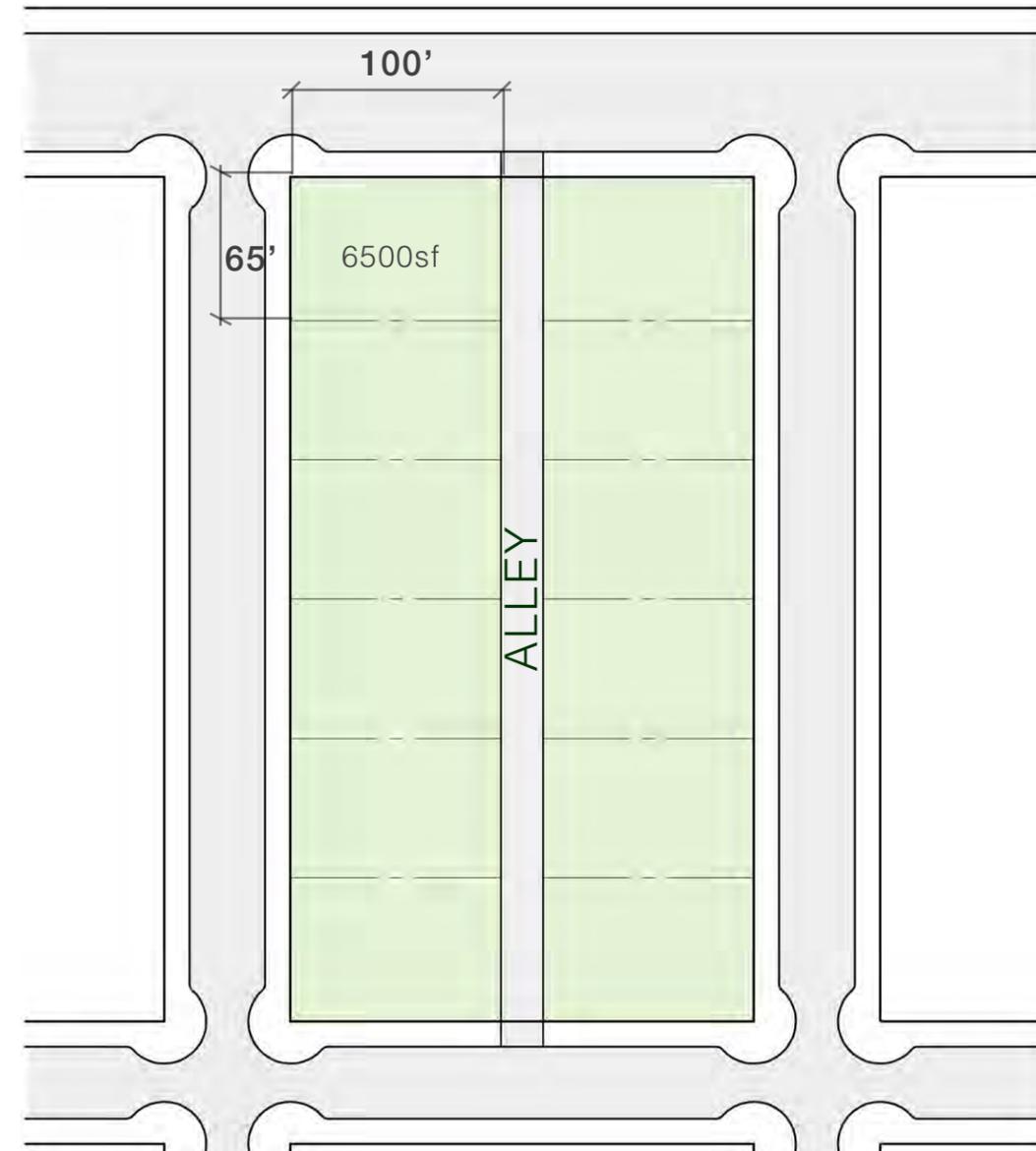
Large Lots (LDR)

- 8-12 lots (4-6/ac)
- 7,000 - 10,000 sf



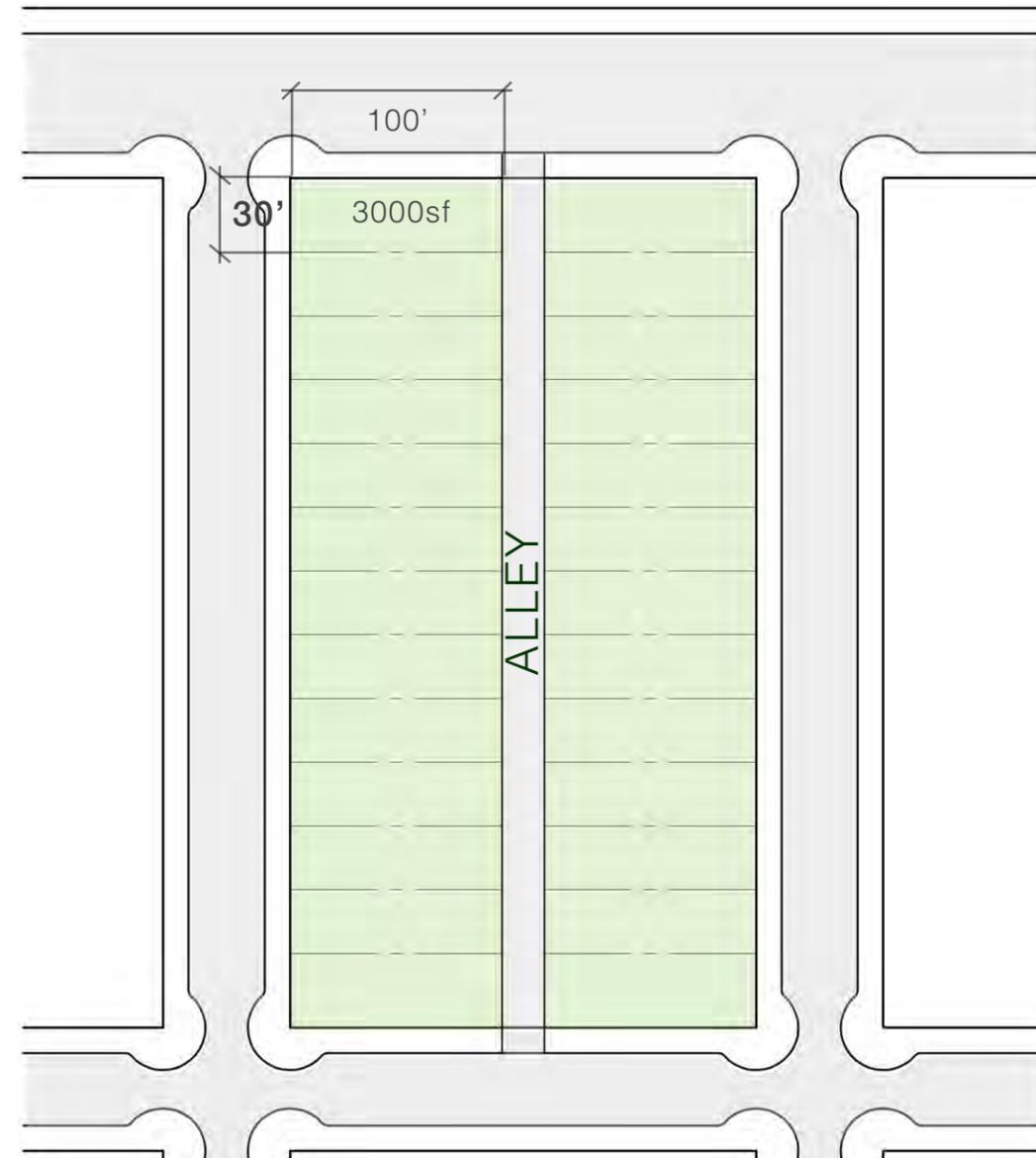
Medium Lots (MDR)

- 12-16 lots (6-8/ac)
- 5,000 - 6,500 sf



Small Lots (HDR)

- 26 lots shown
- ~ 3,000 sf
(min. 14 du/ac)



Canby New Home Sales, Lot and Home Size

The average size of new homes built in Canby between 2003 and 2014 average as much as 2,400 square feet for a two story detached home to as little as 1,400 square feet for a two story townhome.

Lot sizes average less than 3,000 square feet for duplexes and townhomes and as much as 7,900 for detached single family homes.

Housing Type	Home Size (sf)			Lot Size (sf)		
	Min	Avg	Max	Min	Avg	Max
One Story Detached	1,400	2,000	3,200	5,100	7,900	9,700
Two Story Detached	1,200	2,400	4,400	3,200	7,000	46,900
Duplex	1,500	1,500	1,500	1,700	2,300	3,400
Townhome - 2 Story	1,100	1,400	2,000	1,600	2,300	4,600
Townhome - 3 Story	2,100	2,100	2,100	2,600	2,900	3,100

Source: Metrostudy, Leland Consulting Group

Housing Demand of Current Canby Residents by Price Range

Given the household income distribution of current Canby residents, the chart below shows an estimated range of new home purchase prices. An annual household income of greater than \$75,000 is needed to afford the average price of new homes being sold in Canby.

The primary market opportunity and demand going forward is likely to be for single family detached housing of 5,000+ SF lots being purchased by households in the \$75,000+ income categories.

There is likely a market opportunity for developers to develop additional small-lot and attached housing, since none has been built since 2008, and there demand exists in the lower-middle household income categories.

Household Income Category			Percent of Households	Number of Households	Est Percent Owners	Number of Owner HHs	Home Purchase Price Range	
							(Low)	(High)
\$0	-	\$15,000	10%	559	10%	56	\$0	\$55,000
\$15,000	-	\$25,000	10%	571	25%	143	\$55,000	\$95,000
\$25,000	-	\$35,000	8%	457	50%	228	\$95,000	\$135,000
\$35,000	-	\$50,000	14%	805	60%	483	\$135,000	\$190,000
\$50,000	-	\$75,000	20%	1,130	70%	791	\$190,000	\$285,000
\$75,000	-	\$100,000	15%	850	80%	680	\$285,000	\$380,000
\$100,000	-	\$150,000	17%	947	85%	805	\$380,000	\$570,000
\$150,000	-	\$200,000	4%	245	90%	221	\$570,000	\$760,000
\$200,000	+		3%	148	95%	141	\$760,000	+

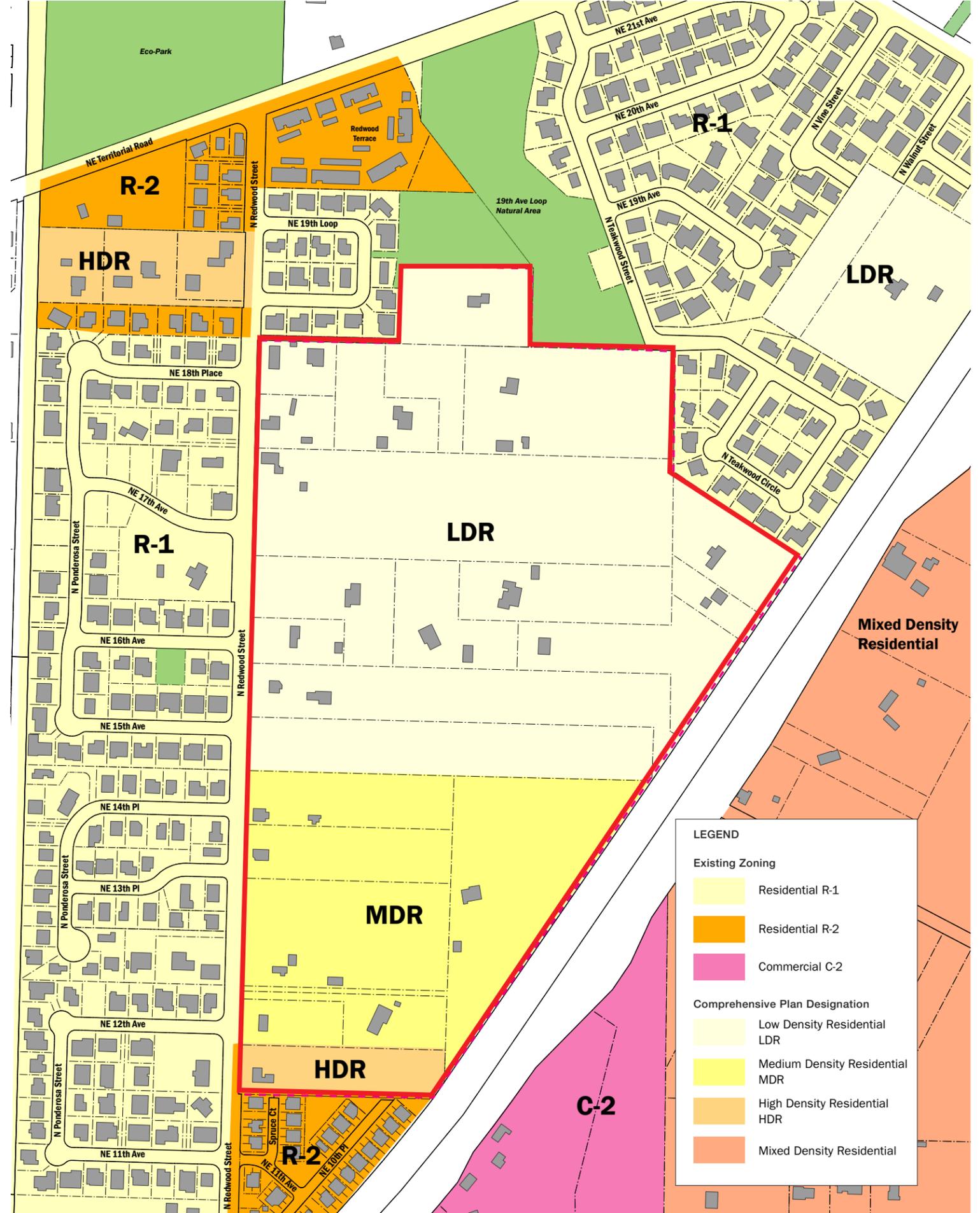
Source: ESRI, Leland Consulting Group NOTE: Assumes a 10% down payment, and a 30 year mortgage at 4.25% interest rate, and a maximum mortgage payment to gross income ratio of 25% including home insurance and property taxes.

Zoning

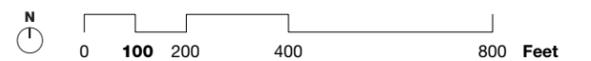
LDR: 45.4 ac

MDR: 18.8 ac

HDR: 2.2 ac

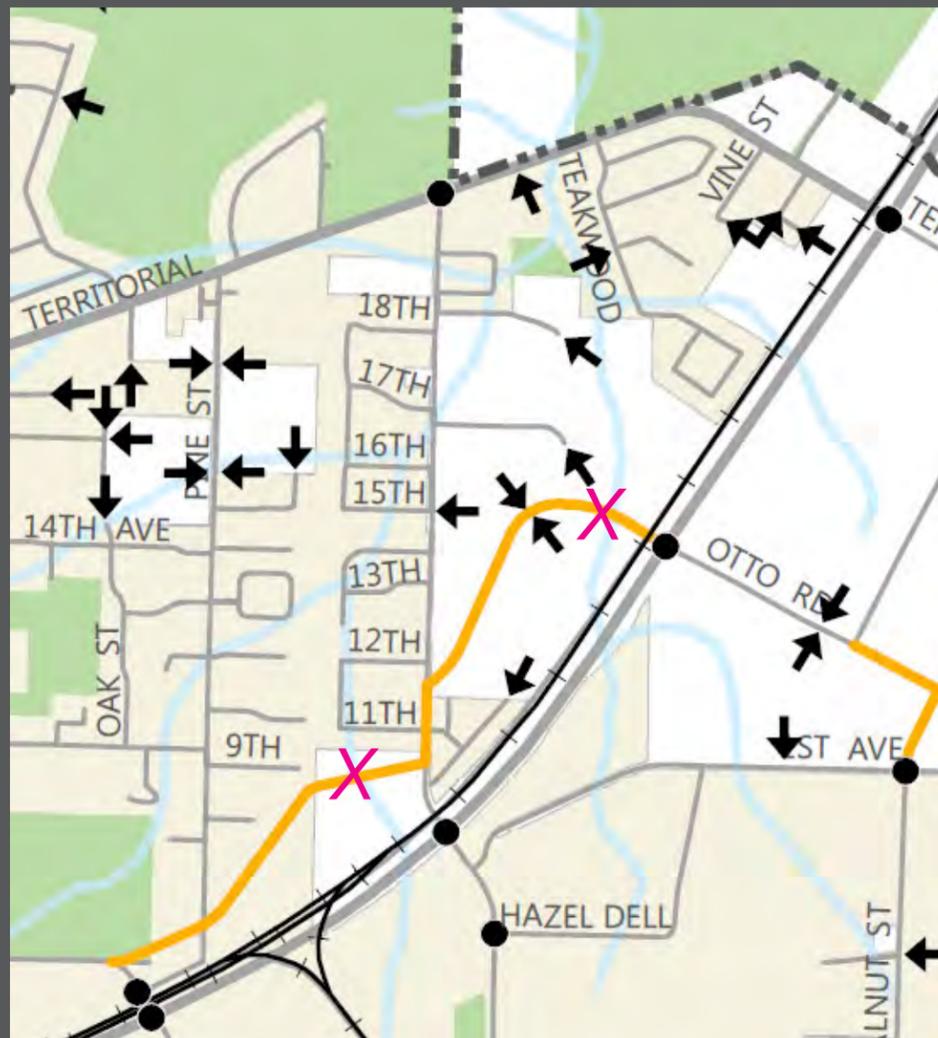


LEGEND	
Existing Zoning	
	Residential R-1
	Residential R-2
	Commercial C-2
Comprehensive Plan Designation	
	Low Density Residential LDR
	Medium Density Residential MDR
	High Density Residential HDR
	Mixed Density Residential



Potential Connections

Connections to existing grid. Not all connections will be required. TSP suggests minimum spacing of pedestrian and bicycle connections at roughly 300', and of vehicle connections at 600', depending on site conditions.



Concept 1

“Grid”

Total Road Acreage: 14.9 acres
(20-25% typical)

Total Park Acreage: 10.3 acres
(Environmental Areas plus 1 acre pocket neighborhood park)

