



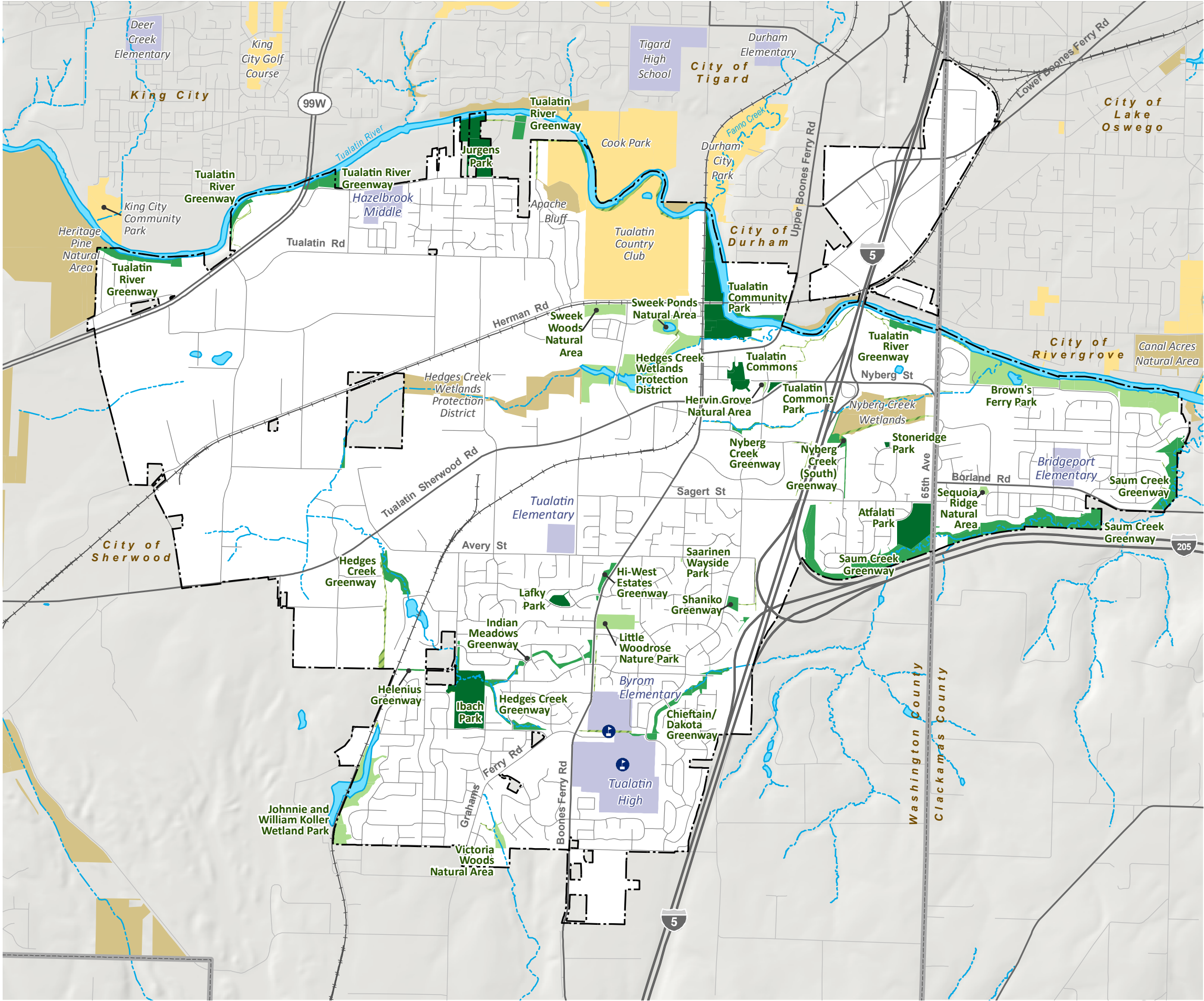
# TUALATIN PARKS & RECREATION MASTER PLAN

## APPENDIX A INVENTORY









PARKS & RECREATION MASTER PLAN

Map A-1: Existing Parks, Natural Areas and Recreation Resources

Tualatin Park and Recreation Facilities

- Parks
- Greenways
- Natural Parks & Areas
- Shared Use Paths
- School Joint-Use Facilities

Other Park and Natural Areas

- Other Developed Parks and Recreation Areas
- Other Greenways and Natural Areas
- Tigard-Tualatin District Schools

Base Map Features

- Tualatin City Boundary
- County Boundary
- Freeways/Highways
- Major Arterials
- Local Streets
- Railroads
- Streams
- Rivers and Waterbodies

M I G Date: October 2017

Sources: City of Tualatin, Parks and Recreation, 2017; Metro Regional Government, 2017; Oregon Spatial Data Library, State of Oregon, 2017.

Disclaimer: This map is derived from various digital database sources. While an attempt has been made to provide an accurate map, the City of Tualatin, OR assumes no responsibility or liability for any errors or omissions in the information. This map is provided "as is".





Table A-2: Tualatin School Facility Inventory

Schools	Outdoor Recreation		Outdoor Athletic Facilities				Trails	Indoor Facilities		
	Play Features	Flexible Use Lawn Areas	Rectangular Fields	Ball Fields	Basketball Courts	Tennis Courts	Cross-country trails	Gyms	Auditorium/Theater	Swimming Pool
Bridgeport Elementary School	•	1	1	2	1			1		
Byrom Elementary School	•	1		4			•	1		
Tualatin Elementary School	•		1		1			1		
Hazelbrook Middle School		1	1	•				2		
Tualatin High School		•	2	6		6	•	2	•	•
<i>Totals</i>	3	4	5	13	2	6	2	7	1	1







# TUALATIN PARKS & RECREATION MASTER PLAN

## APPENDIX B SITE RECOMMENDATIONS MATRIX









# PARKS & RECREATION MASTER PLAN

## APPENDIX B: SITE RECOMMENDATIONS MATRIX

The Site Recommendations Matrix (Table B-1) identifies the types of capital projects recommended for existing parkland and potential future sites in the City of Tualatin’s park system. It also notes expectations for ongoing maintenance and operations, sites that should be programmed, and sites where partnership agreements should be addressed. These recommendations advance all Master Plan goals and provide overarching guidance for park investment. They supplement the information presented in Chapter 5.