-  **LDR: 45.4 ac**
-  **MDR: 18.8 ac**
-  **HDR: 2.2 ac**





19th Ave Loop
Natural Area

NE 19th Loop

Willow Creek

NE 19th Ave
N Teakwood Street

NE 18th Place

1/2-street
dedication
required

Emergency-Only
Access

N Teakwood Circle

N Ponderosa Street

NE 17th Ave

+/- 15
lots

N Redwood Street

NE 16th Ave

Park

Emergency-Only
Access

NE 15th Ave

Bridge

Pacific RR

NO
PARKING
FIRE LANE
TOW AWAY
ZONE

NO
PARKING
FIRE LANE
TOW AWAY
ZONE

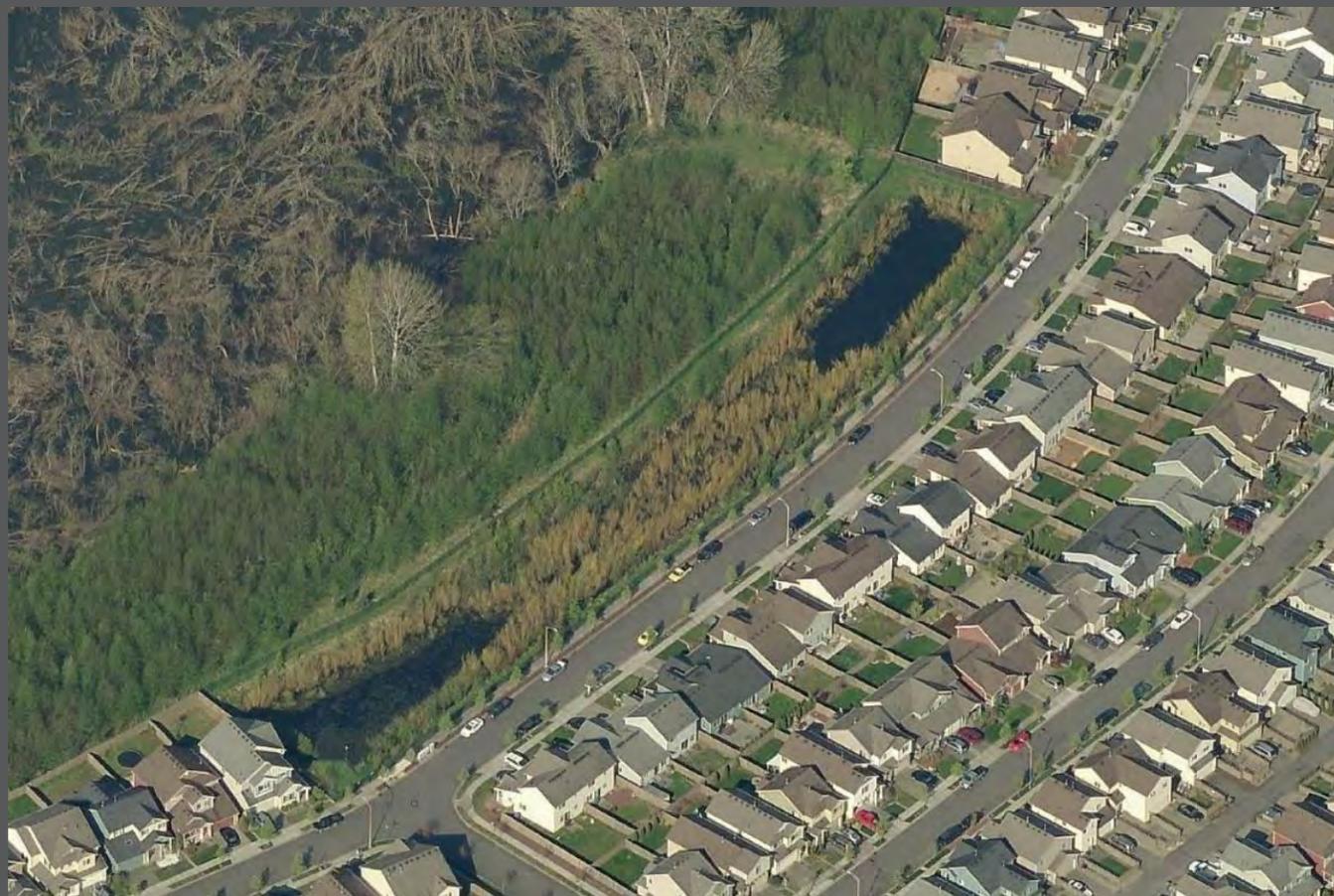
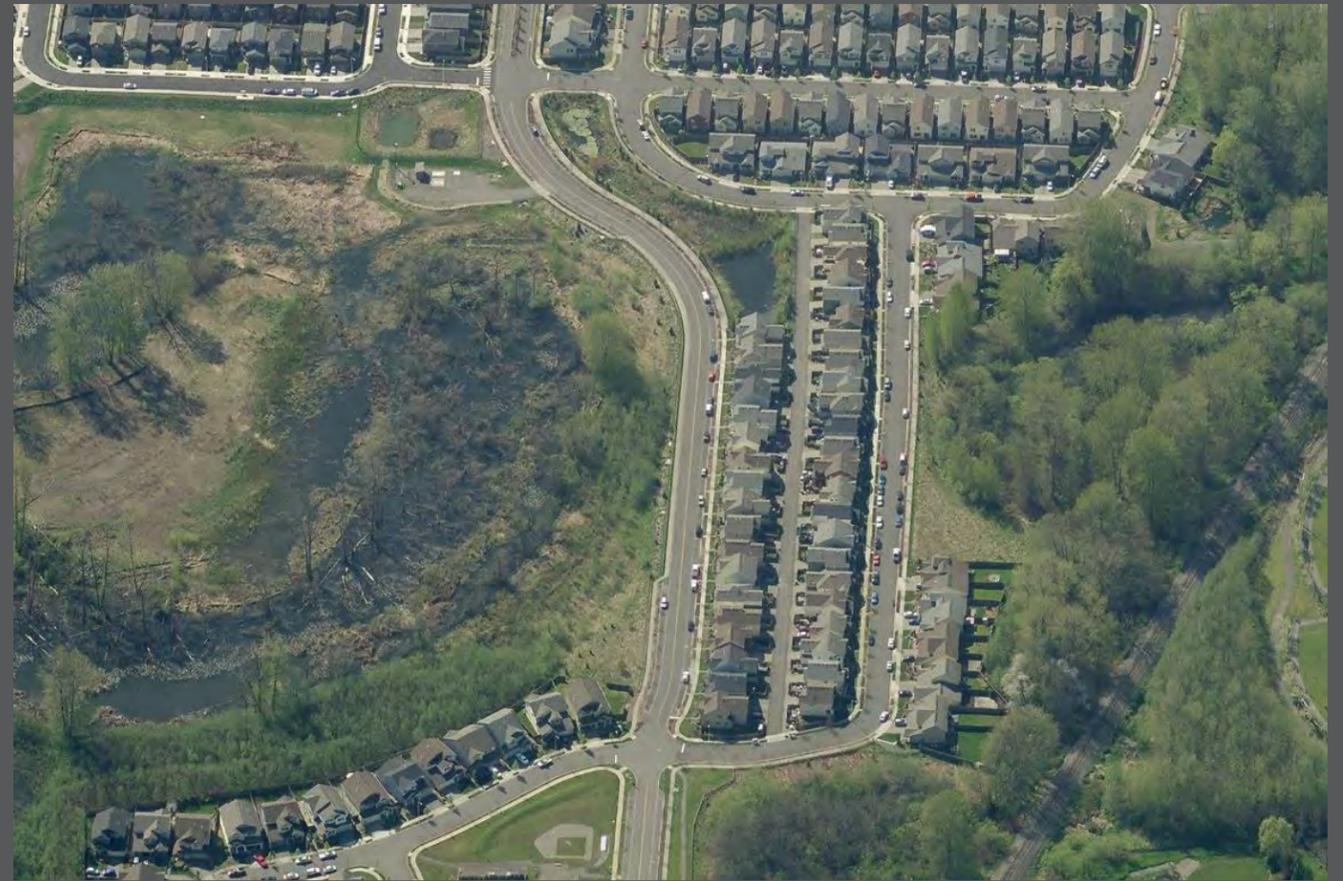
WARNING

NEIGHBORHOOD WATCH
SEE NEIGHBORHOOD WATCH
TO REPORT ANY SUSPICIOUS
ACTIVITY OR LEGAL
CONVICTIONS TO AGENTS

SW FALLEN LEAF ST

NO
PARKING





Concept 2

“Relaxed Grid”

Total Road Acreage: 16.6 acres

Total Park Acreage: 9.9 acres

 **LDR: 45.4 ac**

 **MDR: 18.8 ac**

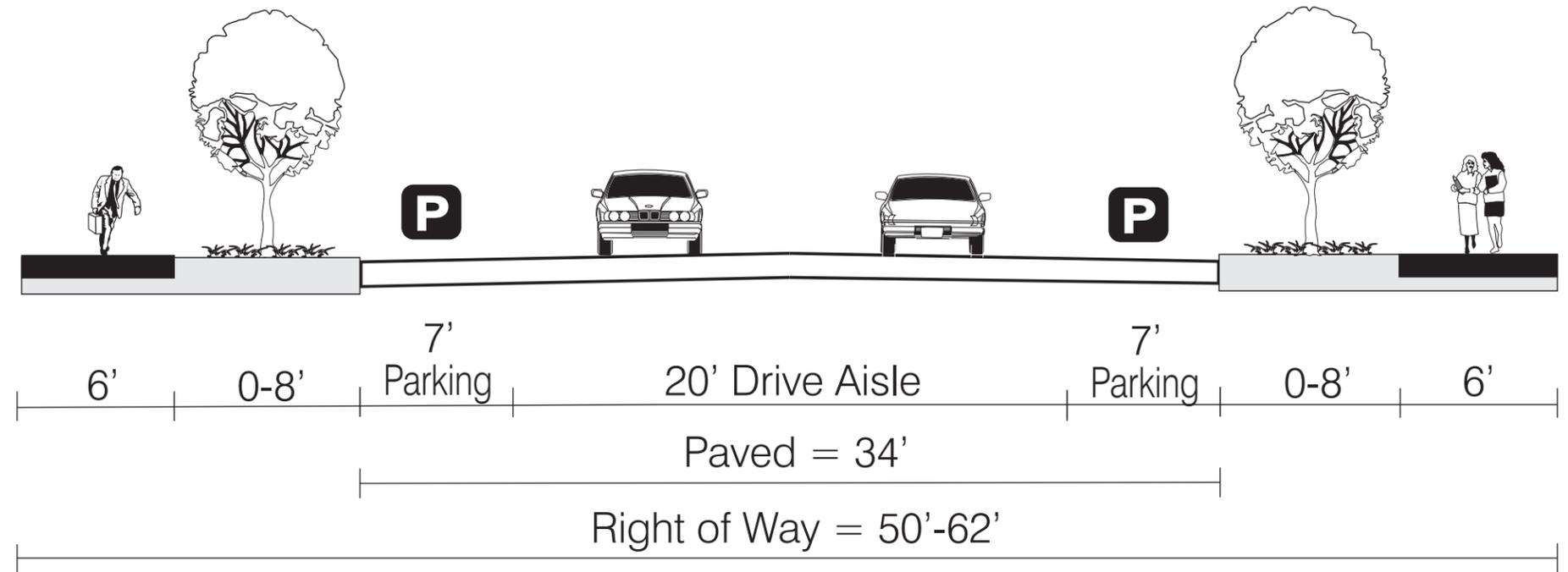
 **HDR: 2.2 ac**



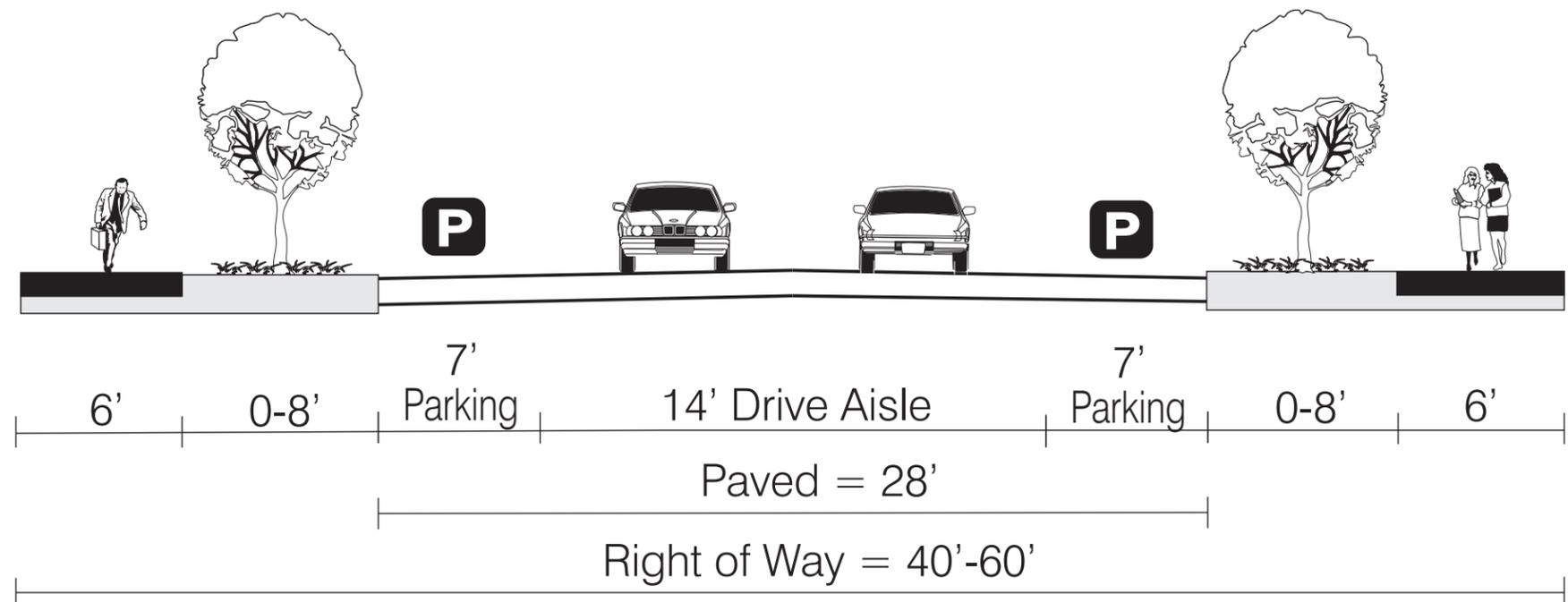


Streets

STANDARD LOCAL STREET



LOW-VOLUME LOCAL STREET (<500 Vehicles Per Day)



Streets

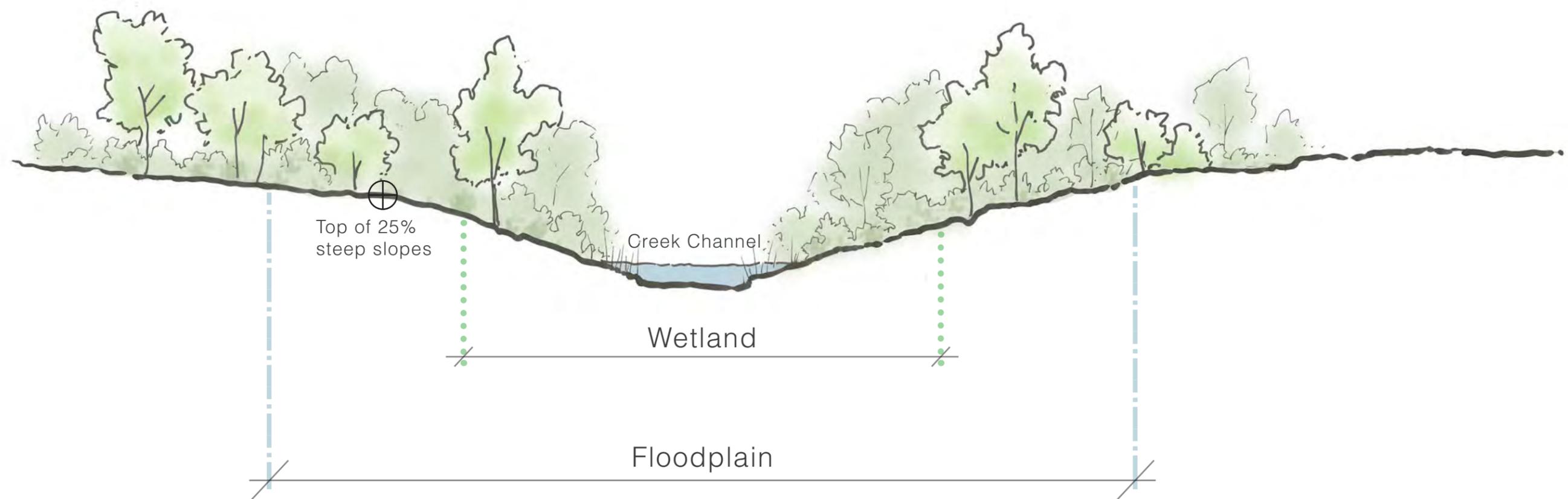


**Alleys reduce
curb-cuts**

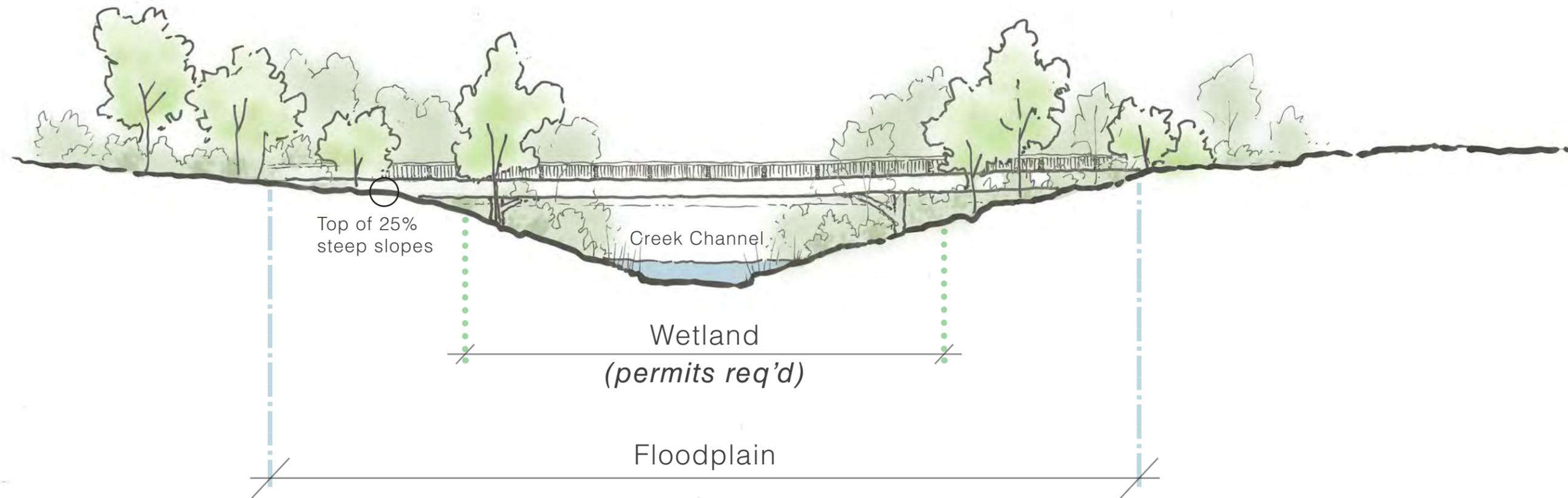
**Add plant
strip & trees**

**Wider
sidewalks**

Willow Creek *(typical condition)*

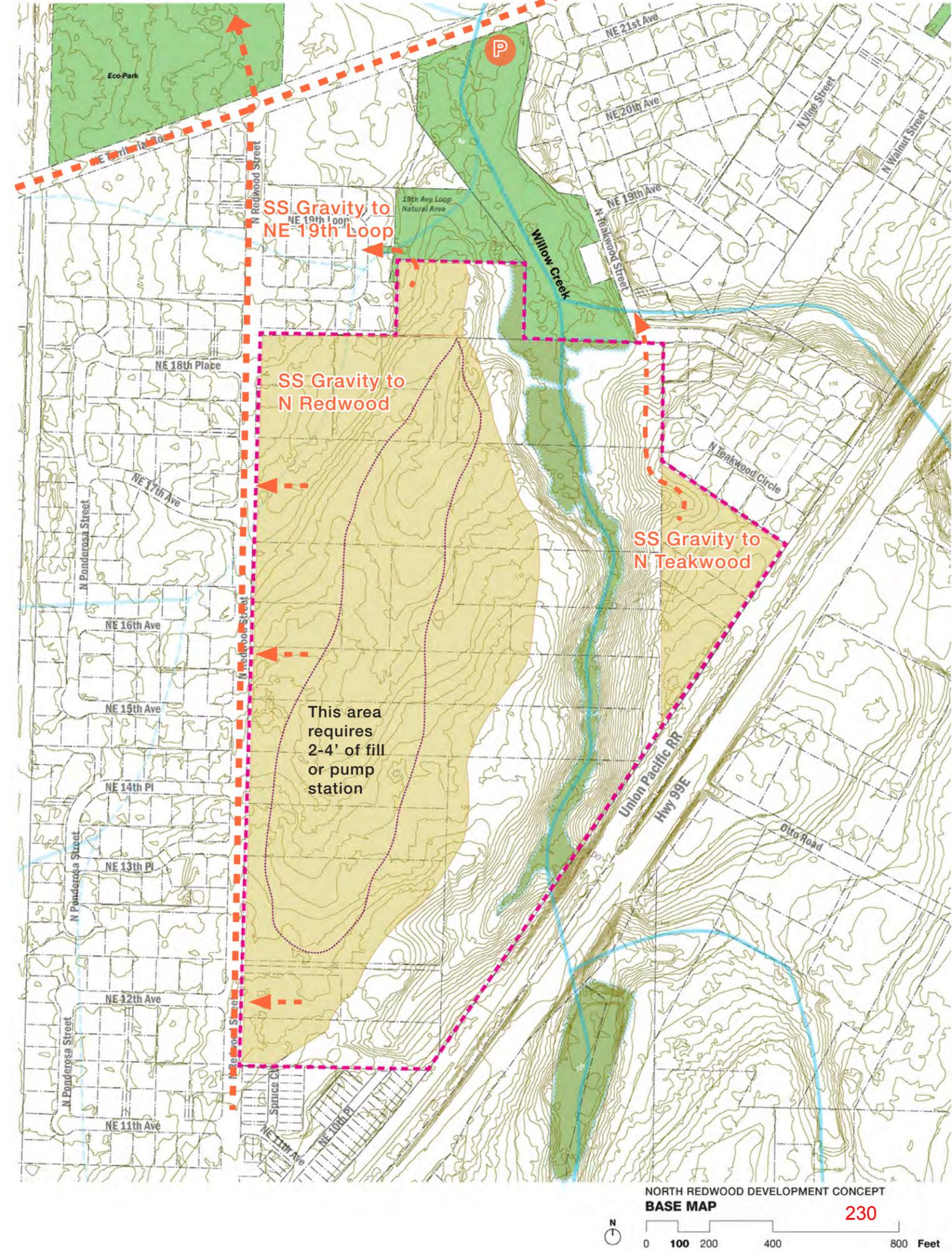


Willow Creek Bridge

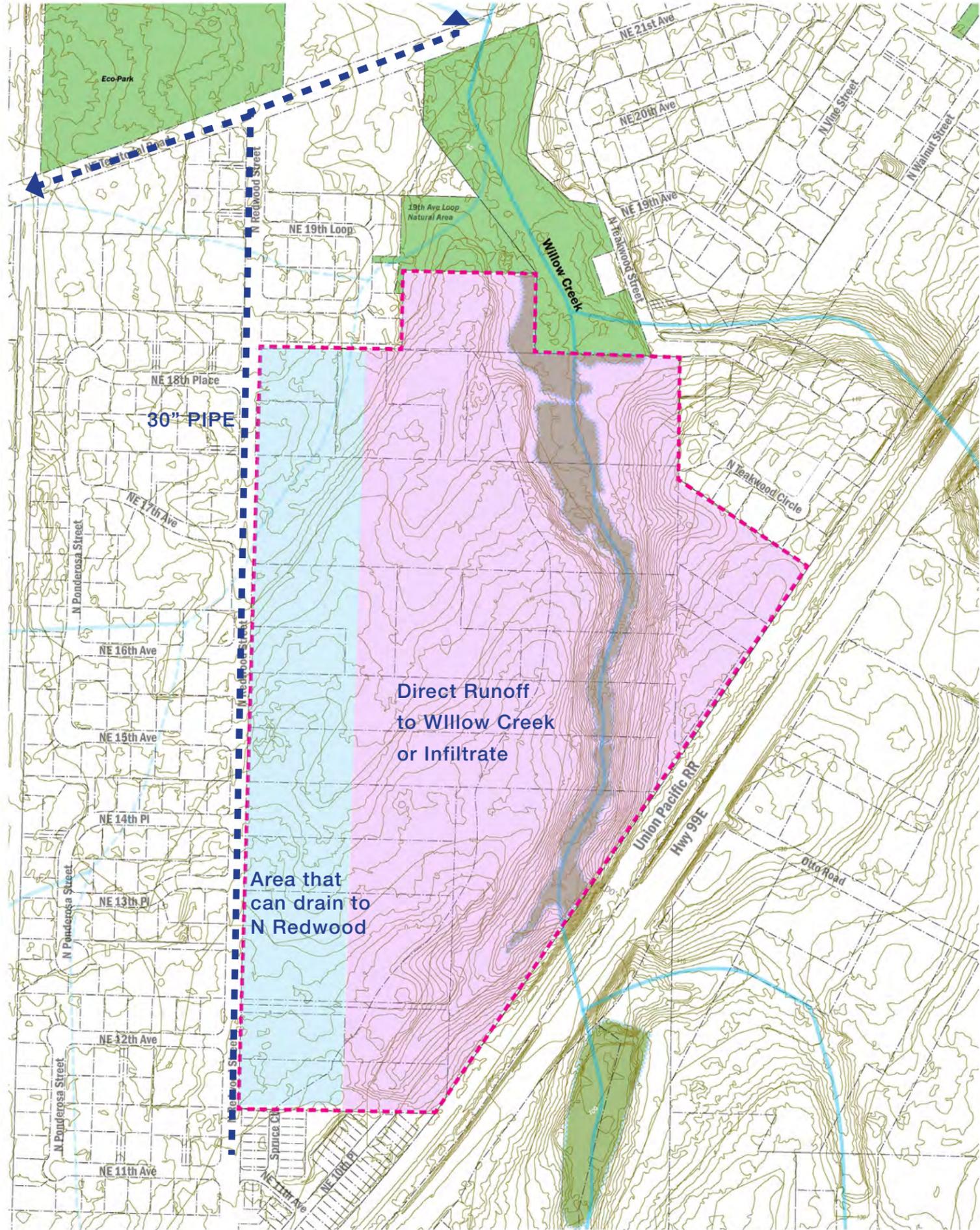


(110' long: Rough cost ~\$1 million)

Sewer



Stormwater Approach

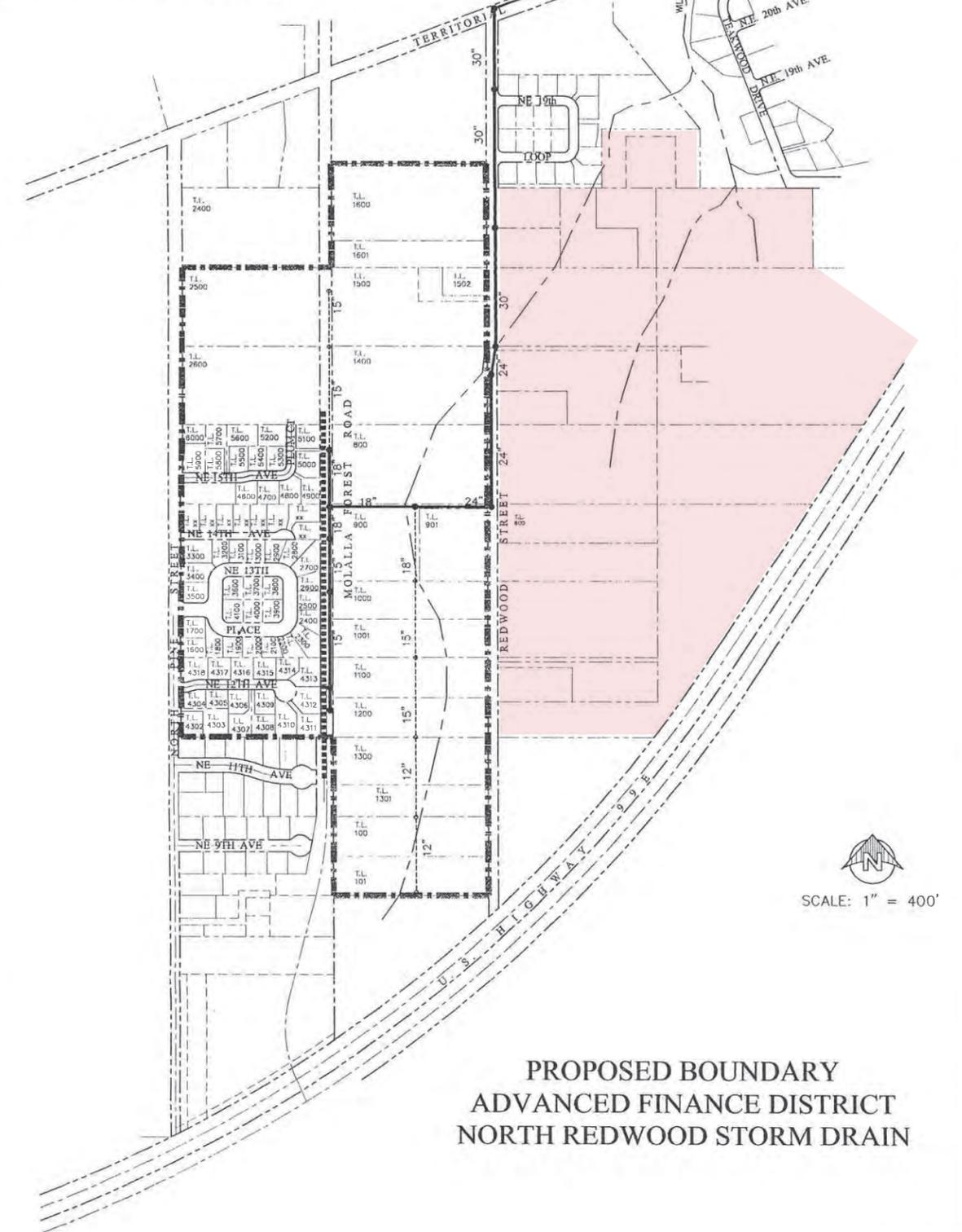


Tools to Share Costs and Benefits of Growth

- **Transfer of Development Rights** –not strongly recommended
- **Density Transfers** - lot size averaging, alternative lot layouts allowed now; additional code provisions possible
- **Density Bonuses** –not currently allowed (except through height bonuses); additional code provisions possible
- **Planned Unit Developments** – allowed now; good tool for consolidated properties
- **Property Consolidation, Master Planning** – Concept Plan helps mimic this process without sale, consolidation of property
- **Advance Financing Districts** – used previously; allows for sharing infrastructure costs (*Canby Code 4.12*)
- **Local Improvement District**

Advance Financing Districts

- LEGEND**
-  ADVANCED FINANCING DISTRICT BOUNDARY (NET AREA = 72.16 Acres)
 -  FIRST PHASE STORM DRAIN MH & PIPES
 -  SECOND PHASE STORM DRAIN MH & PIPES
 -  EXISTING STREAMS
 -  PROPERTY LINES



**PROPOSED BOUNDARY
ADVANCED FINANCE DISTRICT
NORTH REDWOOD STORM DRAIN**

CURRAN-McLEOD, INC.
CONSULTING ENGINEERS

6655 SW. HAMPTON ST., SUITE 210
PORTLAND, OREGON 97223
PHONE (503) 684-3478

An aerial photograph of a residential neighborhood. The image shows several streets with houses, interspersed with large green spaces and a prominent wooded area in the center. The overall scene is a mix of built-up areas and natural greenery.

DISCUSSION

To: Matilda Deas

Topic: TAC #2 Meeting Notes

Date: 04/27/2015

From: Ken Pirie

Project: Canby North Redwood

Project #: 3077

Distribution:
Basecamp

North Redwood Development Concept Plan
Technical Advisory Committee Meeting (#2) Notes
(See consultant presentation on Basecamp)

Committee discussion included:

- **Parks:**
 - Is there enough park land in the plan to fulfil future community needs?
 - City has adequate supply, according to Matilda but maintenance of existing parks is the main challenge. City is exploring options on how to address the maintenance funding gap
 - Providing at least 10 acres in the study area meets standards in the City's park system plan but it would be acceptable if a property owner/developer wished to provide more, as an amenity to residents (provided that those additional acres can be maintained appropriately)
 - Is transit access covered? CAT representative not present at the meeting; there is not a proposed line through the area yet but this can be revisited at a later date once development is proposed. There is a Dial-a-Ride service
- **Concepts:**
 - In Concept 1, trail should be extended south towards Fred Meyer, to the extent practicable; trail north should extend to the cul-de-sac and beyond, through the 19th Avenue Natural Area if possible
 - Committee asked if alleyways were assumed for all blocks. They are optional and possible in most blocks; consultants noted that, while prevalent in many area new communities, they have yet to be built in the Canby area so there may be a process of educating home builders and buyers to the benefits
 - The access options were discussed; a cul de sac off Teakwood would serve approximately 15 lots. It is not cost-effective to build an expensive bridge across Willow Creek to serve these lots. Fire dept representative present indicated that he would be supportive of an emergency-only access point across the Union Pacific rail line, connecting to a cul-de sac serving lots east of Willow Creek.
 - He would also be supportive, if a bridge was built across the creek, of an emergency-only access into the Teakwood subdivision.

- **Stormwater:**
 - Future stormwater treatment facility is planned north of Territorial
 - DSL representative at meeting stated that untreated runoff cannot be directed into a waterway like Willow Creek or adjacent wetlands
 - Will require pre-treatment within the new neighborhoods, according to Clean Water Services standards.
 - City and DSL to coordinate further to describe regulatory parameters of stormwater on site.

end

To: Matilda Deas

Topic: SAC #2 Meeting Notes

Date: 04/27/2015

From: Ken Pirie

Project: Canby North Redwood

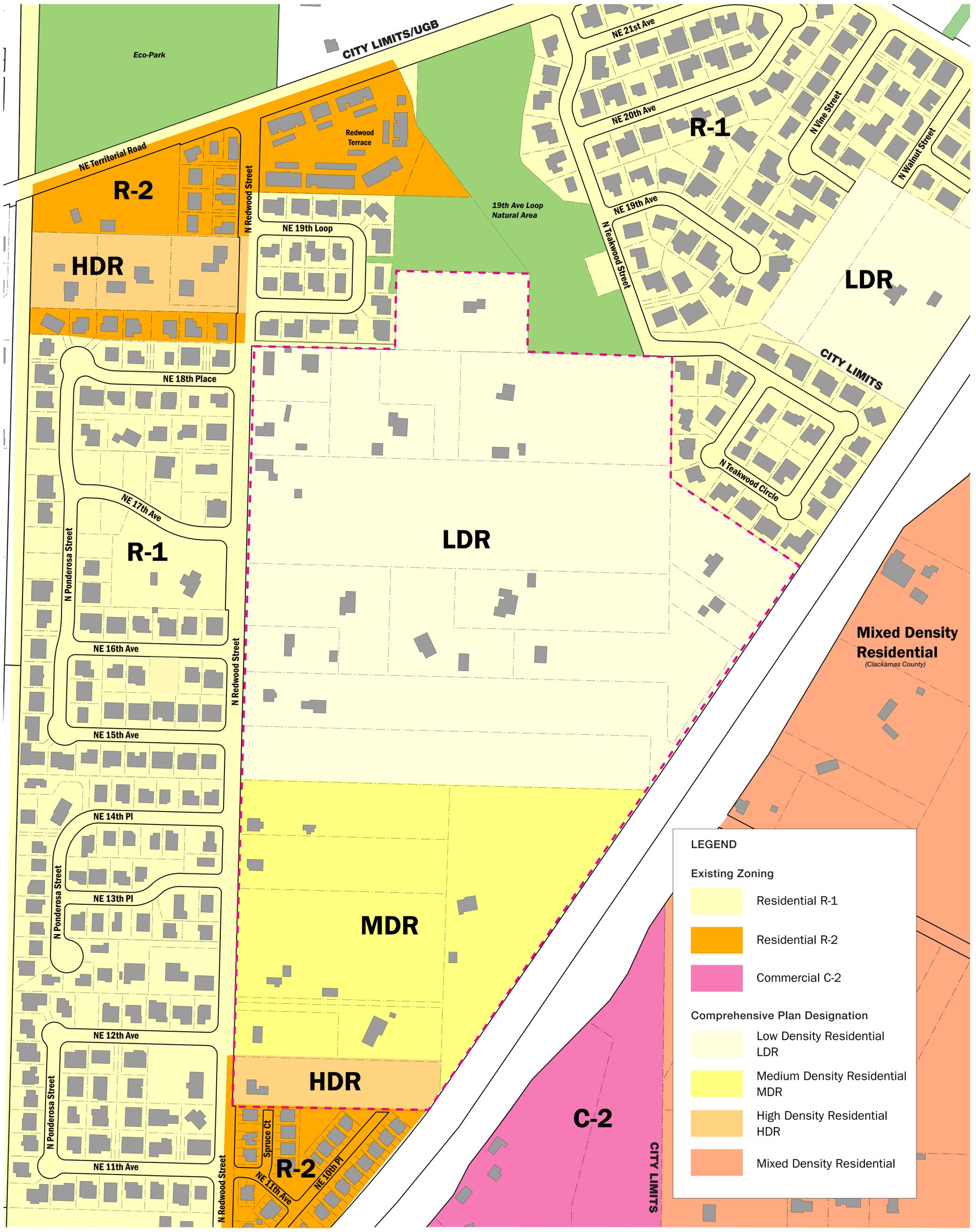
Project #: 3077

Distribution:
Basecamp

North Redwood Development Concept Plan
Stakeholder Advisory Committee Meeting (#2) Notes
(See consultant presentation on Basecamp)

- **Concepts:**
 - Is it efficient to include one-sided roadways in the plan, facing open space? If there are homes on both sides, what is the condition to the rear of the lots, with fences? It may be more secure to have full visibility from a public street into the wetland/park area, as opposed to backyards
 - Discussion of access options. With emergency access across the railroad, will probably need to restrict pedestrian and bicycle access, for rail safety.
 - Fire Dept representative noted that stopped trains block north-south access in Canby about 10 times per year. Fire Dept can use Logging Road trail to avoid this in an emergency
 - Concept 2, the Relaxed Grid, was preferred, due to lower impacts and costs without major bridge. The bike/ped bridge in this option would benefit all residents
 - Consider buffering homes along railroad east of Willow Creek. Could you shift density away from that area?
 - Avoid offset roads—try to line up new roads in the area with existing roads west of North Redwood to consider sight distances.
 - Is there flexibility for block layouts for property owners? Yes, the ones shown are simply prototypes.
 - Make sure the final plan is clear that future developers can propose alternative plans within the overall framework
 - Will there be more detail on intersection design at a later stage? Yes.
 - Will there be annexation before development? Matilda answered that yes, this plan is required before voter-approved annexation. The City will use this plan as a template, but will allow flexibility. Key things that will be less flexible include major road locations (not all roads), stormwater management approach, parks and open space locations and a phasing approach that ensures that no property owners are restricted from future development
 - With this plan, there may be possibility of non-contiguous annexations, again, if no property owners are restricted from future development
 - Be sure to involve Oregon Dept of Fish and Wildlife on future plans for Willow Creek—lot of restoration required
 - How will City maintain open spaces/parks?

end



LEGEND

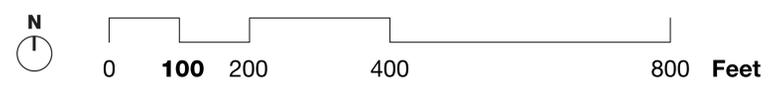
Existing Zoning

- Residential R-1
- Residential R-2
- Commercial C-2

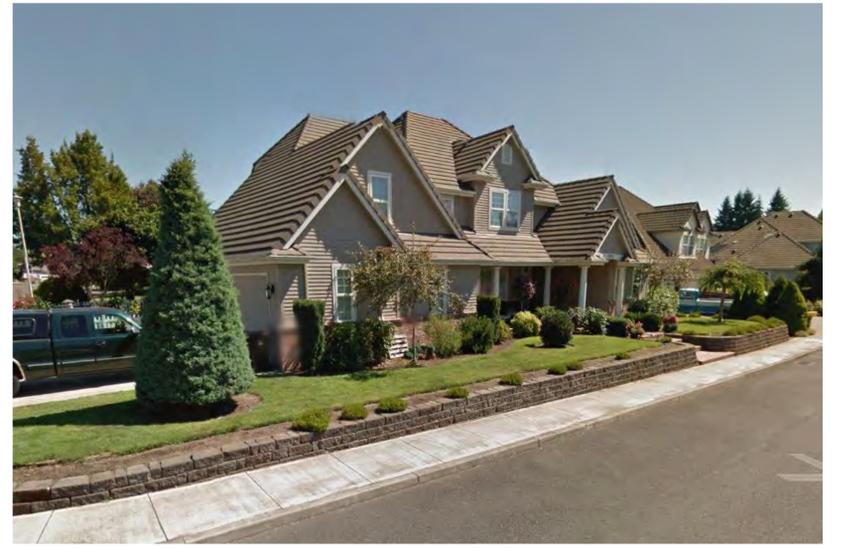
Comprehensive Plan Designation

- Low Density Residential LDR
- Medium Density Residential MDR
- High Density Residential HDR
- Mixed Density Residential

NORTH REDWOOD DEVELOPMENT CONCEPT ZONING



ZONING/COMP PLAN



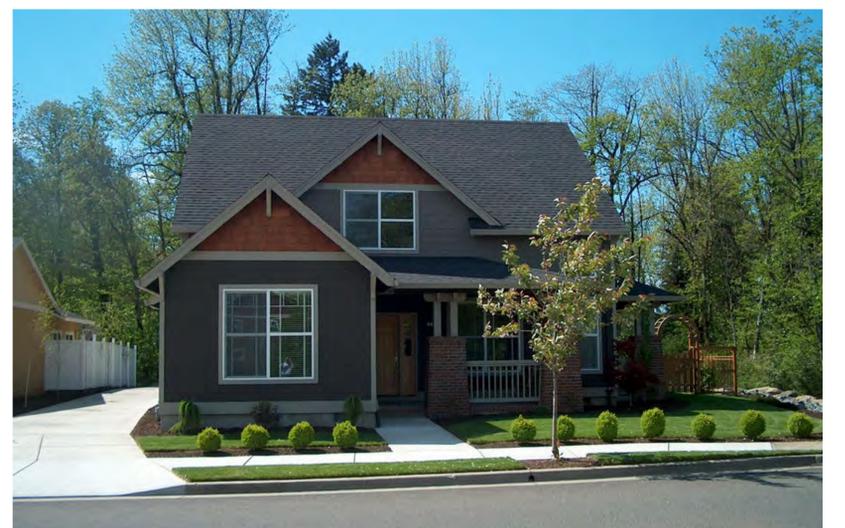
LDR

Low Density Residential 7,000-10,000 square foot lots (4-6 du/acre)



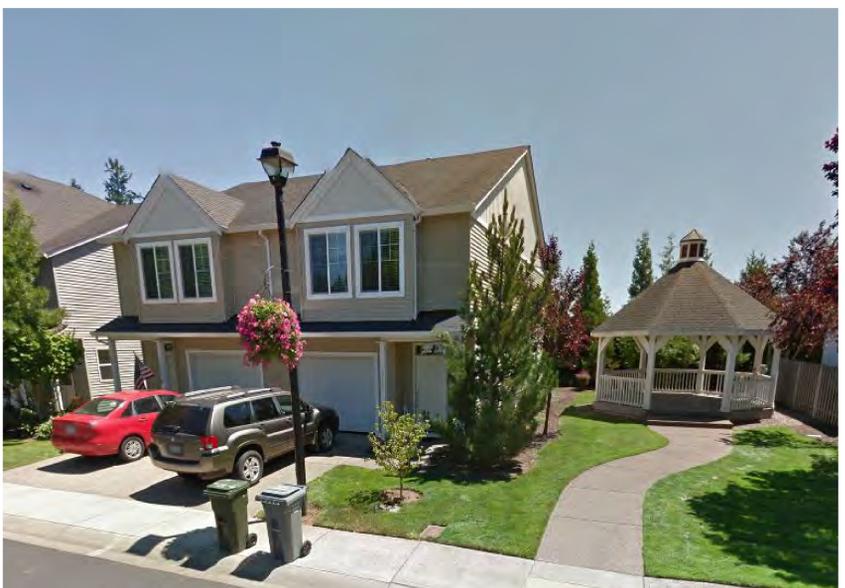
MDR

Medium Density Residential 5,000-6,500 square foot lots (7-9 du/acre)