### Matrix Definitions and Assumptions

Table B-1 includes the following information:

#### SITE OVERVIEW

- **Project Identification #:** A project number for reference purposes only. This does not reflect project priorities. The ID distinguishes existing projects (E) from proposed projects (P).
- **Site Name:** Name of the site.
- **Acreage:** Total existing or proposed acreage of site.
- **Park Type:** The site’s classification, as noted in the approved parkland inventory. CP = Community Park; LNP = Large Neighborhood Park; SNP = Small Neighborhood Park; SU = Special Use; SUP = Shared Use Path; NP = Natural Park; JU = Joint Use; G = Greenway; NA = Natural Area.

## CAPITAL PROJECTS

### Build

- **Master Plan/Feasibility Study:** Update existing site master plans, develop new design concepts or site master plans, and/or conduct feasibility studies to identify acquisition, development and/or operational plans. This applies to proposed new parks, major facilities, and to existing sites slated for significant enhancements.
- **Parkland Acquisition or Easements:** Where appropriate, obtain new land for parks, natural areas, greenways, or trails. Acquisition may be through purchase or other means.
- **Site Development:** Develop an existing or acquired piece of property, including infrastructure, access, and new amenities and facilities.
- **Major Facility Construction:** Build a new high-cost facility, such as a new building, tournament sport complex, or floating dock.

### Enhance

- **Added Recreation Element(s):** Add a new site feature or make a specific improvement that does not involve further site enhancements or renovations.
- **Added Trail:** Develop a trail and add minor support amenities to a site that does not involve further site enhancements or renovations.
- **Added Art:** Add artwork to a site. The art may be integrated into other features.
- **Minor Renovation:** Provide small to medium level of improvements/upgrades to an existing park. Minor renovations can include (but are not limited to) elements such as small park features, enhanced play areas, seating areas, trails, new/renovated sports courts, small circulation adjustments, site furnishings, plantings, etc. Minor renovations are anticipated to affect approximately a quarter of the developed portion of the site.
- **Major Renovation:** Provide extensive level of improvements/upgrades to an existing park. Major renovations may include (but are not limited to) new, large-scale, signature park elements such as destination play areas, sports fields, new picnic shelters, restrooms, etc. Major renovations are anticipated to affect approximately half of the developed portion of the site or add costly features and facilities to the site. This may include a mix of large and small site adjustments.
- **Special Use Building Renovation:** Renovation of a community center, heritage center, administrative offices, or similar special use building.
- **Enhancement Through Partnership:** Collaborate with a partner to add a facility or renovate a site.

### Steward

- **Natural Resource Restoration:** Steward or restore natural resource areas such as habitat, wetlands, riparian corridors, prairies, and forested areas to remove invasive species and protect

wildlife, tree canopies, water quality, and the ecological function of sites. This may include wildfire protection and replanting with native species to restore the ecological health of the site.

- **Deferred Maintenance:** Attend to deferred tasks required to maintain, preserve, and enhance a park or building site to a level that is aesthetically pleasing, well-tended, and safe. Includes work such as turf care, refreshed plantings, repair/replacement of site furnishings, building painting or residing, roof or infrastructure repairs, etc.
- **Accessibility Improvements:** Remove barriers to site or facility access as per the recommendations of the ADA Transition Plan.

## Replace

- **Capital Reinvestment and Replacement:** Set aside funds annually to offset the costs of replacing facilities at the end of their lifecycles. Funds can be used for major repairs, but these funds are not intended to support routine maintenance.

## MAINTENANCE AND OPERATIONS

### Maintain

- **Standard Maintenance:** Provide standard level of care including all routine and preventative tasks necessary to maintain parks at an adequate level for safe access and use. Includes landscaping and janitorial services.
- **Enhanced Maintenance:** Provide a higher level of maintenance and more frequent tasks at sites that have specialized assets, are heavily programmed, provide special events and reservable facilities, or are otherwise heavily used. These sites are maintained at the highest level and receive priority during peak use times.
- **Natural Resource Maintenance:** Provide specialized maintenance of natural areas, including routine monitoring and inspection, tree pruning, invasives removal, dump and litter pickup, hazards removal.

### Program

- **Recreation Activities & Programs:** Provide and support classes, programs, activities, and/or league play at the site in core program service areas as appropriate.
- **Community & Special Events:** Support large and small group events and activities at the site, whether organized and hosted by the City or by another partner.

### Partner

- **Memorandum of Understanding, Partnership Agreement, or Joint-Use Agreement Update:** Update or develop joint-use agreements, partnership agreements, or MOUs with partner(s) to identify roles and responsibilities for site or facility acquisition, development, maintenance, operations, or management.