MDR

5,000-6,500 square foot lots



HDR

High-Density Residential 3,000 square foot lots (14 du/acre)

HOUSING CHOICES

A walkable, cohesive neighborhood



Clear, connected and safe streets

Connect trails to natural areas and protect Willow Creek

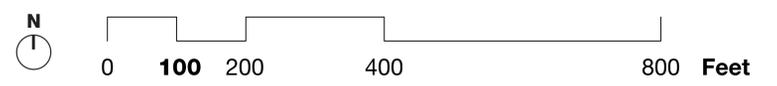


Public parks & open spaces

NEIGHBORHOOD DESIGN PRINCIPLES



NORTH REDWOOD DEVELOPMENT CONCEPT
BASE MAP



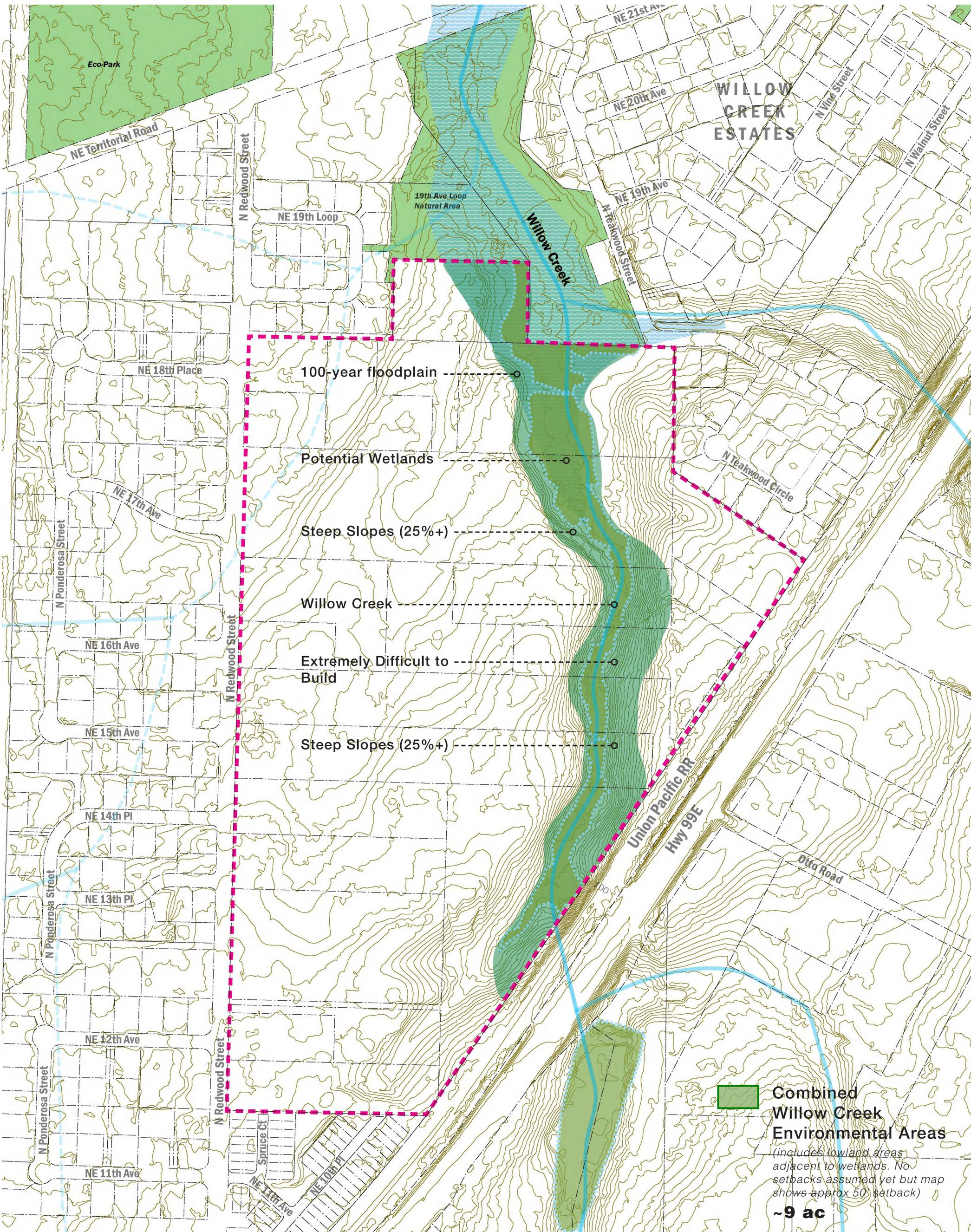


CANBY PARKS

NORTH REDWOOD DEVELOPMENT CONCEPT
CONTEXT MAP



0 300 600 1200 2400 Feet



WILLOW
CREEK
ESTATES

19th Ave Loop
Natural Area

100-year floodplain

Potential Wetlands

Steep Slopes (25%+)

Willow Creek

Extremely Difficult to
Build

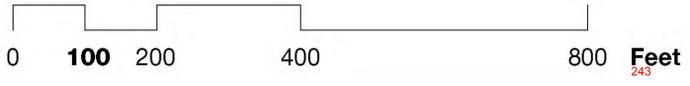
Steep Slopes (25%+)

**Combined
Willow Creek
Environmental Areas**

*(includes lowland areas
adjacent to wetlands. No
setbacks assumed yet but map
shows approx 50' setback)*

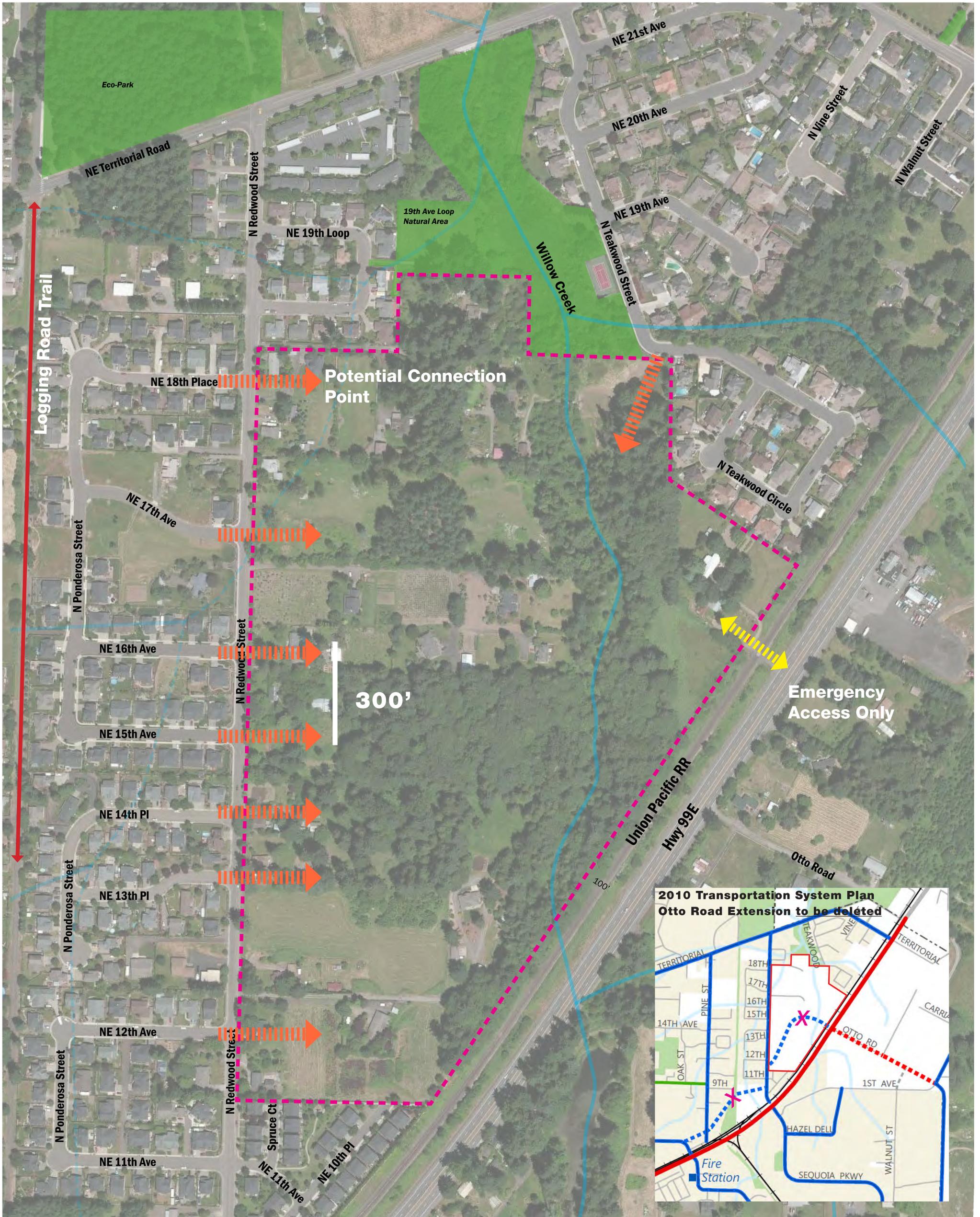
~9 ac

**NORTH REDWOOD DEVELOPMENT CONCEPT
BASE MAP**

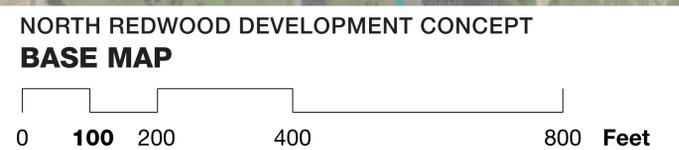




WILLOW CREEK PARK and NATURAL AREA

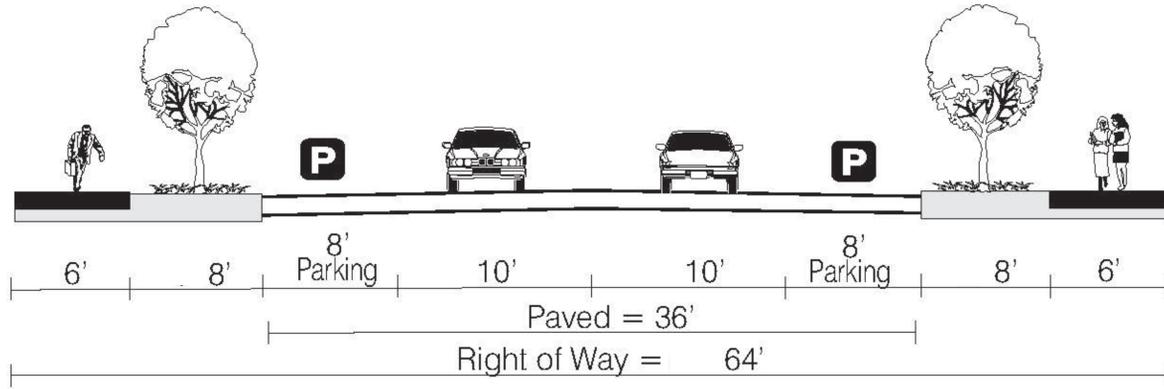


 **Connections to existing grid. Not all connections will be required. TSP suggests spacing of pedestrian connections at roughly 300', and of vehicle connections at 600', depending on site conditions.**

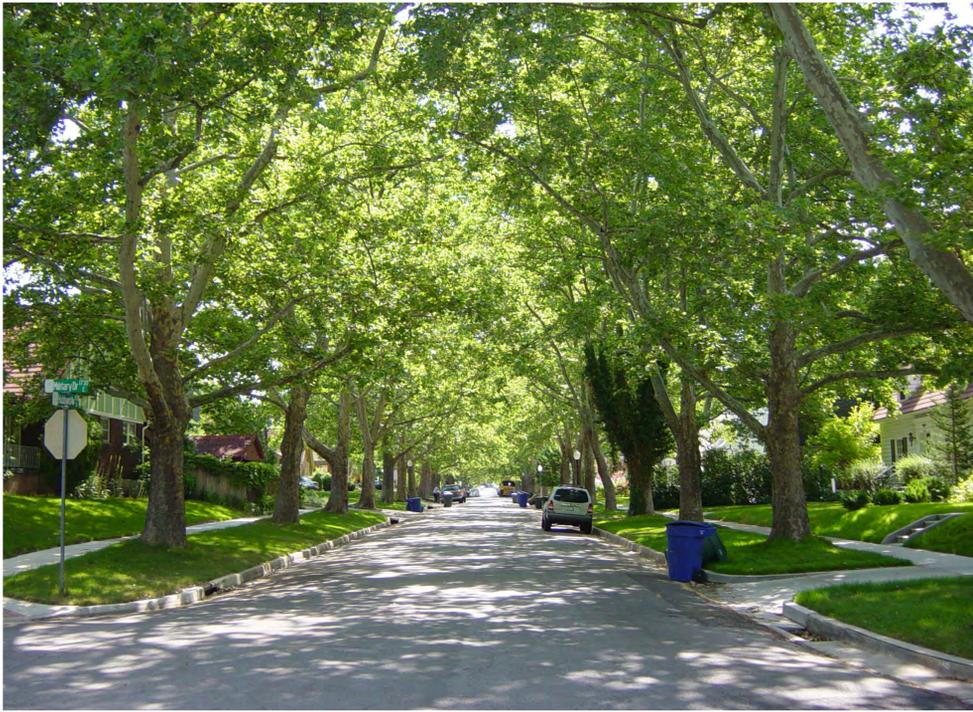
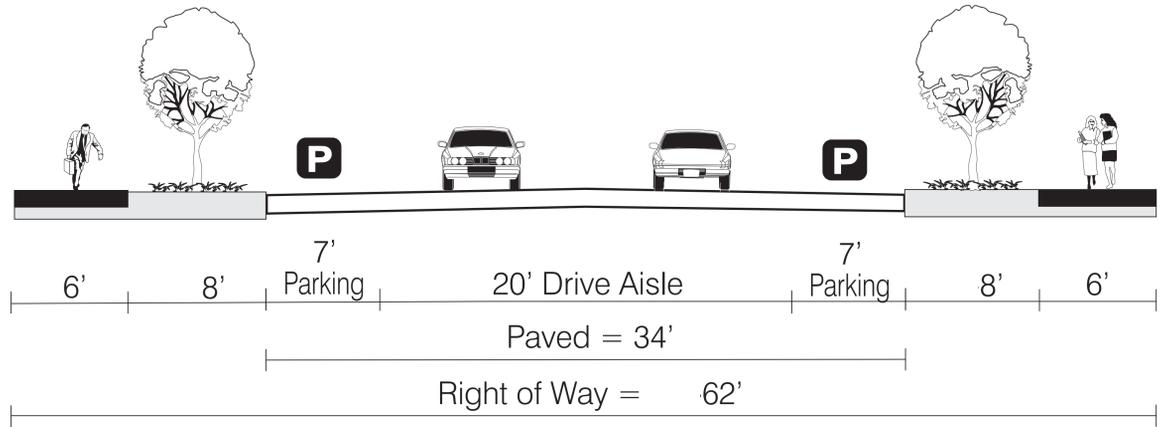


CONNECTIONS

NEIGHBORHOOD ROUTE



STANDARD LOCAL STREET



STREETS & TRAILS



Swales



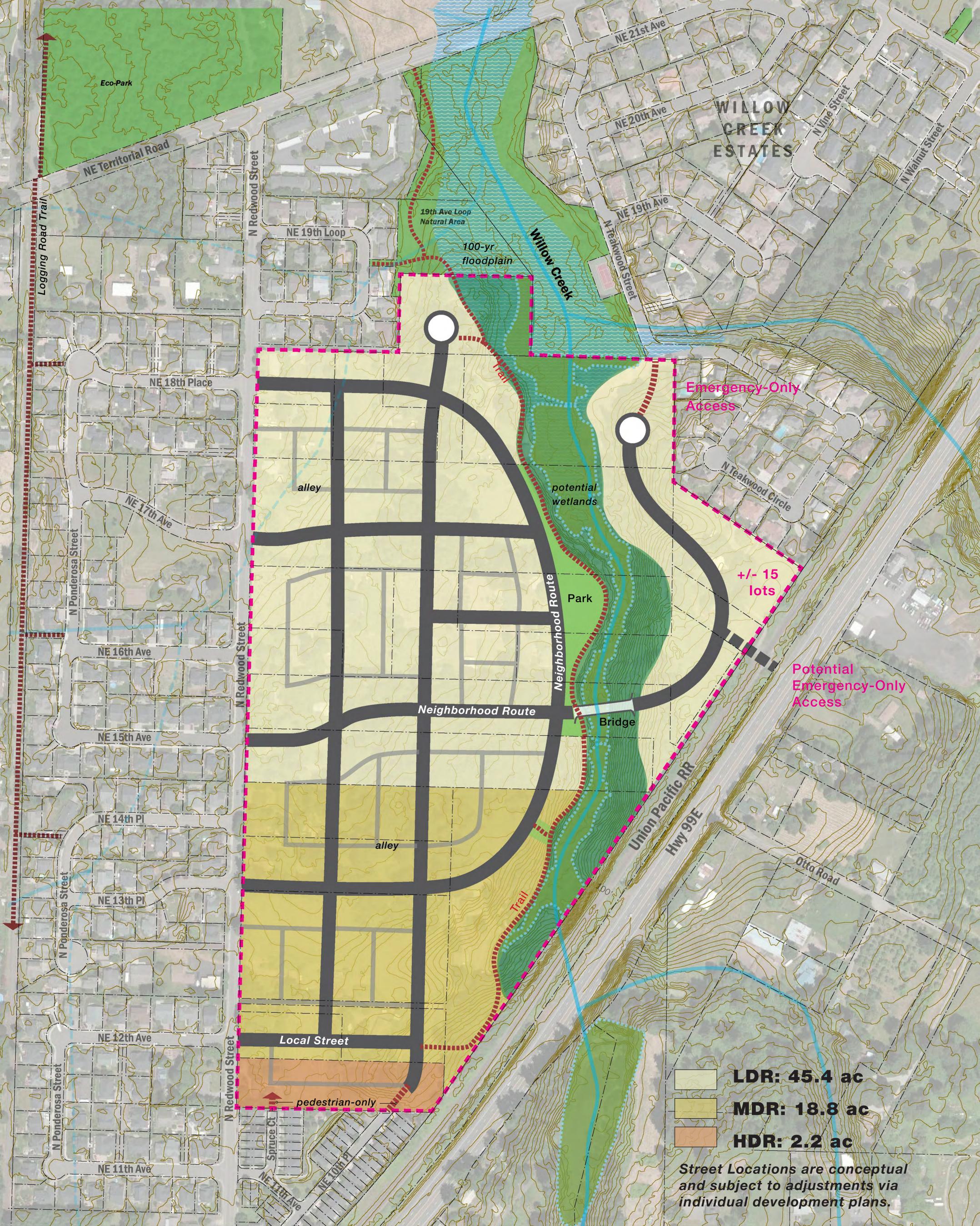
Detention & Retention Ponds



Water Quality Planters



LOW IMPACT STORMWATER FACILITIES



CITY GRID PLAN

NORTH REDWOOD DEVELOPMENT CONCEPT
BASE MAP

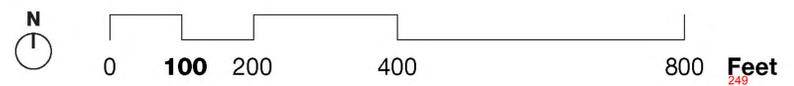


0 100 200 400 800 Feet



RIVERSIDE PLAN

NORTH REDWOOD DEVELOPMENT CONCEPT
BASE MAP



North Redwood Development Concept Plan

Project Purpose

The North Redwood Development Concept Plan will provide a preferred alternative for development of this site with multiple property owners. The project will develop conceptual infrastructure and financing options for achieving urban housing densities while protecting the site's natural resources.

Project Study Area

The Project Study Area is 66 acres and is bounded by OR99E and the Union Pacific Railroad on the east and south, NE Territorial Road on the north, and N Redwood Street on the west (see map on back). The Project Study Area consists of 23 tax lots, varying in size between one and ten acres with 18 property owners, including a single family that owns 7 lots.

Zoning

The Project Study Area's current zoning is Rural Residential Farm Forest 5-Acre District (RRFF-5) governed by Clackamas County. The Project Study Area is located in unincorporated Clackamas County inside the Canby Urban Growth Boundary and is within the boundaries of a DCP area (Development Concept Plan area). **Upon voter approved and owner-requested annexation**, developments located within a designated DCP area are required to have a DCP adopted by the City Council prior to granting a change to city zoning.

Natural Resources

The Project Study Area has significant natural resources including Willow Creek, a year-round flowing creek that empties a mile north into the Willamette River. Willow Creek is a designated Goal 5 resource. It is anticipated that Willow Creek will receive some of the Project Study Area's storm water runoff and carry it to the future, City owned tertiary wetland storm water facility to the north. It is anticipated that protection of the Creek would occur as part of the mandatory park land dedication provision under City code.

Project Objectives

To develop a DCP that:

- Identifies a mix of residential uses and densities that complement the existing character of the surrounding area;
- Identifies a comprehensive multi-modal transportation network and circulation plan that provides connections to the existing transportation system and promotes alternative modes of transportation;
- Identifies infrastructure to serve future development and provides mechanisms for an equitable distribution of cost among property owners in the Project Study Area;
- Protects the significant natural resources in the Project Study Area while providing for storm water management and recreational amenities;
- Includes a financing plan focusing on the provision of public infrastructure, including phased development strategies

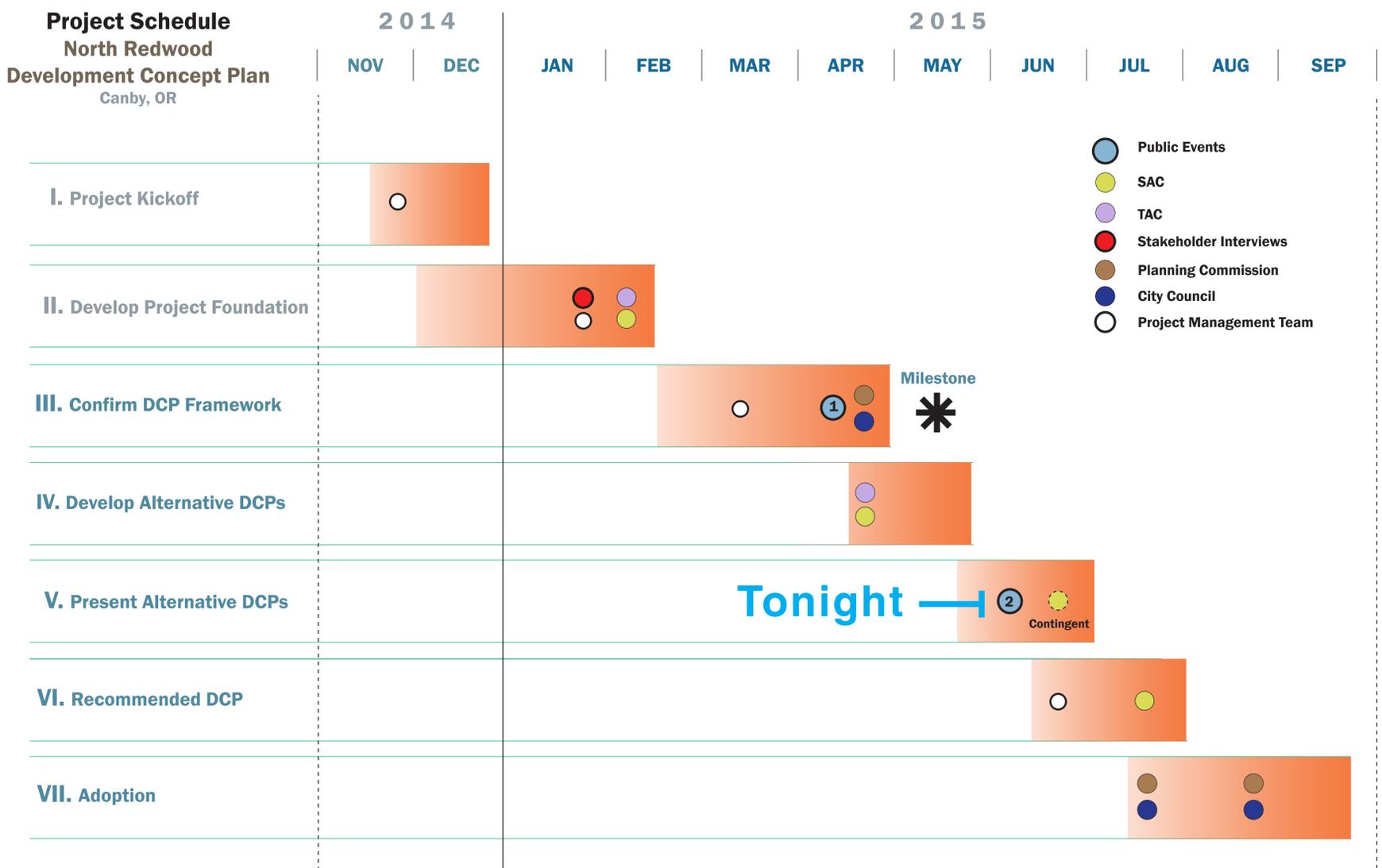
Public Involvement

The Public Involvement process for North Redwood will allow the community an opportunity to provide input into the planning process. Meaningful involvement means that:

- Potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health;
- The public's contribution can influence the regulatory agency's decision;
- The concerns of all participants involved will be considered in the decision making process; and
- The decision makers seek out and facilitate the involvement of those potentially affected.

Upcoming Meetings

Stakeholder Advisory Committee Meeting #3, July 14th
City Council and Planning Commission, August 5, 2015
Project Adoption, end of August 2015



SCHEDULE

North Redwood

Development Concept Plan

Public Event #2

June 23, 2015



What's Happened So Far

- **Existing Conditions Inventory**
- **Best Development Practice Analysis**
- **Stakeholder Interviews**
- **TAC and SAC #1** (Feb 9)
- **Public Event #1** (Apr 14)
- **City Council/Planning Commission** (Apr 15)
- **TAC and SAC #2** (April 27)

Study Area



NORTH REDWOOD DEVELOPMENT CONCEPT
CONTEXT MAP
 N
 0 300 600 1200 2400 Feet
 254

What We've Heard

- **Stormwater**
- **Parks funding**
- **Sequence of development**
- **Annexation questions**
- **Teakwood and RR connections**

Concept Plan Criteria

- 1. Integrated with existing city fabric of Canby**
- 2. A walkable, cohesive neighborhood**
- 3. All parcels integrated in plan**
- 4. Distribute impacts equitably to individual parcels**
- 5. Allow for different owners' timing of development**
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- 14. Meet regulations**

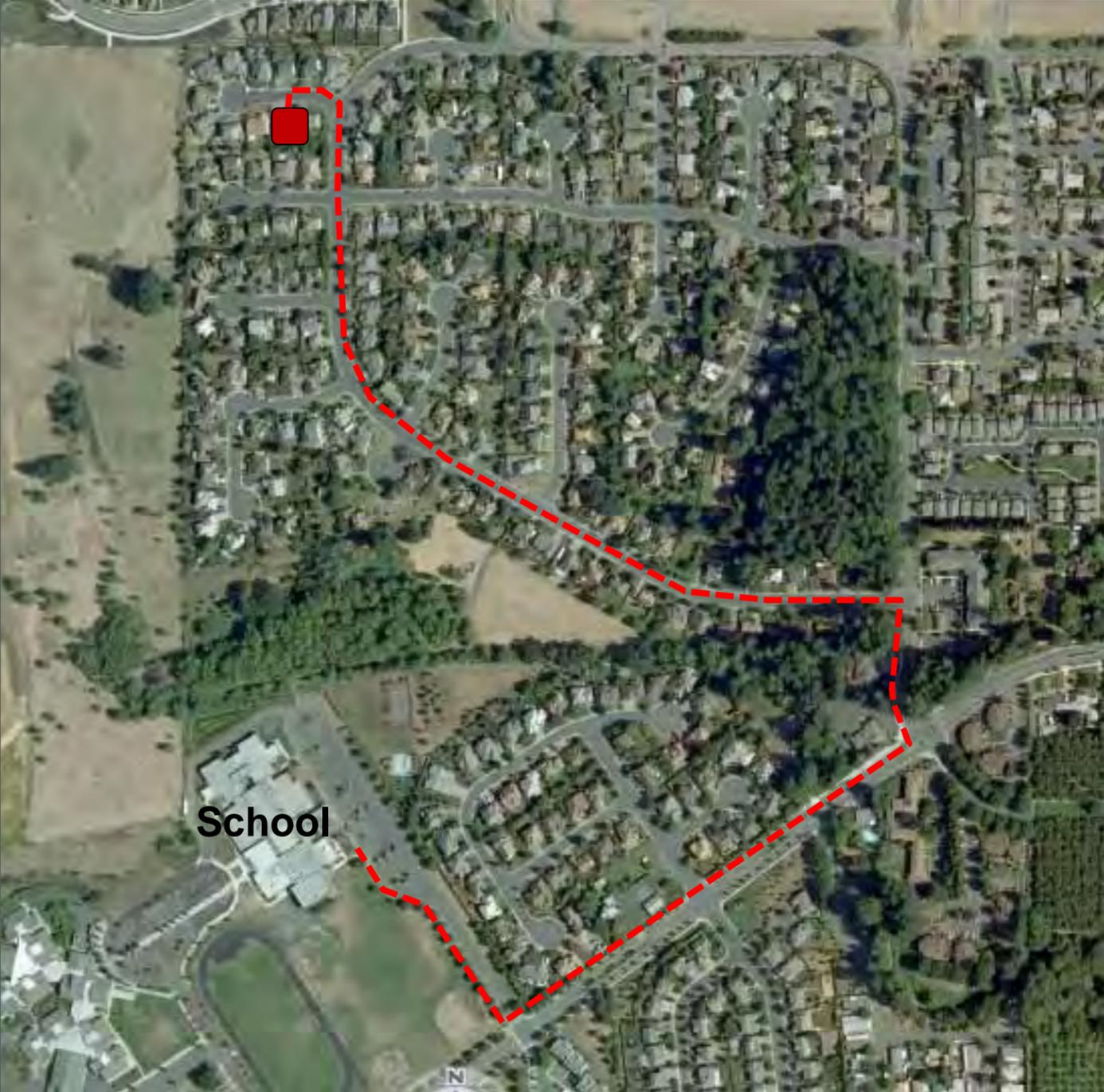
NEIGHBORHOOD DESIGN PRINCIPLES



Walkable



NEIGHBORHOOD DESIGN PRINCIPLES



Disconnected



Connected and Safe

NEIGHBORHOOD DESIGN PRINCIPLES



Integrated Stormwater Treatment



Access to Open Space & Nature

NEIGHBORHOOD DESIGN PRINCIPLES

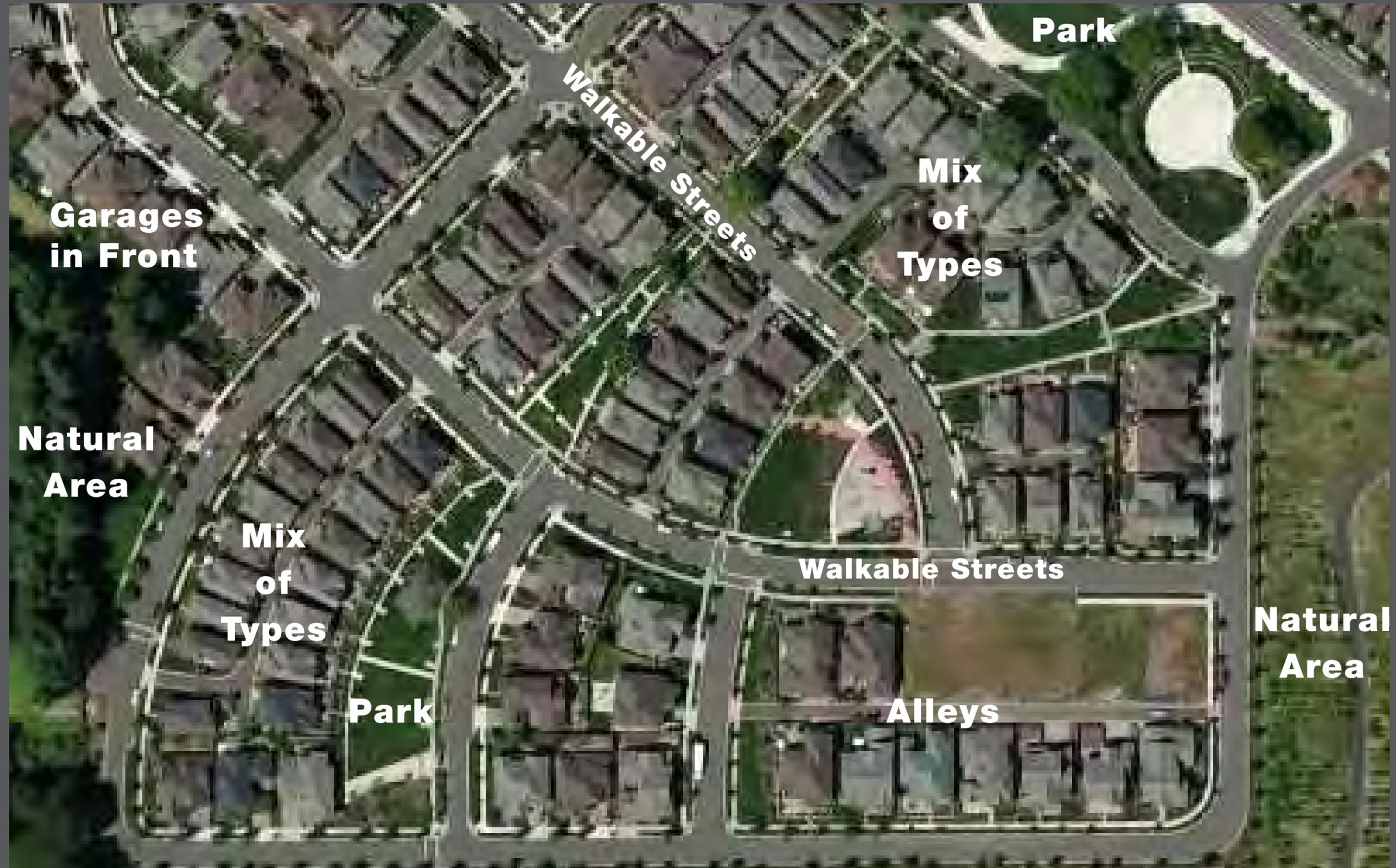


Trees Enhance Livability



Sense of Community

NEIGHBORHOOD DESIGN PRINCIPLES



NEIGHBORHOOD DESIGN PRINCIPLES



Large Lot (7,000-10,000sf)



Medium Lot (5,000-6,500sf)



Small Apartment or Townhouse



Large Lot (7,000-10,000sf)



Medium Lot (5,000-6,500sf)



Duplex/Small Lot (3,000sf)

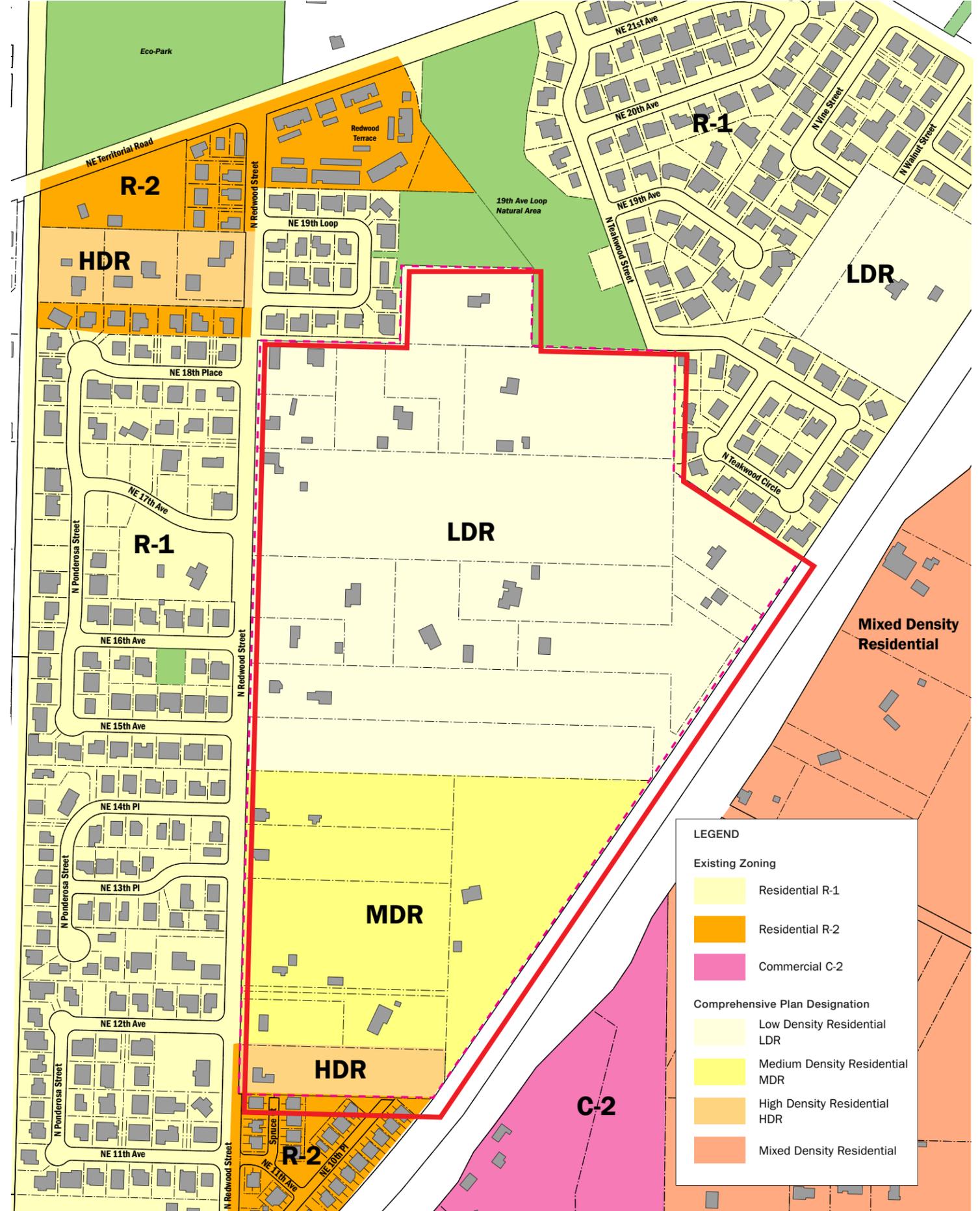
Provide Housing Choices

Zoning

LDR: 45.4 ac

MDR: 18.8 ac

HDR: 2.2 ac



LEGEND

Existing Zoning	
[Light Yellow Box]	Residential R-1
[Orange Box]	Residential R-2
[Pink Box]	Commercial C-2
Comprehensive Plan Designation	
[Pale Yellow Box]	Low Density Residential LDR
[Yellow Box]	Medium Density Residential MDR
[Light Orange Box]	High Density Residential HDR
[Darker Orange Box]	Mixed Density Residential

Environmental Factors



>25% Slope:
~2 ac

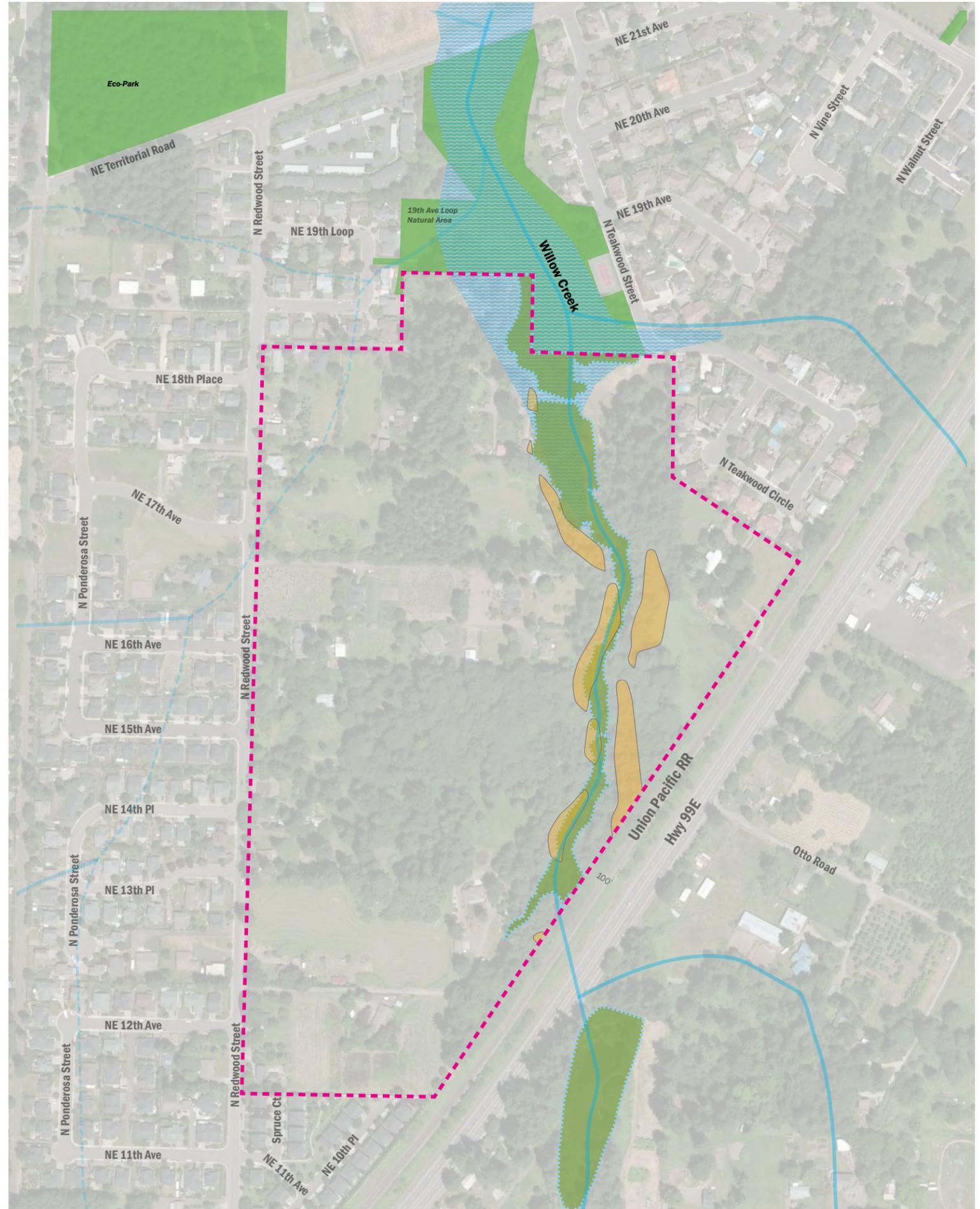


Potential Wetland
~3 ac



FEMA 100-yr Flood
(not incl wetland)
~1.3 ac

Additional lowlands
~1 ac



Willow Creek

(typical condition)