Table B-1 : Site Recommendations Matrix  
Exhibit A to Resolution No. 5407-18

					Capital Projects														Operations & Maintenance							
Project Identification #	Site Name	Acreage	Percentage of Site to Be Developed <sup>1</sup>	Type	Build				Enhance							Steward			Replace	Maintain			Program		Partner	
					Master Plan/Feasibility Study	Parkland Acquisition or Easements	Site Development	Major Facility Construction	Added Recreational Element (s)	Added Trail	Added Art	Minor Renovation	Major Renovation	Special Use Building Renovation	Enhancement Through Partnership	Natural Resource Restoration	Deferred Maintenance	Accessibility Improvements (See ADA Transition Plan)	Capital Reinvestment and Replacement	Standard Maintenance	Enhanced Maintenance	Natural Resource Maintenance	Recreation Activities & Programs	Community & Special Events	MOU, Partnership Agreement or JUA Update	
Existing Parks and Facilities																										
E1	Atfalati Park	13.27	25%	LNP			●				●		●			●	●	●	●		●	●	●	●	●	
E2	Ibach Park	20.08	25%	LNP			●				●		●			●	●	●	●		●	●	●	●	●	
E3	Jurgens Park	15.59	40%	LNP	●		●			●	●		●			●		●	●		●	●	●	●	●	
E4	Lafky Park	2.00	-	SNP								●						●	●	●	●					
E5	Stoneridge Park	0.23	-	SNP									●		●		●	●	●	●	●				●	
E6	Tualatin Commons	4.83	-	SU							●	●					●	●	●	●	●		●	●	●	
E7	Tualatin Commons Park	0.64	-	SU							●							●	●	●	●	●				
E8	Tualatin Community Park	27.11	-	CP	●				●				●	●		●		●	●	●	●	●	●	●	●	
E9	Tualatin Library		-	SU	●									●	●			●	●	●	●		●	●		
	Subtotal Existing Parks and Facilities	83.75			3	0	3	0	1	1	5	2	5	2	2	5	5	9	8	3	5	4	6	6		2
Existing Natural Parks & Areas																										
E10	Brown's Ferry Park	43.21	25%	NP	●				●		●		●	●		●	●	●	●		●	●	●	●	●	
E11	Hedges Creek Wetlands Protection District	29.06	-	NA							●					●	●	●	●	●	●					
E12	Hervin Grove Natural Area	0.29		NA						●						●						●				
E13	Johnnie and William Koller Wetland Park	15.32	40%	NA	●		●			●	●					●				●		●	●			
E14	Little Woodrose Nature Park	6.55	-	NP								●				●	●	●	●	●	●					
E15	Saارين Wayside Park	0.06	-	NP												●		●		●		●				
E16	Sequoia Ridge Natural Area	0.65	-	NA												●	●			●		●				
E17	Sweek Ponds Natural Area	4.68	-	NA							●	●		●		●	●	●			●	●	●	●		
E18	Sweek Woods Natural Area	5.03	-	NA												●				●		●				
E19	Victoria Woods Natural Area	2.22	-	NA												●	●	●		●		●				
	Subtotal Existing Natural Parks & Natural Areas	107.07			2	0	1	0	1	2	4	2	1	2	0	10	6	6	3	7	2	10	3	1		0

Project Identification #	Exhibit A to Resolution No. 5407-18  Site Name	Acreage	Percentage of Site to Be Developed <sup>1</sup>	Type	Build				Enhance							Steward			Replace	Maintain			Program		Partner	
					Master Plan/Feasibility Study	Parkland Acquisition or Easements	Site Development	Major Facility Construction	Added Recreational Element (s)	Added Trail	Added Art	Minor Renovation	Major Renovation	Special Use Building Renovation	Enhancement Through Partnership	Natural Resource Restoration	Deferred Maintenance	Accessibility Improvements (See ADA Transition Plan)	Capital Reinvestment and Replacement	Standard Maintenance	Enhanced Maintenance	Natural Resource Maintenance	Recreation Activities & Programs	Community & Special Events	MOU, Partnership Agreement or JUA Update	
Existing Greenways																										
E20	Chieftain/Dakota Greenway	6.14	50%	G			●					●				●		●	●	●	●					
E21	Hedges Creek Greenway	11.66	50%	G			●									●		●	●	●	●					
E22	Helenius Greenway	0.43	100%	G			●									●		●	●	●						
E23	Hi-West Estates Greenway	1.59		G								●				●		●	●	●	●					
E24	Indian Meadows Greenway	3.82	10%	G			●					●				●		●	●	●	●					
E25	Nyberg Creek Greenway	5.78	75%	G			●			●	●					●		●	●	●	●					
E26	Nyberg Creek (South) Greenway	2.30	100%	G			●			●						●		●	●	●						
E27	Saum Creek Greenway	54.22	25%	G			●			●	●					●		●	●	●	●					
E28	Shaniko Greenway	3.30		G												●		●	●	●	●					
E29	Tualatin River Greenway	30.39	50%	G			●		●	●	●					●		●	●	●	●	●				
	Subtotal Existing Greenways	119.63			0	0	8	0	1	4	3	3	0	0	0	10	0	8	10	10	0	10	1	0	0	
Existing School Joint-Use Facilities																										
E30	TuHS Leonard Pohl Field <sup>2</sup>		-	JU											●						●		●		●	
E31	TuHS-Byrom Elementary Cross Country Running Trail		-	JU																●		●			●	
	Subtotal Existing Joint-Use Facilities				0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	2	0	2	2	
Existing Shared Use Paths																										
E32	65th Avenue Shared Use Path	0.47	-	SUP															●	●						
E33	Boones Ferry Road Shared Use Path (Byrom Elementary to Arapaho Road)	0.41	-	SUP														●	●	●						
E34	Byrom Elementary Shared Use Path (Martinazzi Ave. to Boones Ferry Rd.)	0.80	-	SUP															●	●						
E35	Cherokee Street Shared Use Path (108th Ave to Rail Road ROW)	0.09	-	SUP															●	●						
E36	I-5 Shared Use Path (Warm Springs St. to Sagert St.)	1.54	100%	SUP			●			●										●						



Project Identification #	Exhibit A to Resolution No. 5407-18  Site Name	Acreage	Percentage of Site to Be Developed <sup>1</sup>	Type	Build				Enhance							Steward			Replace	Maintain			Program		Partner		
					Master Plan/Feasibility Study	Parkland Acquisition or Easements	Site Development	Major Facility Construction	Added Recreational Element (s)	Added Trail	Added Art	Minor Renovation	Major Renovation	Special Use Building Renovation	Enhancement Through Partnership	Natural Resource Restoration	Deferred Maintenance	Accessibility Improvements (See ADA Transition Plan)	Capital Reinvestment and Replacement	Standard Maintenance	Enhanced Maintenance	Natural Resource Maintenance	Recreation Activities & Programs	Community & Special Events	MOU, Partnership Agreement or JUA Update		
E37	Ice Age Tonquin Trail	3.06	75%	SUP	•		•			•	•								•	•	•						
	Subtotal Existing Shared Use Paths	6.37			1	0	2	0	0	2	1	0	0	0	0	0	0	0	2	5	6	0	0				
	TOTAL EXISTING PARKLAND	316.82			6	0	14	0	3	9	13	7	6	4	2	25	11	25	26	26	7	24					
Proposed Parks and Facilities																											
P1	Jurgens Park addition	5.15	100%	LNP	•	•	•			•	•								•		•		•	•			
P2	Tualatin Community Park addition	3.0	100%	LNP	•	•	•			•	•								•		•		•	•			
P3	Basalt Creek park	20.0	100%	CP	•	•	•			•	•								•		•		•	•			
P4	East Tualatin / Bridgeport Elementary partnership		100%	JU											•				•	•			•			•	
P5	Pony Ridge/ Heritage Pine partnership		100%	JU						•	•				•				•							•	
P6	Central Tualatin sports park	9.0	100%	SU	•	•	•			•	•								•		•		•			•	
P7	Community recreation center	5.0	100%	SU	•	•	•	•		•	•								•		•		•	•			
P8	Additional park opportunities	11.8	100%	SU	•	•	•	•											•	•							
P9	Tournament sports complex	10.0	100%	SU	•	•	•	•			•										•		•	•		•	
	Subtotal Proposed Parks and Facilities	63.95			7	7	7	3	0	6	7	0	0	0	2	0	0	0	8	2	6	0	7	5		4	
Proposed Natural Parks & Areas																											
P10	New natural park and areas	12.7	100%	NA	•	•	•			•	•								•		•		•	•			
	Subtotal Proposed Natural Parks & Areas	12.70			1	1	1	0	0	1	1	0	0	0	0	0	0	0	1	0	1	0	1	1		0	
Proposed Greenways and Shared Use Paths																											
P11	New greenways and shared use paths	15.1	100%	G	•	•	•	•		•	•								•	•		•					
P12	Westside Trail bridge	1.0	100%	G	•	•	•			•					•				•	•						•	
	Subtotal Proposed Greenways and Shared Use Paths	16.10			2	2	2	1	0	2	1	0	0	0	1	0	0	0	2	2	0	1	0	0		1	
	TOTAL PROPOSED PARKLAND	92.75			10	10	10	4	0	9	9	0	0	0	3	0	0	0	11	4	7	1	8	6		5	

Project Identification #	Exhibit A to Resolution No. 5407-18	Acreage	Percentage of Site to Be Developed <sup>1</sup>	Type	Build				Enhance								Steward			Replace	Maintain			Program		Partner						
					Master Plan/Feasibility Study	Parkland Acquisition or Easements	Site Development	Major Facility Construction	Added Recreational Element (s)	Added Trail	Added Art	Minor Renovation	Major Renovation	Special Use Building Renovation	Enhancement Through Partnership	Natural Resource Restoration	Deferred Maintenance	Accessibility Improvements (See ADA Transition Plan)	Capital Reinvestment and Replacement	Standard Maintenance	Enhanced Maintenance	Natural Resource Maintenance	Recreation Activities & Programs	Community & Special Events	MOU, Partnership Agreement or JUA Update							
Proposed Additional Planning																																
P13	Community (Urban) Forestry Plan				●																											
P14	Comprehensive Fee Analysis and Plan				●																											
P15	Resource Management Plan				●																											
P16	Marketing and Outreach Plan				●																											
	TOTAL ADDITIONAL PLANNING					4	0	0	0		0	0	0	0	0	0	0		0	0	0		0		0	0	0					
	TOTAL EXISTING PARKLAND, PROPOSED PARKLAND & ADDITIONAL PLANNING				409.6	20	10	24	4		3	18	22	7	6	4	5		25	11	25		37		30	14	25		8	6		5

Notes:

1. This number reflects the percentage of the site that will be developed when development projects proceed. For new sites, it is assumed that 100% of the site will be developed. For existing sites, the percentage reflects a portion of the site that is currently undeveloped and will be developed in the next phase of construction.

Key:

Project Identification Number: E = Existing Site; P = Proposed Site

Park Type: CP- Community Park, LNP- Large Neighborhood Park, SNP- Small Neighborhood Park, SU- Special Use, SUP- Shared Use Path, NP- Natural Park, JU- Joint Use, G- Greenway, NA-Natural Area



# TUALATIN PARKS & RECREATION MASTER PLAN

## APPENDIX C SITE CONSIDERATIONS









# PARKS & RECREATION MASTER PLAN

## APPENDIX C: SITE CONSIDERATIONS

Through community outreach, the park and facility condition assessment, and the technical analysis of the park and recreation system, additional opportunities were identified for site renovations and improvements. These considerations, concepts, and ideas are noted by site below. This information is intended to supplement the site-specific recommendations presented in Chapter 5. These should be vetted through further site design, partnership, and master planning processes when funds are available for renovation and development. These considerations are not intended to be prescriptive, but rather to prompt further discussion and conversation on ideas to consider at the following sites.

### Atfalati Park

- Add pedestrian crosswalk as development grows along SW 65th Avenue.
- Add a new water play or spray feature.
- Convert lower soccer fields to sand base with subsurface drainage, providing for one youth and one adult size soccer field.
- Add futsal court.
- Add site lighting.
- Resurface basketball court.
- Renovate existing tennis court for multi-use as pickleball/tennis.
- Add historical/interpretive signs specific to the site.
- Add adventure play elements for teens.
- Stabilize banks of Saum Creek with native vegetation.