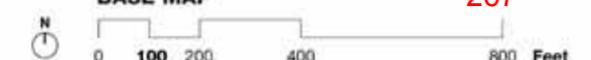
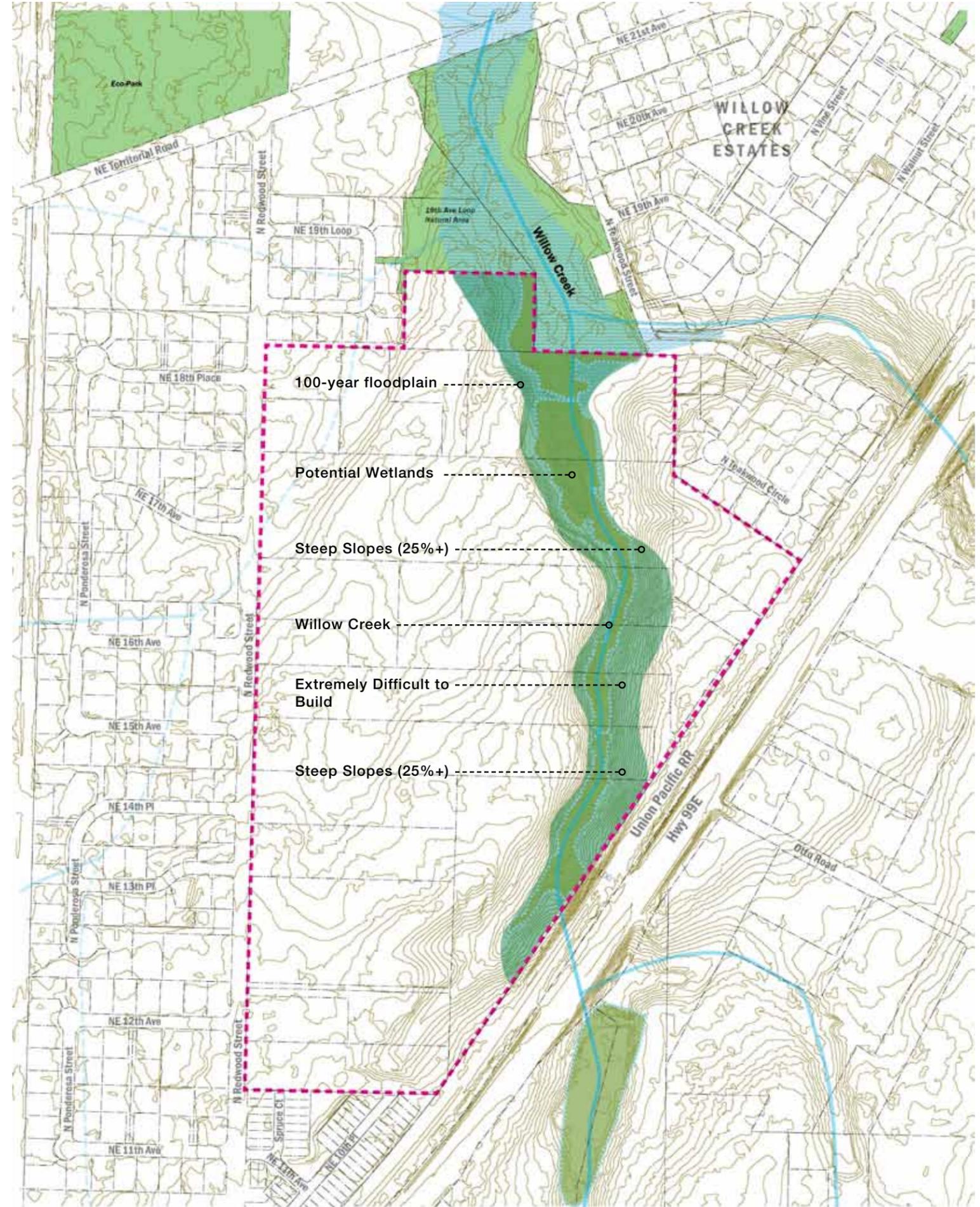


Environmental Factors



Combined Willow Creek Environmental Areas
(includes lowland areas adjacent to wetlands. No setbacks assumed yet but this area is approx 50' setback)

~9 ac



Park Formula

***(Maximum units in a plat) x (persons/unit) x 0.01
(acreage to be dedicated)***

LDR/R-1: 36.3 ac (total acres minus streets)

36.3 ac / 7000 sf minimum lot size = 226 units

226 x 2.7 people per unit = 610

610 x 0.01 = 6.1 park acres.

MDR/ R1.5: 15 ac (total acres minus streets)

15 ac / 5000 sf minimum lot size = 131 units

131 x 2.7 people per unit = 353

353 x 0.01 = 3.5 park acres.

HDR R-2: 1.8 ac (total acres minus streets)

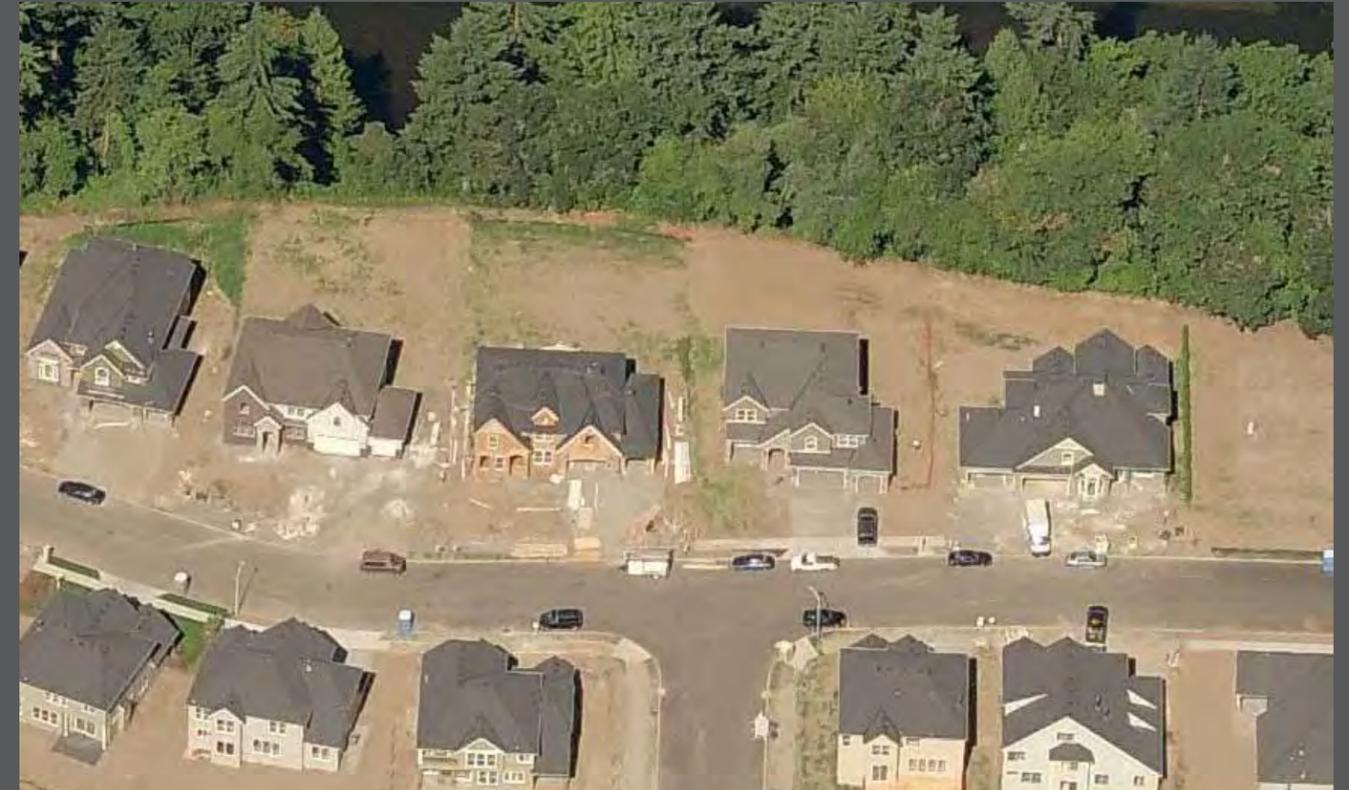
1.8 ac / 3000 sf minimum lot size = 26 lots

28 x 2.7 people per unit = 71

58 x 0.01 = 0.7 park acres.

POTENTIAL PARK ACREAGE: 10.3 acres

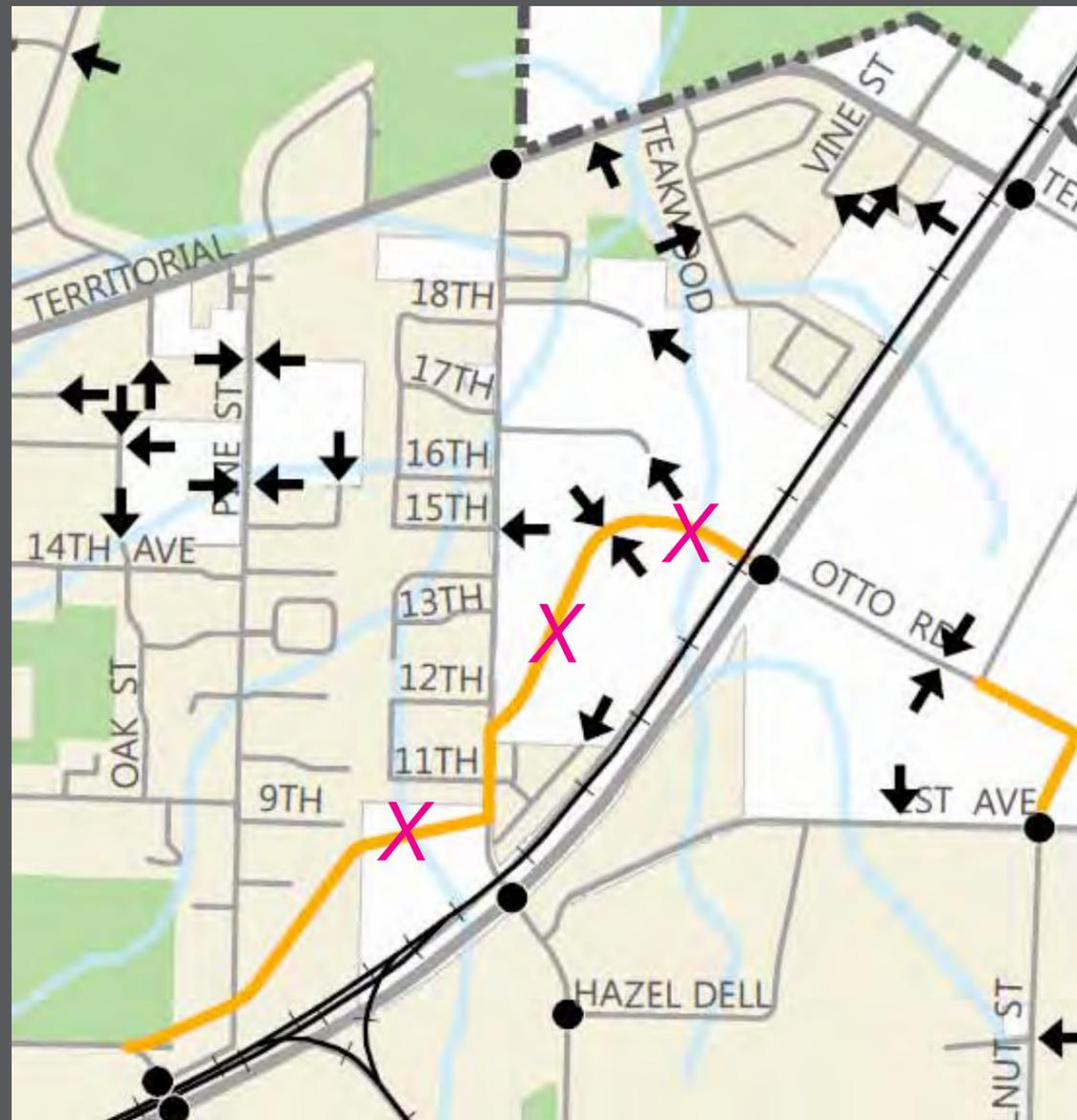
Open Space Edges



Connections

Connections to existing grid.
 Not all connections will be required.

(Also potential Logging Rd Trail connections.)