### Jurgens Park

- Add a parking area at north end of park closer to the dock to ease effort of carrying kayaks to water.
- Add pedestrian crosswalks as development grows on adjacent parcels.
- Add a new water play or spray feature; add a tiny tots play area (ages 0-2); renovate existing playground equipment and safety surfacing.
- Add a rinse station at existing sand and water play area.
- Install sand base field with drainage and irrigation on planned field area between the wetlands pond and river.
- Add large shelter at northeast corner of ballfield.

- Consider site and/or field lighting to increase hours of use and play.
- Add small picnic shelter and restroom at north end of park.
- Add wood deck observation area along Tualatin River.
- Add historical/interpretive signs specific to the site.
- Consider adding an off-leash dog park (fenced or buffered from habitat areas and surrounding uses).
- Consider adding community gardens.
- Consider adding disc golf.
- Consider a passive use area around the pond for respite, exploration, and art and nature appreciation that includes native plantings, grouped and individual seating, interpretive and thematic art, pollinator patches, display gardens, integrated nature play elements and spaces, and viewpoints.
- Replace concrete planters.
- Add subsurface drainage and irrigation to north field and convert to four youth soccer fields.
- Consider replacing lawn areas with no-mow natives to reduce maintenance.
- Add wayfinding and distance signage to different destinations.

## **Stoneridge Park**

- Replace the play equipment and surfacing with thematic play elements consistent with the site concept.
- Add raised community garden beds (if enough sunshine).
- Add seating, tables, or a picnic shelter to support family gatherings.
- Provide adjacent residential uses more privacy from the park.

## **Tualatin Commons**

- Install decorative lighting in trees.

## **Tualatin Community Park**

- Identify a design theme for the park.
- Improve entry, circulation, and parking to address vehicular and pedestrian access into and within park.
- Consider renovation of the Juanita Pohl Center and the consolidation of buildings into a multigenerational community recreation center. If a community recreation center is not viable, follow the recreation center business and operations plan/site master plan recommendations regarding the renovation of existing special use buildings.
- Leverage indoor/outdoor programming opportunities associated with building improvements. Consider a small outdoor amphitheater in association with indoor performance and program space; consider low impact activities such as bocce and shuffleboard with shaded group seating adjacent to the Juanita Pohl Center.
- Resolve the use conflicts at the ballfield, rail trestle, river, adjacent uses, and proximity to parking with possible relocation of field.
- Replace field lighting with LEDs to minimize maintenance and increase hours of play, and add field lights to the north field next to the dog park.



- Consider replacing horseshoes with bocce ball or another low-impact activity with a similar footprint.
- Renovate and update skate park features.
- Re-stripe existing tennis court for multi-use as pickleball/tennis.
- Expand and replace the main picnic shelter and barbeque facilities and add electrical outlets at the Trestle Shelter.
- Improve site drainage and add a restroom at the dog park.
- Add outdoor exercise equipment and fitness features.
- Stabilize banks of Tualatin River with native vegetation; steward natural resources on site.
- Redesign hydrozones, irrigation, and subsurface drainage system including new controller, heads, etc.
- Connect this site to the Tualatin River Greenway trail, adding additional wayfinding and distance signage to different destinations.

## Browns Ferry Park

- Renovate the barn to create an event space/pavilion for group activities and public use.
- Add a group picnic shelter.
- Build an outdoor classroom near the pond.
- Install amphitheater.
- Designate or create a nature exploration area that can be programmed for environmental education and interpretation or support drop-in activities such as fort-building, digging, planting, etc.
- Add interpretive elements and identification signage, calling attention to plants and nest boxes for wood ducks and bats.
- Provide a wedding/small event venue with opportunities for arts, cultural, and nature programming.
- Consider interpretive features at Community Center (house).
- Consider Willowbrook parking impacts and trail connection in park site planning.
- Replace lawn areas with no-mow natives to reduce maintenance.

## Other Natural Areas

- Provide viewpoints and habitat viewing areas, particularly where trails/pathways meet, to highlight local geography, natural features, and the early history of site (ex: Ice Age floods).
- Promote natural areas through new and continued partnership with Clean Water Services and Tigard-Tualatin School District.

## Trails and Greenways

- Consult with Tualatin Historical Society to identify and/or develop interpretive themes along trails and greenways.
- Design for trails and greenways to prioritize accessibility, safety, and a natural look and feel.

## Basalt Creek

- Identify a site theme and park elements. Incorporate interactive, interpretive, and thematic art elements to support site character, with the collaboration and involvement of residents.
- Consider the following:

- A destination and/or universal play area, with water play features
- Sports fields (see New Facilities)
- Pickleball sports court complex (lighted)
- Other lighted sports courts (futsal, basketball, tennis)
- Game and activity/challenge areas
- A small indoor recreation site
- Picnic and group gathering shelters with seating.
- Event space and amphitheater-style gathering area for events
- Dog park or dog run
- Disc golf
- Looped walking trail with lighting
- Trailhead
- Nature viewpoints
- Other outdoor facilities consistent with plan recommendations

## Pony Ridge

- Consider park elements to meet Pony Ridge neighborhood needs, such as:
  - Nature play area
  - Seating area
  - Small picnic shelter that fits in with Metro's vision for this site.

## Sports Facilities

- Add a pickleball court complex and consider joint striping and lighting of tennis/pickleball courts at Atfalati and Tualatin Community Park.
- Provide 1-2 dedicated futsal courts at Atfalati and another site TBD.
- Consider low-impact sports courts (e.g., badminton, bocce, table tennis, shuffleboard, etc.) near the Juanita Pohl Center.
- Provide active use courts in areas with nearby youth and teens.
- Provide gymnasiums and consider fieldhouse elements in conjunction with the community recreation center.
- Consider through site master planning opportunities to add sports fields to Jurgens Park.
- Consider moving/improving the Tualatin Community Park ballfield and adding lighting, seating and drainage improvements to other sites to expand playability.
- Leave out soccer goals at selected sites during summer months (alternating sites to allow field rest) to support summer drop-in play.
- Ensure there are adequate shade or shelters provided in proximity to fields and court facilities to address needs of spectators, teams, and parents.

## Other Outdoor Facilities

Integrate the following outdoor facilities at pilot sites to test use before adding more to additional sites.

- **Play areas:** Vary the types of play areas in parks to address needs for universal play, nature play, and water play while supporting imaginative, creative, and active play for children and families. Incorporate art in play areas, including playable elements such as musical instruments. Address lack of play areas for toddlers and preschool groups.

- **Teen zone:** Select 1-3 sites (e.g., Atfalati, Ibach, and Basalt Creek) to add challenge and adventure play elements for teens, such as zip lines, rope swings, climbing spire/net climbers, bike skills course, skate spots/parks, etc.
- **Skate Park:** Identify a skate park location in a geographic area of the City to serve residents that do not have access to the current skate facility at Tualatin Community Park.
- **Dog parks:** Consider off-leash dog areas at Jurgens Park and possibly the proposed Basalt Creek Community Park (or similar sites to distribute options around the city). Provide small and large dog areas. Vary surfacing to include turf, decomposed granite, synthetic turf, or a combination of the three. Provide site amenities such as dog waste dispensers, seating, and a gated main entry, if fenced. Consider additional amenities, such as drinking stations, water pools, shade, picnic tables, topography, lighting, and landscaping. Consider fenced areas, and if appropriate, unfenced areas buffered from other site uses.
- **Community gardens:** Identify 1-2 sites with sunlight, drainage, access to water, and land suitable for gardens or raised gardens. Consider options adjacent to recreation facilities or schools for joint programming.
- **Disc golf course:** Provide one 18-hole disc golf course at a site to be determined.
- **Water access facilities:** Evaluate option to add one additional floating dock on the river and/or add additional sections to existing floating docks.
- **Fitness facilities/equipment:** Integrate outdoor fitness equipment at 1-2 community parks or large neighborhood parks. Consider adding outdoor fitness equipment along trails.
- **Activity spots:** Consider unique elements in 3-5 parks to support social interaction, fitness, and play, such as skate spots, uneven shooting hoops, outdoor ping pong tables, giant chess boards, chess tables, pop-up play installations, hill slides/climbers, slack lines, hammocks, unique swings, mini foot golf, putting green, tai chi court, etc.
- **Interpretive/nature spots:** Consider adding small venues to connect people to nature in 3-5 parks, natural areas, and greenways. These may incorporate both natural and developed elements, such as butterfly garden/pollinator patch, frog pond, rock formation for climbing/seating, vista/viewpoint, interpretive area or trail, permaculture area, accessible creek, stepping stones or logs, bridged bioswales, rock gardens, groves, treehouses, etc.
- **Shade:** Ensure there are adequate shade or shelters provided in proximity to new outdoor facilities.

## Public Art

- Consider interpretive, expressive, educational, functional, and abstract art that addresses the following themes:
  - Geologic and glacial processes with an emphasis on the Ice Age floods.
  - Human history in Tualatin, from local tribes such as the Atfalati to the agricultural/settlement history of Tualatin and significant individuals and buildings.
  - Natural history, including native flora and fauna.
  - Tualatin's cultural and ethnic diversity.
  - Abstract or expressive representations of Tualatin's identity.
- Integrate arts and culture into the design or renovation of all public buildings, including but not limited to the addition of exhibit or display spaces (Example: The Quilt Barn Trail piece at Brown's Ferry Park is an example of temporary art, in this case part of a larger Washington County temporary installation).
- Incorporate artists and art into youth recreation programming by partnering with schools, the Youth Advisory Council, and other organizations.

- Explore ways to encourage young artists to participate in the City’s arts and cultural programs.
- Partner with community organizations such as Tualatin RiverKeepers, Willowbrook, and Mask & Mirror Community Theatre to develop arts education programs for youth.
- Promote adult and intergenerational art programs that encourage art and music appreciation as well as creativity and participation.
- Coordinate with JPC staff and related advisory committees to identify and increase arts programs for older adults and seniors.
- Organize community artwalk or artcrawl events to showcase different art, food and sensory experiences.
- Consider options such as hosting hackathons, makerspace contests, or poetry slams to engage people of all ages.
- Initiate an annual photo contest of Tualatin’s parks and natural areas.
- Partner with schools to encourage student development of videos highlighting positive activities or behaviors in Tualatin parks, recreation facilities, and natural areas. (See example: <https://www.youtube.com/watch?v=IFB3VFQpcp8>)
- Promote the Tualatin ArtWalk with local businesses and companies as part of their employee health and fitness program.
- Create a downloadable or interactive map of Tualatin’s ArtWalk route.
- Host contests to identify an honorary poet laureate for the City.
- Consider a rotating “artist-in-residence” for the community recreation centers. This person would teach art classes and display his or her current work.





# TUALATIN PARKS & RECREATION MASTER PLAN

## APPENDIX D COST MATRIX









# PARKS & RECREATION MASTER PLAN

## APPENDIX D: COST MATRIX

Appendix D introduces the planning-level cost estimates associated with Master Plan recommendations. The estimates are based on a general order-of-magnitude in costs to assist in evaluating and prioritizing projects for future consideration in the City’s annual capital improvement planning. Costs are in 2018 dollars not accounting for inflation.

### Matrix Definitions and Assumptions

The appendix presents three tables. Each are aligned with the recommendations presented in Appendix B.

Table D-1: Proposed Projects Cost Summary and SDC Eligibility summarizes project costs estimates by site associated with capital projects, reinvestment and replacement, and maintenance. Costs are based on the information as noted below. The table also identified projects that are SDC eligible and/or included in developing the new SDC methodology.

Costs shown in Table D-1 are based on per-acre or per-site costs by park classification, as noted in Table D-2: Cost Estimates by Park Type and Category.

Table D-3: Proposed Projects Cost Matrix provide details regarding specific costs by category.