Otto Road - *deleted*



Streets



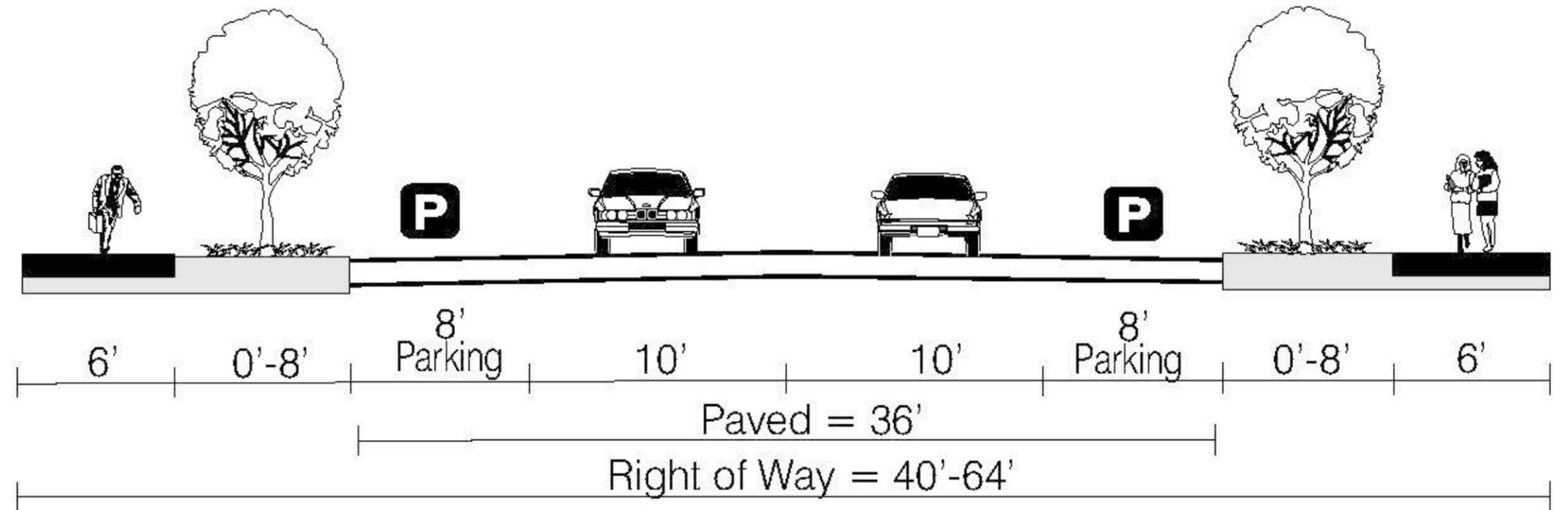
**Alleys reduce
curb-cuts**

**Add plant
strip & trees**

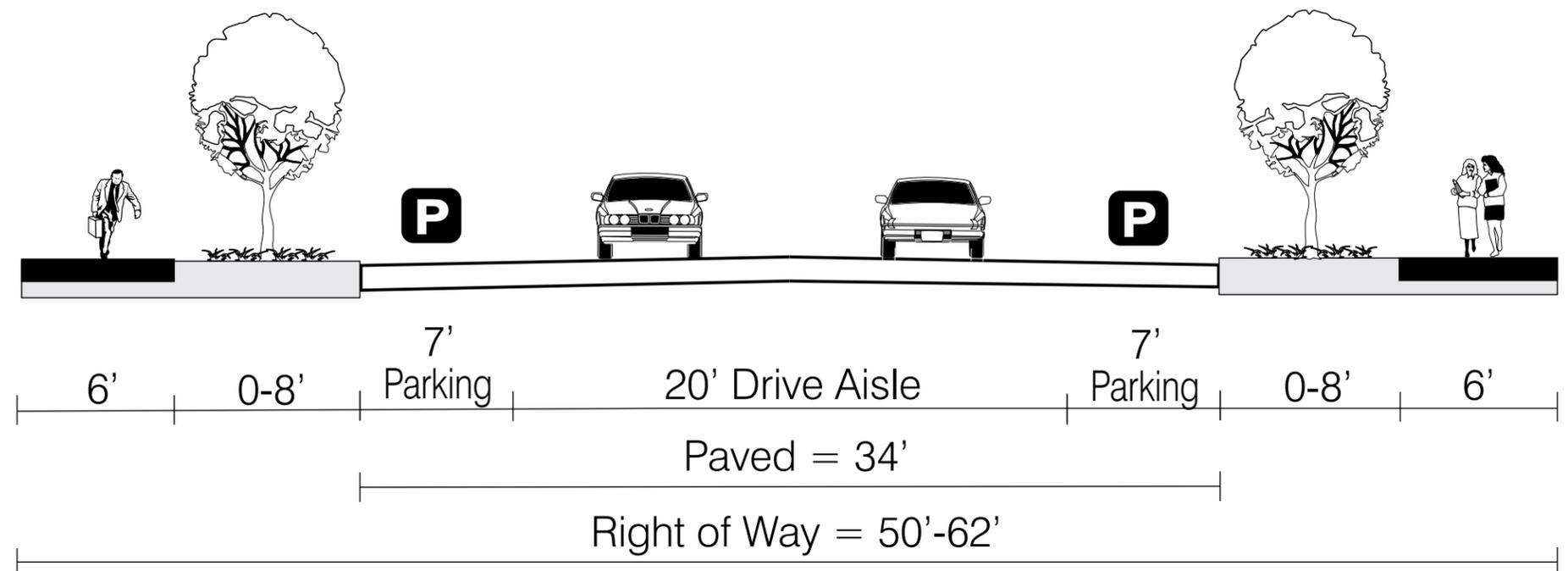
**Wider
sidewalks**

Streets

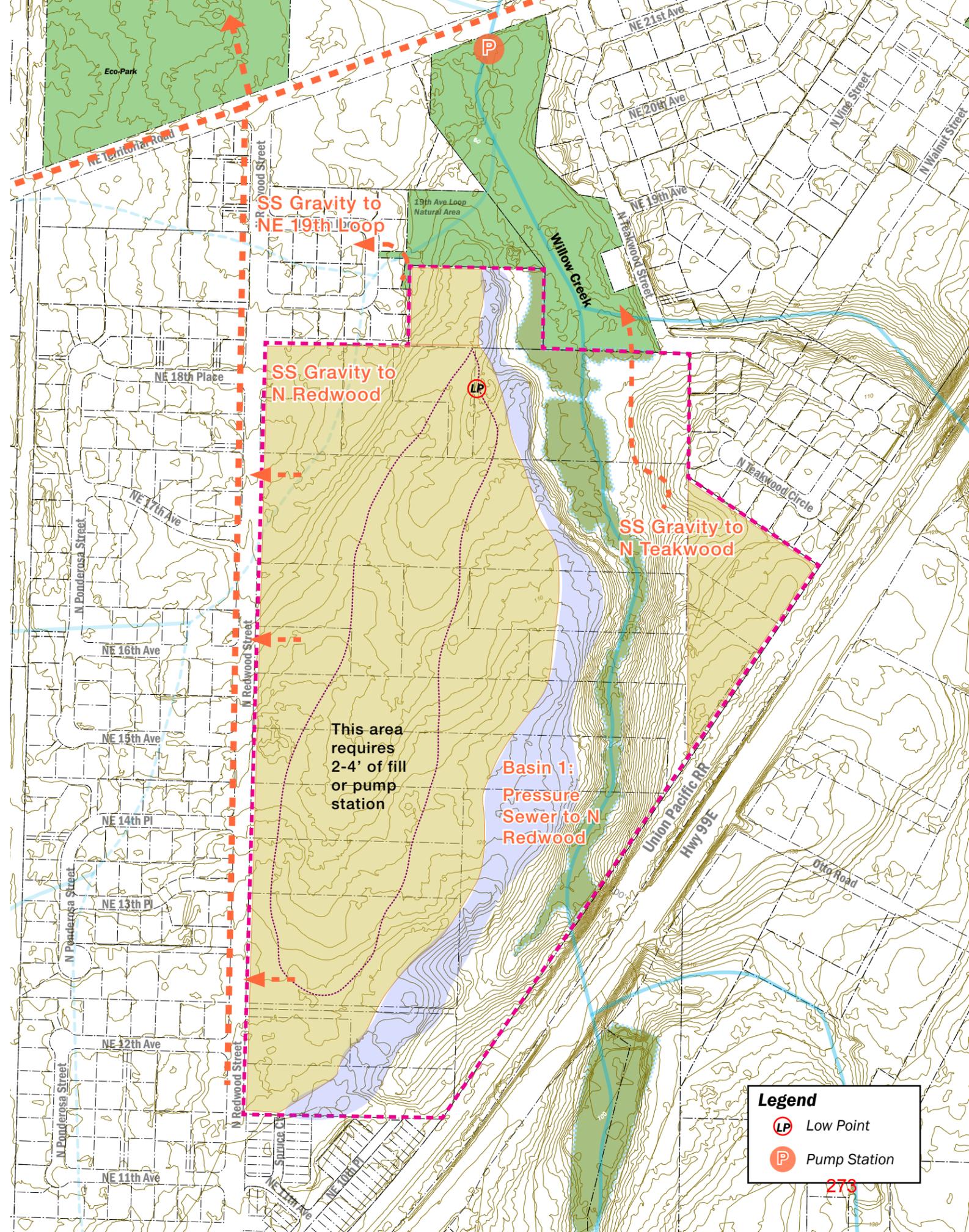
NEIGHBORHOOD ROUTE



STANDARD LOCAL STREET



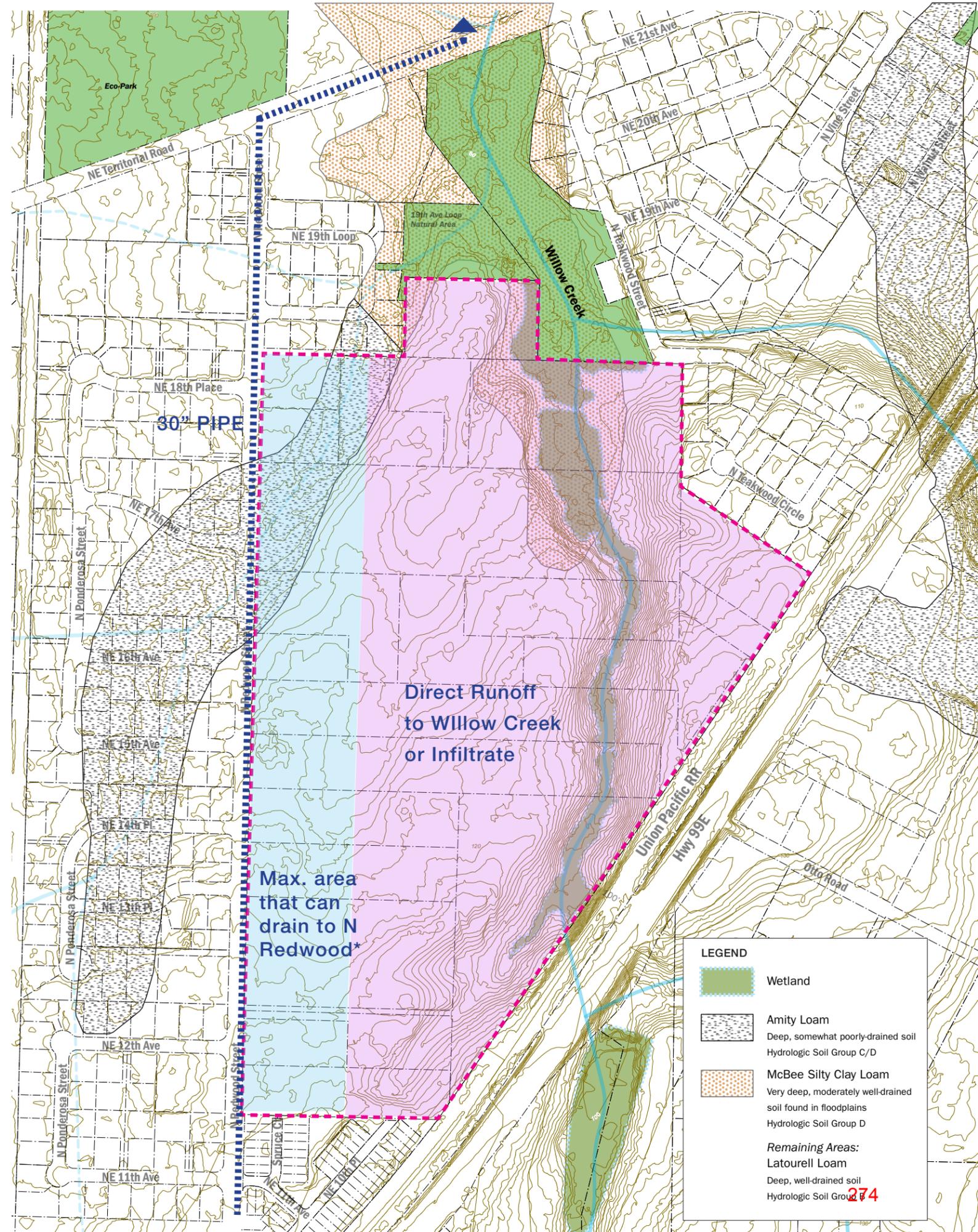
Sewer



Legend

	Low Point
	Pump Station

Stormwater Approach



Concept 1

“City Grid”

Total Road Acreage: 15 acres (22%)
(20-25% typical)

Total Park Acreage: +/-10 acres
(Environmental Areas plus 1 acre pocket neighborhood park)

 **LDR: 45.4 ac**

 **MDR: 18.8 ac**

 **HDR: 2.2 ac**

(all include open space areas)





19th Ave Loop
Natural Area

Willow Creek

NE 19th Ave

NE 19th Loop

N Teakwood Street

NE 18th Place

Trail

Emergency-Only
Access

Alley

N Teakwood Circle

NE 17th Ave

+/- 15
lots

Park
(1ac)

Potential
Emergency-Only
Access

N Ponderosa Street

NE 16th Ave

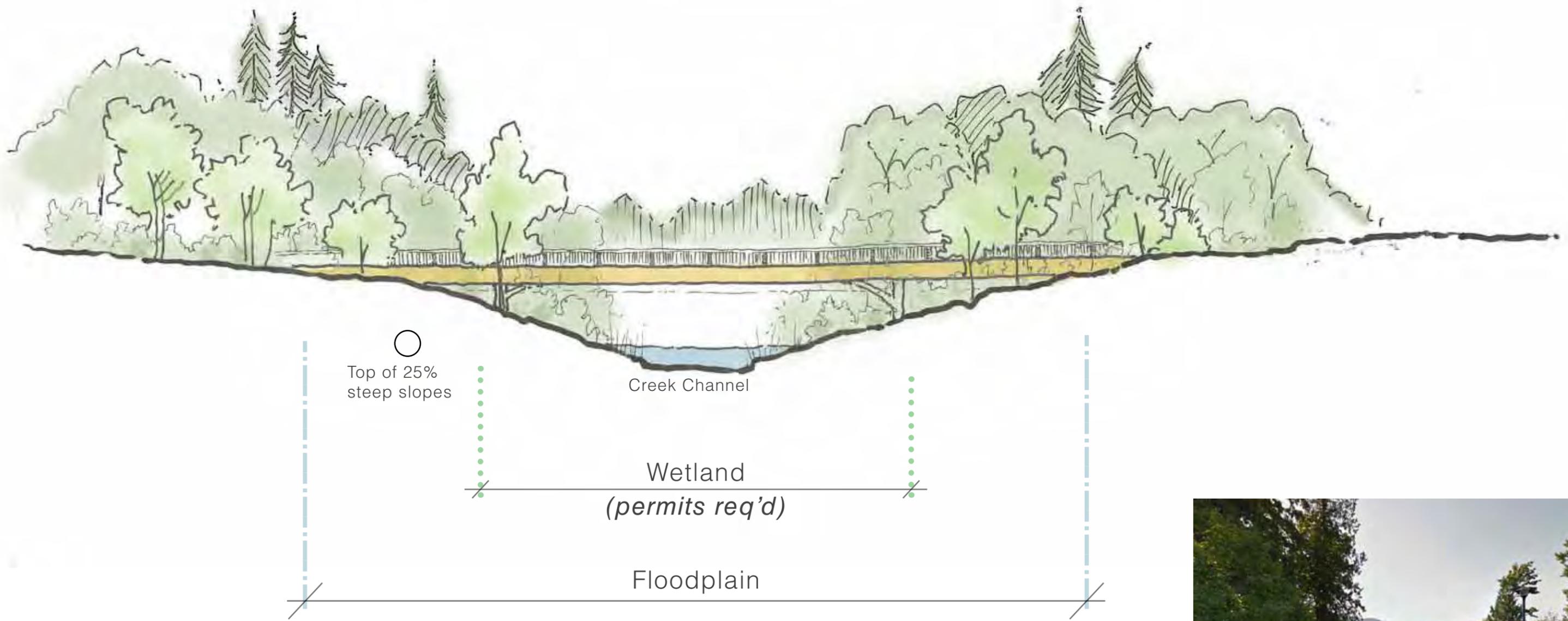
N Redwood Street

Bridge

NE 15th Ave

Pacific RR

Willow Creek Road Bridge



(44' wide, 110' long: Rough cost~\$1.5-\$2 million)



Emergency Access



Potential Railroad Emergency Access



GENERAL PLAN OF RIVERSIDE

OLMSTED, VAUX & CO. LANDSCAPE ARCHITECTS

1869.

Scale 400 feet to an inch



Concept 2

“Riverside”: **PREFERRED**

Total Road Acreage: 14 acres (21%)
(20-25% typical)

Total Park Acreage: +/-10 acres

Key Benefits:

- Cheaper bridge cost
- Minor Impacts to Willow Creek Estates
- Roads aligned with natural features

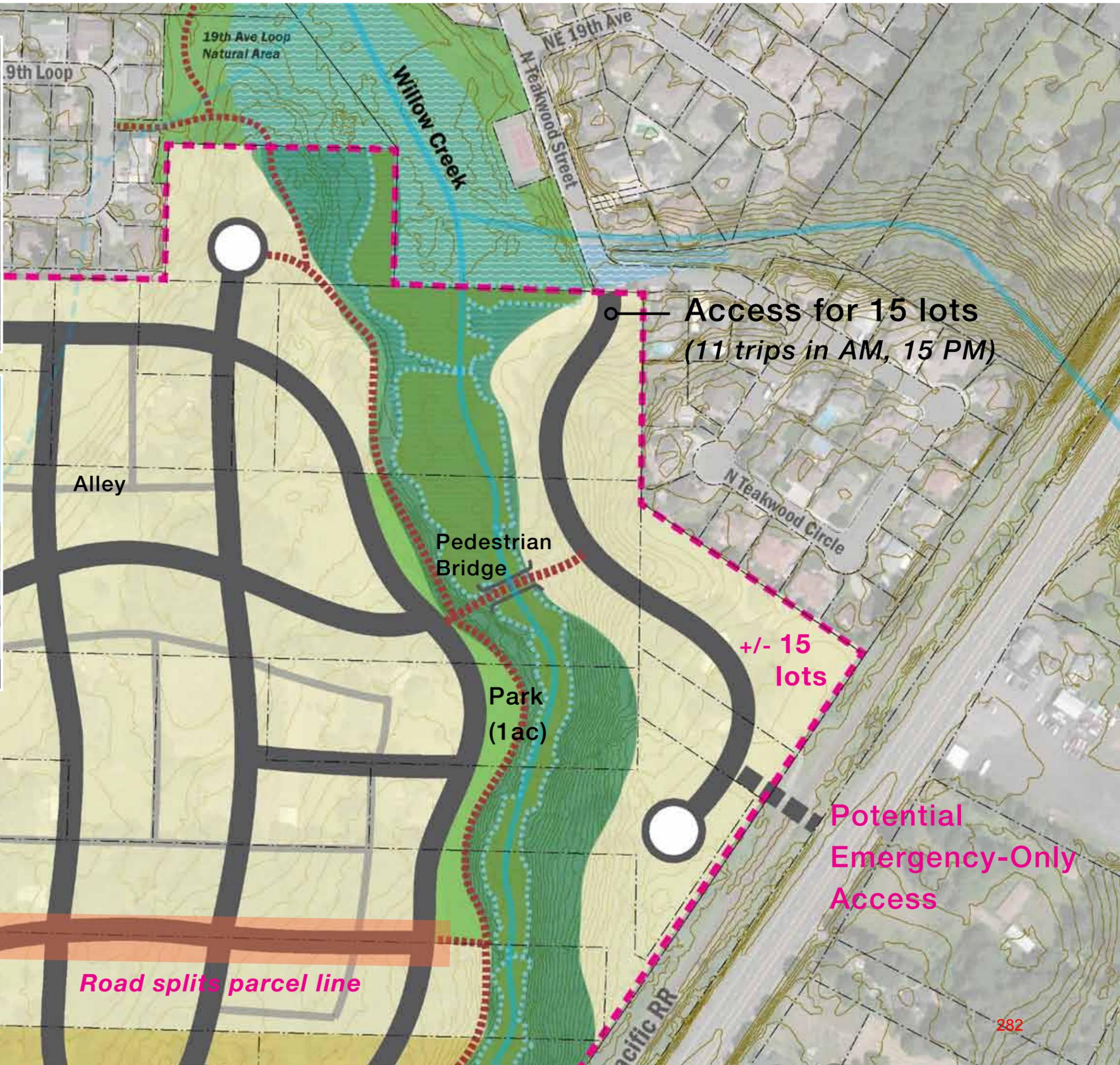
LDR: 45.4 ac

MDR: 18.8 ac

HDR: 2.2 ac

(all include open space areas)





Concept Plan Criteria

- 1. Integrated with existing city fabric of Canby**
- 2. A walkable, cohesive neighborhood**
- 3. All parcels integrated in plan**
- 4. Distribute impacts equitably to individual parcels**
- 5. Allow for different owners' timing of development**
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Concept Plan Criteria

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- ✓ **10. Connect trails to natural areas**
- ✓ **11. Protect Willow Creek**
- ✓ **12. Public, accessible parks**
- ✓ **13. Innovative land planning**
- ✓ **14. Meet regulations**

Tools to Share Costs and Benefits of Growth

- **Density Transfers** - lot size averaging, alternative lot layouts allowed now; additional code provisions possible
- **Density Bonuses** -not currently allowed (except through height bonuses); additional code provisions possible
- **Planned Unit Developments** - allowed now; good tool for consolidated properties
- **Property Consolidation, Master Planning** - Concept Plan helps mimic this process without sale, consolidation of property
- **Advance Financing Districts** - used previously; allows for sharing infrastructure costs (*Canby Code 4.12*)
- **Local Improvement District**

An aerial photograph of a residential neighborhood, showing a mix of houses, green lawns, and dense trees. The image is slightly faded to serve as a background for the text.

OPEN HOUSE
Please circulate and tell
the team what you think!

To: Matilda Deas

Topic: Public Event #2 Meeting Notes

Date: 06/23/2015

From: Ken Pirie

Project: Canby North Redwood

Project #: 3077

Distribution:
Basecamp

North Redwood Development Concept Plan Public Event #2 Notes

Land Use and Plan Alternatives Boards

- Concerns about wildlife crossing of Teakwood Road and from development
- Concerned about increased traffic in Willow Creek Estates
- No major benefits to Willow Creek Estates from an emergency rail crossing (some but not a lot)
- Like visual access to open space
- Potential impacts on streets, sewer, etc. in Willow Creek Estates
- Differing opinions re: impact on properties
- Pedestrian bridge and trails add value, but possible adverse impacts if development not done right
- Prop owners east of Willow Creek knew they had access issues when they bought; why not leave that area alone as open space
- Can study area be required to have similar CC& R's as Willow Creek Estates?
- Parks are further from HDR land—shouldn't they be closer?
- Is a linear park in the Riverside option a suggestion? Is it flexible?
- Can city pay for road on west side and be repaid as development occurs?
- Suggest HDR next to RR as buffer
- House in path of road on map. What happens to house? Is it possible to shift road locations to allow development to avoid intervening property owners?
- How to address differences in amount of land covered by natural areas for different properties?
- Constrained land has less value than flat ground. How to assign value? Natural areas have some value—as an amenity, stormwater, etc.
- One of the maps shows a slightly different study area boundary than the others.
- What are the next steps in the process?

Parks and Natural Areas Boards

- Concerns about width and limits of creek (beaver habitat)
- Pedestrian bridge and paths in park at Willow Creek Estates often flood
- Creek flooding concerns
- 19th Avenue Natural Area is more 'wetland' than creek-substantial width
- At one time, there were fish (non-salmonid) in the northern portion of Willow Creek in the study area.

Transportation Boards (this is a written summary from Steve Boice, DKS)

- Concerns that pedestrian bridge and emergency access may lead to more crime
- Primary concern is the increase in traffic along N Teakwood St with the relaxed grid option. The 15 houses would generate approximately 143 daily trips, 11 am peak hour trips, and 15 pm peak hour trips. This level of traffic increase would not trigger the neighborhood traffic management thresholds (30 peak hour or 300 daily trips) but it might be worth doing a volume/speed count on Teakwood to put this number in perspective. Local residential street volumes should not increase above 1,200 daily vehicles and speeds should not exceed 28 mph. It appears that approximately 80 homes may already use Teakwood so the ADT could be in range of 700-800. This would give residents a sense of what is out there.
- Concerned with the alignment of the new street where it intersects N Teakwood St at the horizontal curve. We need to make sure that adequate intersection sight distance would be provided. The drawing is conceptual.
- Concerned with the pavement condition along Redwood. Noted that the street is continuously filled with potholes. I believe this street is under County jurisdiction - residents would like to see the City take over.
- Concerned with the landscape median at the intersection of Territorial/Teakwood. Sounds like this gets continuously hit and prevents moving vans from travelling though this intersection. If moving vans won't access, how will construction vehicles access and how will it be maintained?
- ***Additional note provided by Matt Hastie:*** The three property owners west of the railroad currently pay the railroad an access fee. Would the city assume that cost if that area were redeveloped?

end

To: Matilda Deas

Topic: PMT #4 Meeting Notes

Date: 06/22/2015

From: Ken Pirie

Project: Canby North Redwood

Project #: 3077

North Redwood Development Concept Plan
Project Management Team Meeting #4

Distribution:
Basecamp

Attendees:

Ken Pirie, Walker Macy
Thomas Fischer, Walker Macy
Matt Hastie, Angelo Planning Group
Matilda Deas, City of Canby
Lidwien Rahman, ODOT

- The team reviewed the draft presentation for Public Event #2. Key comments focused on providing clarity on the following presentation elements:
 - Emergency Access: due to difficulty in Union Pacific RR negotiations, team was advised to be cautious when presenting options for emergency access across the railroad's property.
 - Add apartments and townhomes as use in HDR zone
 - Always note that wetlands shown are "potential" and not delineated officially at this point
 - Clarify transportation-related slides for laypersons
 - Match comp plan zone boundaries exactly on Alternatives
 - Add more realistic bridge costs, to include soft cost figures (\$1.5-\$2 million)
 - Organize presentation for logical progression with common elements preceding Alternatives
 - PMT also provided direction on best way to structure public event as open house

end

To: Matilda Deas

Topic: PMT #1 Meeting Notes

Date: 11/20/2014

From: Ken Pirie

Project: Canby North Redwood

Project #: 3077

North Redwood Development Concept Plan

Project Management Team Meeting #1

Attendees:

Ken Pirie, Walker
Macy
Matilda Deas, City of
Canby
Seth Brumley, ODOT

Distribution:

Basecamp

- City has intern who can help with GIS (Jamie Taylor). Also need to set up Basecamp
- Politics in the City are getting better, less conservative
- Smart new City Administrator, Rick Robinson, came from Redding
- There is a problem in the City with parks, there is no money for parks maintenance-(Matilda is also Parks planner.)
- No public works director in Canby currently

Public Engagement

- Stakeholder Interviews--who to interview?
- Who should be on Stakeholder Advisory Committee?
- Alan Manuel is landowner and developer, assembling land
- WM will talk to team member Cogan Owens Greene re: SAC strategy and ground rules
- For open houses, try to split into smaller groups vs. open forum – has worked in Canby before and gives quieter folks a voice

Parks and Natural Areas

- Parks would accept Willow Creek and wetlands for development
- Big nut is how to equitably share park dedication when some properties include a large percentage of the Willow Creek area but some don't.
- Tree protection? City doesn't have stomach--Council won't even buy easements
- Open to creative carrots w/protecting trees and keeping trees as street trees
- No Goal 5 resources in study area (on Molalla River mainly)
- Clackamas County has stronger regulations
- Get around lack of protection by encouraging set aside as parks

Utility Information

- Sewer pipes-should be on GIS
- Water is Canby Utility
- PGE services site
- Stormwater MP: Tertiary stormwater treatment will be increasingly required and is described in the recent stormwater master plan. Opportunities for educational and recreational amenity
- Explain LID and narrow streets: "It can be done, it's not weird."

end

NORTH REDWOOD DEVELOPMENT CONCEPT PLAN
Project Memo #5 (Deliverable 5C)
Alternative Development Concept Plans

June 24, 2015





Figure 1: Study Area Context



Innovative land planning with diverse housing types accessed by rear alleyways.