All are based on the following information:

#### SITE OVERVIEW

- **Project Identification #:** A project number for reference purposes only. This does not reflect project priorities. The ID distinguishes existing projects (E) from proposed projects (P).
- **Site Name:** Name of the site.
- **Acreage:** Total existing or proposed acreage of site.
- **Percentage of Site to Be Developed:** The area of the site that will be developed upon completion of recommended improvements. The percentage is an estimate to account for the fact that some sites are partially developed already and awaiting Phase 2 development.
- **Park Type:** The site’s classification, as noted in the approved parkland inventory. CP = Community Park; LNP = Large Neighborhood Park; SNP = Small Neighborhood Park; SU =

Special Use; SUP = Shared Use Path; NP = Natural Park; JU = Joint Use; G = Greenway; NA = Natural Area.

## CAPITAL PROJECTS

### Build

- **Master Plan/Feasibility Study:** A flat cost that varies by park type. This is an allowance to update existing site master plans, develop new design concepts or site master plans, and/or conduct feasibility studies to identify acquisition, development, and/or operational plans.
- **Parkland Acquisition or Easements:** Standard per-acre cost to purchase new land for parks, natural areas, greenways, or trails.
- **Site Development:** A per-acre cost that varies by park type. This is a cost estimate to develop an existing or acquired piece of property, including infrastructure, access, internal circulation or trails, and new amenities and facilities.
- **Major Facility Construction:** A write-in allowance to build a new high-cost facility, such as a new building, tournament sport complex, or floating dock.

### Enhance

- **Added Recreation Element(s):** A flat cost that varies by park type. This is an allowance to add a new site feature or make a specific improvement that does not involve further site enhancements or renovations.
- **Added Art:** Standard allowance of \$10,000 to add artwork to a site. The art may be integrated into other features.
- **Minor Renovation:** A per-acre cost that is 25% of the cost of full site development. This is a cost estimate to provide small to medium level of improvements/upgrades to an existing park or trail corridor.
- **Major Renovation:** A per-acre cost that is 50% of the cost of full site development. This is a cost estimate to provide extensive level of improvements/upgrades to an existing park or trail corridor.
- **Special Use Building Renovation:** A write-in allowance to renovate a special use building.
- **Enhancement Through Partnership:** A write-in allowance for the City to contribute funding to a joint project or partnership to add a facility or renovate a site owned by another entity.

### Steward

- **Natural Resource Restoration:** A per-acre allowance that varies for developed and natural parks. These funds are used to restore natural resource areas such as habitat, wetlands, riparian corridors, prairies, and forested areas.
- **Deferred Maintenance:** A per-acre cost that is 10% of the cost of full site development. This is a cost estimate to attend to deferred tasks, such as turf care, refreshed plantings, repair/replacement of site furnishings, building painting or residing, roof or infrastructure repairs, etc.



- **Accessibility Improvements:** An amount designated in Tualatin’s ADA Transition Plan to remove barriers to site or facility access.

### Total Capital Costs

- **Subtotal Parkland Acquisition or Easement Costs:** This is a subtotal of the per-acre cost to purchase new land for parks, natural areas, greenways, or trails.
- **Subtotal Improvement Costs:** This is a subtotal of all other costs for site development, enhancement, and stewardship.
- **Total Capital Cost:** This column presents the sum of the capital costs for each site.

### Replace

- **Total Capital Reinvestment and Replacement:** An annual allowance set aside to offset the costs of replacing facilities at the end of their lifecycles. These costs are based on a 20-year replacement schedule to update one-quarter of the park, including landscaping and amenities. The costs are annualized to provide an estimated allowance to set aside annually to ensure that funds are available for these types of improvements when needed. For this reason, they are separated from other capital costs.

## MAINTENANCE AND OPERATIONS

### Maintain

- **Standard Maintenance:** A per-acre cost that varies by park type. This represents funds needed to provide standard level of care including all routine and preventative tasks.
- **Enhanced Maintenance:** A per-acre cost that varies by park type. This represents funds needed to provide a higher level of maintenance and more frequent tasks at sites that have specialized assets, are heavily programmed, provide special events and reservable facilities, or are otherwise heavily used.
- **Natural Resource Maintenance:** An add-on allowance, in addition to regular site maintenance, to provide specialized maintenance of natural areas, including routine monitoring and inspection, tree pruning, invasives removal, dump and litter pickup, hazards removal.
- **Total Maintenance Cost:** This column presents the sum of the maintenance costs for each site.

## SDC ELIGIBILITY

- **Capacity Enhancement:** This column is checked for projects that are considered “capacity enhancement” and provide a new or increased recreation use. The increased recreation use may serve existing and new residents and employees as the community grows.