A connected, cohesive neighborhood



A walkable neighborhood

Overview

This memo describes and explains two alternative Development Concept Plans for the Canby North Redwood Study Area. Each concept offers different approaches to circulation, infrastructure needs, location of housing types, and natural resource protection. Additionally, each concept is structured using development parameters: specifically, clustering of density, prototypical block sizes, and park acreage requirements. These concepts are intended to guide the final Development Concept Plan. Eventual development by individual properties will be required to match key street and open space locations but will otherwise have an element of flexibility for the owners to develop new neighborhoods according to their individual intentions.

Concept Plan Criteria

Each alternative Development Concept Plan is guided by the following criteria, outlined in Memo #4. To the extent possible, the alternative plans seek to foster development of a neighborhood that is:

- Integrated with existing city fabric of Canby
- Walkable and cohesive neighborhood
- A plan with all parcels integrated
- A plan with impacts distributed equitably to individual parcels
- Allowing for different owners' timing of development
- Reasonable costs of infrastructure and roads
- Connected with safe streets
- Transit-friendly
- Allows emergency access
- Connects trails to natural areas
- Protects Willow Creek
- Provides public, accessible parks
- Demonstrates innovative land planning

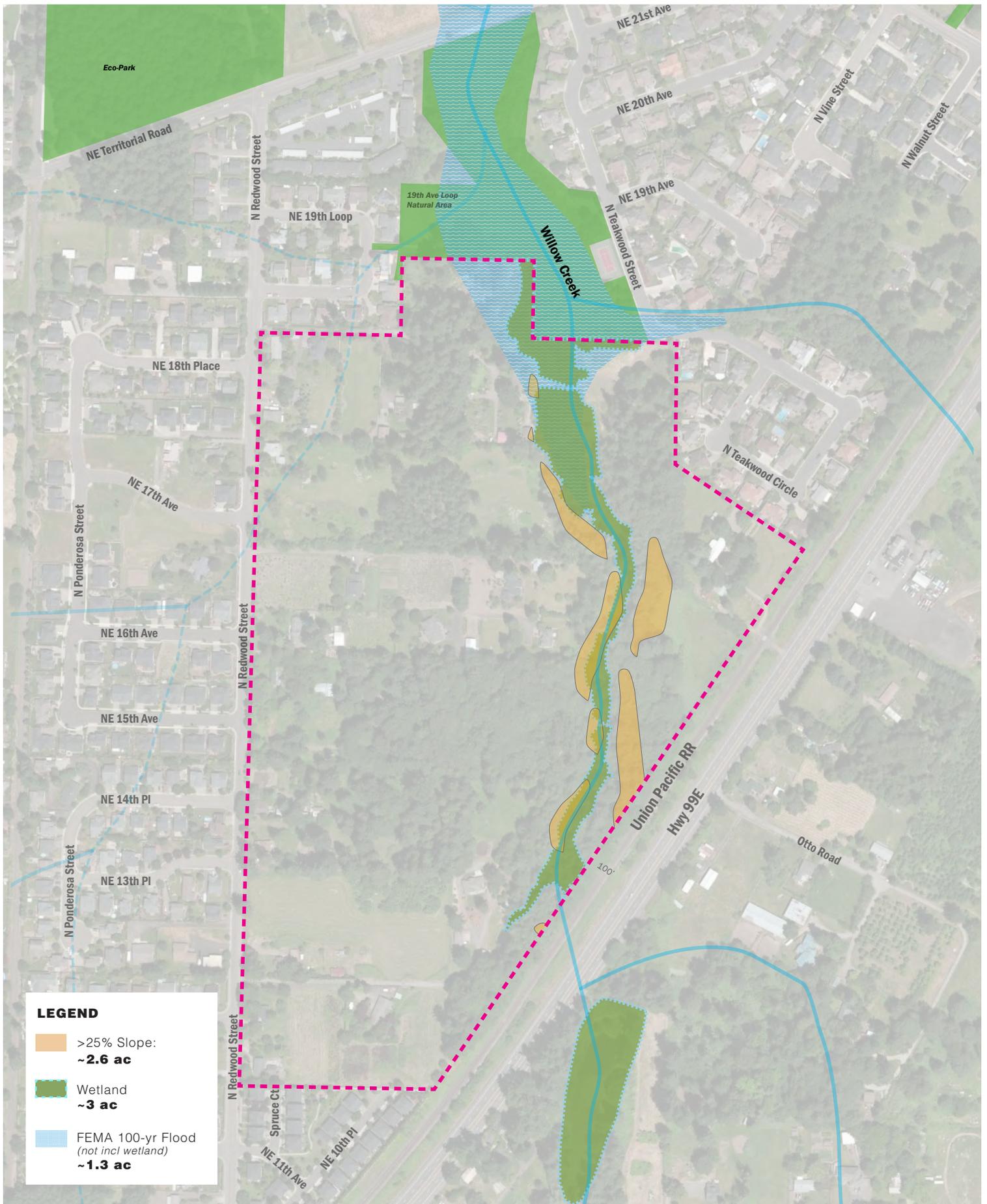
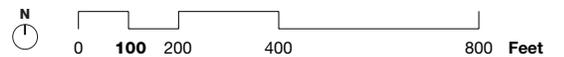


Figure 2: Steep Slopes, Wetlands, and Floodplain

NORTH REDWOOD DEVELOPMENT CONCEPT
BASE MAP



Natural Conditions

The Willow Creek channel through the study area has relatively high water quality and well-vegetated slopes, although there is an understory of invasive species such as English Ivy and Himalayan blackberry. The creek corridor is essentially unbuildable, given current regulations. There is a 50' setback required by Clackamas County, which won't automatically apply to the creek upon annexation. The City does not recognize Willow Creek as a protected Goal 5 resource so new City setbacks would not be applied, although development regulations will still protect these sensitive areas to an extent.

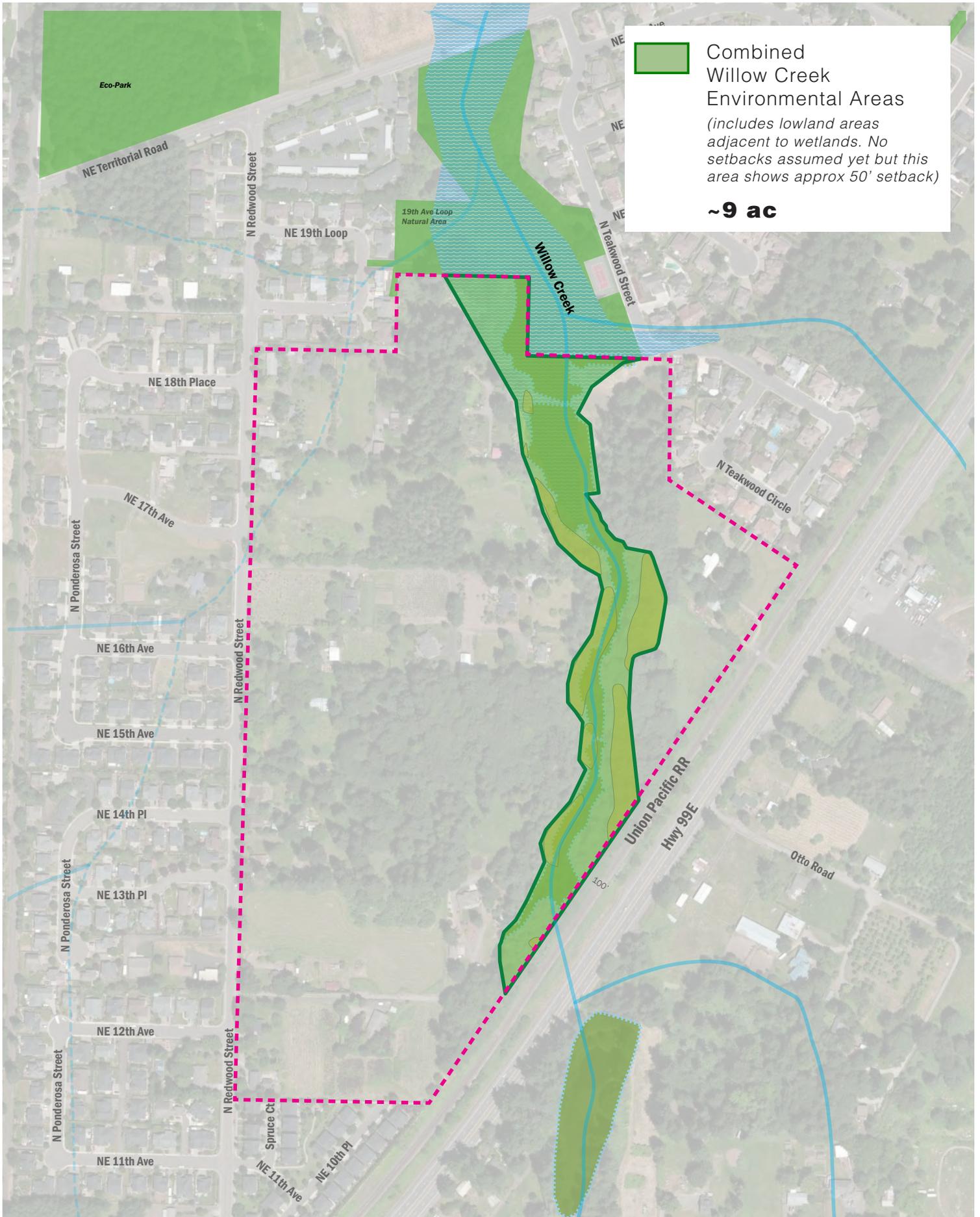
Despite being unbuildable, the corridor has the potential to be a visual and recreational amenity for the future community, as well as providing potential space for stormwater treatment. In addition, as the following pages explain, the creek and associated natural area can potentially serve as park land dedicated to the City of Canby as part of land use regulations.

A preliminary reconnaissance of properties adjacent to Willow Creek found the likely presence of approximately 3 acres of wetlands, whose approximate boundaries are mapped in Figure 2. More defined boundaries would be determined through a more detailed wetland delineation required at the time that individual parcels are developed.

Within the northern parcels of the study area, the FEMA 100-year flood plain extends south roughly 200-300 feet. This floodplain condition is a result of the 1996 flood that backed up along the Willow Creek corridor, covering Territorial Road. There are roughly 1.3 acres within the floodplain.

Finally, there are steep slopes on both the west and east banks of Willow Creek. Slopes over 25% are challenging to develop and should remain undisturbed when adjacent to wetlands and streams in order to avoid erosion. There are approximately 2.6 acres of these steep slopes.

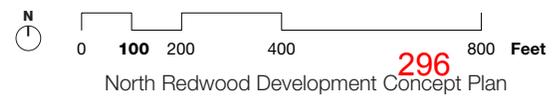
The combined acreage of these sensitive areas,, along with adjacent land between wetlands and slopes, is shown on Figure 3. This 9-acre area can form the core of a future open space that satisfies City regulations for park dedication.



Combined Willow Creek Environmental Areas
(includes lowland areas adjacent to wetlands. No setbacks assumed yet but this area shows approx 50' setback)
~9 ac

Figure 3: Willow Creek Environmental Area

**NORTH REDWOOD DEVELOPMENT CONCEPT
BASE MAP**





A natural area with wetlands can be accessed with a boardwalk, minimizing impacts to the natural resource while allowing residents to enjoy the space.



A pocket park with gazebo can provide a community gathering space.



A trail is proposed along the Willow Creek corridor.

Parks and Open Spaces

Future development in the North Redwood Study Area will be required to dedicate a certain amount of parks and open space, which is consistent with the principles outlined on page 3 for the creation of a livable community.

The acreage required for dedication is calculated using the formula below, applied to new construction:

$$\text{(Maximum units in a plat)} \times \text{(persons/unit)} \times 0.01 = \text{acreage to be dedicated}$$

To account for the various densities included in the City of Canby Comprehensive Plan zoning for this Study Area, approximate acreages of Low Density Residential, Medium Density Residential, and High Density Residential were calculated (not including street area, subtracted as a 20% deduction from gross acreages). Park acreages were then calculated for each as follows:

$$\begin{aligned} \text{LDR/R-1: } & 36.3 \text{ ac (total acres minus streets)} \\ & 36.3 \text{ ac} / 7000 \text{ sf minimum lot size} = 226 \text{ units} \\ & 226 \times 2.7 \text{ people per unit} = 610 \\ & 610 \times 0.01 = \mathbf{6.1 \text{ park acres.}} \end{aligned}$$

$$\begin{aligned} \text{MDR/ R1.5: } & 15 \text{ ac (total acres minus streets)} \\ & 15 \text{ ac} / 5000 \text{ sf minimum lot size} = 131 \text{ units} \\ & 131 \times 2.7 \text{ people per unit} = 353 \\ & 353 \times 0.01 = \mathbf{3.5 \text{ park acres.}} \end{aligned}$$

$$\begin{aligned} \text{HDR R-2: } & 1.8 \text{ ac (total acres minus streets)} \\ & 1.8 \text{ ac} / 3000 \text{ sf minimum lot size} = 26 \text{ lots} \\ & 28 \times 2.7 \text{ people per unit} = 71 \\ & 58 \times 0.01 = \mathbf{0.7 \text{ park acres.}} \end{aligned}$$

TOTAL PARK ACREAGE: 10.3 ACRES

The City of Canby does not typically accept unbuildable natural areas as dedicated park lands under the above formula, however, the city has indicated a willingness to accept land dedicated along Willow Creek, which is a significant benefit to potential future developers.

The plan alternatives in the following pages show the green corridor in Figure 3 incorporated consistently within the two plans. Additional park land of approximately 1-2 acres, which can serve as a potential neighborhood pocket park, is shown in both Alternatives, to make up the difference between the core 9 acre natural area and the 10+ acres required by code. Alternatively the City could accept Park System Development Charges to make up the difference.

Development Parameters

The alternative Development Concept Plans are structured partly using the two parameters described below:

Prototypical Block Sizes

Studying the range of traditional block sizes from Canby (top right), new community block sizes in Canby (center right), and best practices from other well-designed developments (bottom right), a prototypical block size with a width range of 280', measured from the center of one street to the center of the next street was used to guide the layout of each concept plan. A variety of lot sizes are possible within this prototypical block.

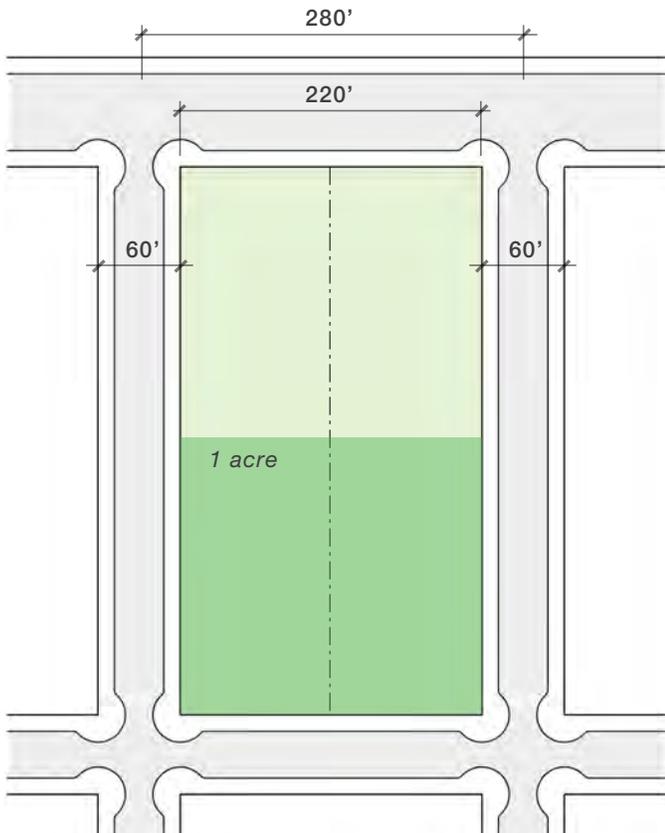


Figure 4: Prototypical Block



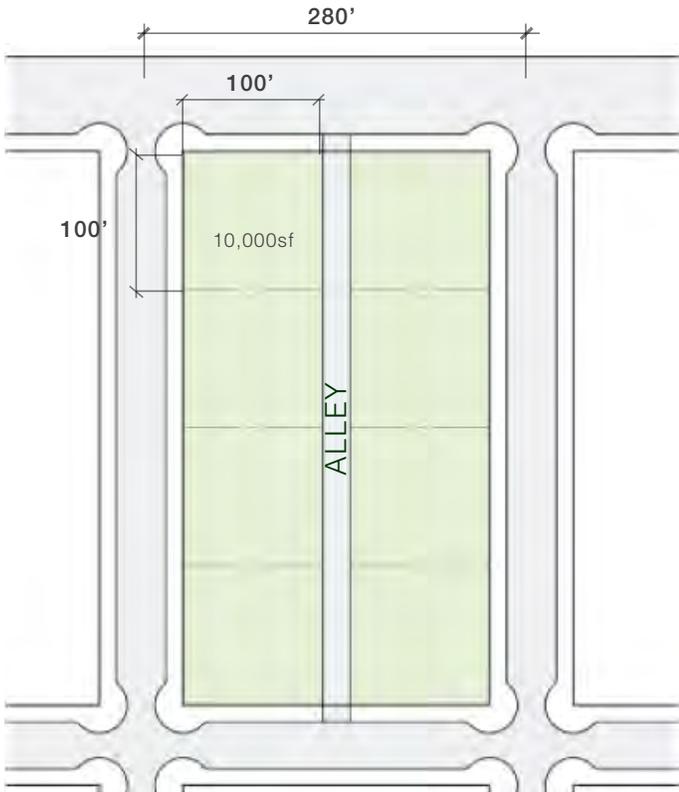
Traditional Canby Neighborhood



New Canby Neighborhood (since 2000)

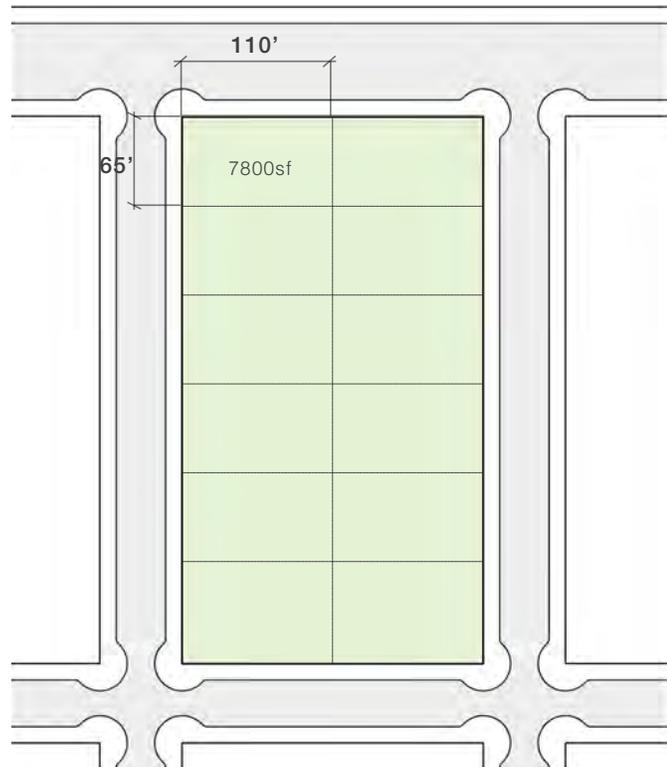


Wilsonville New Neighborhood (since 2005)



Large Lot

Figure 5a: Large Lots (LDR) with alley



Large Lot

Figure 5b: Large Lots (LDR) no alley; garages in front of homes

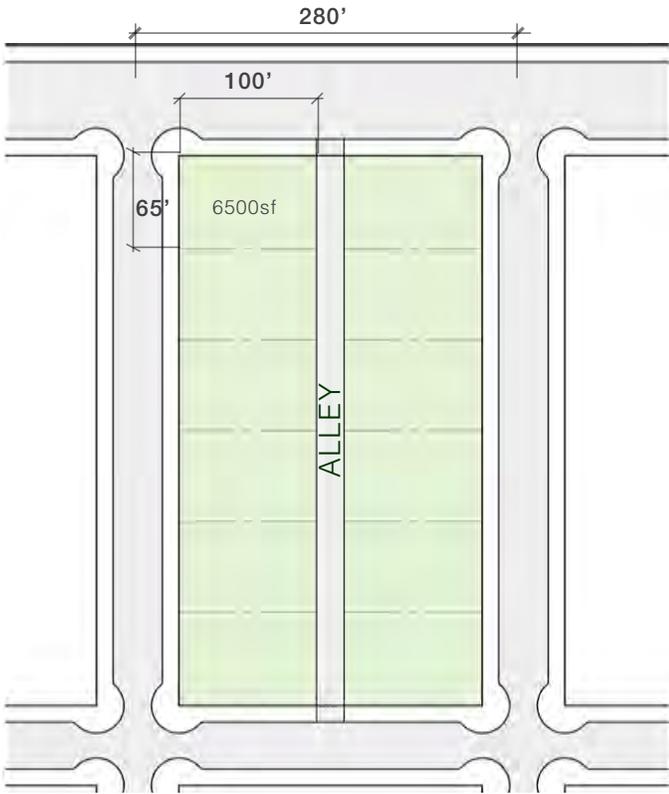


Figure 6: Medium Lots (alley is optional)



Medium Lot



Medium Lot



Medium Lot