Table D-1 : Proposed Projects Cost Summary and SDC Eligibility

Exhibit A to Resolution No. 5407-18

Project Identification #	Site Name	Acreage	Percentage of Site to Be Developed <sup>1</sup>	Type	Build			Enhance						Steward			Costs			Replace	Costs	Maintain			Costs	SDC Eligible							
					Master Plan/Feasibility Study	Parkland Acquisition or Easements	Site Development	Major Facility Construction	Added Recreational Element (s)	Added Trail	Added Art	Minor Renovation	Major Renovation	Special Use Building Renovation	Enhancement Through Partnership	Natural Resource Restoration	Deferred Maintenance	Accessibility Improvements (See ADA Transition Plan)	Subtotal: Parkland Acquisition or Easements			Subtotal: Improvement Costs	Total Capital Cost	Capital Reinvestment and Replacement			Total Capital Reinvestment and Replacement	Standard Maintenance	Enhanced Maintenance	Natural Resource Maintenance	Total Maintenance Cost	Capacity Enhancement	
Existing Parks and Facilities																																	
E1	Atfalati Park	13.27	25%	LNP			●				●		●			●	●	●	\$	-	\$	6,181,432	\$	6,181,432	●	\$	82,938		●	●	\$	112,795	✓
E2	Ibach Park	20.08	25%	LNP			●				●		●			●	●	●	\$	-	\$	9,041,788	\$	9,041,788	●	\$	125,500		●	●	\$	170,680	✓
E3	Jurgens Park	15.59	40%	LNP	●		●			●	●		●			●		●	\$	-	\$	7,328,675	\$	7,328,675	●	\$	97,438		●	●	\$	132,515	✓
E4	Lafky Park	2.00	-	SNP								●						●	\$	-	\$	277,818	\$	277,818	●	\$	10,000	●			\$	12,000	✓
E5	Stoneridge Park	0.23	-	SNP									●		●		●	●	\$	-	\$	113,870	\$	113,870	●	\$	1,150	●			\$	1,380	✓
E6	Tualatin Commons	4.83	-	SU							●	●				●	●	●	\$	-	\$	1,088,198	\$	1,088,198	●	\$	30,188		●		\$	36,225	
E7	Tualatin Commons Park	0.64	-	SU							●						●	●	\$	-	\$	61,187	\$	61,187	●	\$	4,000	●			\$	3,840	
E8	Tualatin Community Park	27.11	-	CP	●				●				●	●		●		●	\$	-	\$	19,529,596	\$	19,529,596	●	\$	203,325		●	●	\$	230,435	✓
E9	Tualatin Library		-	SU	●									●	●		●	\$	-	\$	6,107,222	\$	6,107,222							\$	-	✓	
	Subtotal Existing Parks and Facilities	83.75			3	0	3	0	1	1	5	2	5	2	2	5	5	9	\$	-	\$	49,729,787	\$	49,729,787	8	\$	554,538	3	5	4	\$	699,870	
Existing Natural Parks & Areas																																	
E10	Brown's Ferry Park	43.21	25%	NP	●				●		●		●	●		●	●	●	\$	-	\$	28,539,479	\$	28,539,479	●	\$	270,063		●	●	\$	172,840	✓
E11	Hedges Creek Wetlands Protection District	29.06	-	NA							●					●	●	●	\$	-	\$	1,213,220	\$	1,213,220	●	\$	145,300	●		●	\$	72,650	
E12	Hervin Grove Natural Area	0.29		NA						●						●			\$	-	\$	20,000	\$	20,000						●	\$	290	
E13	Johnnie and William Koller Wetland Park	15.32	40%	NA	●		●			●	●					●			\$	-	\$	2,506,200	\$	2,506,200				●		●	\$	38,300	✓
E14	Little Woodrose Nature Park	6.55	-	NP								●				●	●	●	\$	-	\$	1,375,619	\$	1,375,619	●	\$	40,938	●		●	\$	19,650	✓
E15	Saارين Wayside Park	0.06	-	NP												●		●	\$	-	\$	20,000	\$	20,000				●		●	\$	180	
E16	Sequoia Ridge Natural Area	0.65	-	NA												●	●		\$	-	\$	46,000	\$	46,000				●		●	\$	1,625	
E17	Sweek Ponds Natural Area	4.68	-	NA							●	●		●		●	●	●	\$	-	\$	1,261,784	\$	1,261,784					●	●	\$	16,380	✓
E18	Sweek Woods Natural Area	5.03	-	NA												●			\$	-	\$	20,000	\$	20,000				●		●	\$	12,575	
E19	Victoria Woods Natural Area	2.22	-	NA												●	●	●	\$	-	\$	228,550	\$	228,550				●		●	\$	5,550	
	Subtotal Existing Natural Parks & Natural Areas	107.07			2	0	1	0	1	2	4	2	1	2	0	10	6	6	\$	-	\$	35,230,852	\$	35,230,852	3	\$	456,300	7	2	10	\$	340,040	
Existing Greenways																																	
E20	Chieftain/Dakota Greenway	6.14	50%	G			●					●				●		●	\$	-	\$	1,520,978	\$	1,520,978	●	\$	23,025	●		●	\$	24,560	✓
E21	Hedges Creek Greenway	11.66	50%	G			●									●		●	\$	-	\$	1,798,218	\$	1,798,218	●	\$	43,725	●		●	\$	46,640	✓
E22	Helenius Greenway	0.43	100%	G			●									●			\$	-	\$	149,000	\$	149,000	●	\$	1,613	●		●	\$	1,720	✓

Project Identification #	Exhibit A to Resolution No. 5407-18  Site Name	Acreage	Percentage of Site to Be Developed <sup>1</sup>	Type	Build				Enhance							Steward			Costs			Replace	Costs	Maintain			Costs	SDC Eligible	
					Master Plan/Feasibility Study	Parkland Acquisition or Easements	Site Development	Major Facility Construction	Added Recreational Element (s)	Added Trail	Added Art	Minor Renovation	Major Renovation	Special Use Building Renovation	Enhancement Through Partnership	Natural Resource Restoration	Deferred Maintenance	Accessibility Improvements (See ADA Transition Plan)	Subtotal: Parkland Acquisition or Easements	Subtotal: Improvement Costs	Total Capital Cost	Capital Reinvestment and Replacement	Total Capital Reinvestment and Replacement	Standard Maintenance	Enhanced Maintenance	Natural Resource Maintenance	Total Maintenance Cost	Capacity Enhancement	
E23	Hi-West Estates Greenway	1.59		G												●			\$ -	\$ 190,338	\$ 190,338	●	\$ 5,963	●		●	\$ 6,360		
E24	Indian Meadows Greenway	3.82	10%	G			●									●		●	\$ -	\$ 545,049	\$ 545,049	●	\$ 14,325	●		●	\$ 15,280	✓	
E25	Nyberg Creek Greenway	5.78	75%	G			●			●	●					●		●	\$ -	\$ 1,381,656	\$ 1,381,656	●	\$ 21,675	●		●	\$ 23,120	✓	
E26	Nyberg Creek (South) Greenway	2.30	100%	G			●			●						●			\$ -	\$ 710,000	\$ 710,000	●	\$ 8,625	●		●	\$ 9,200	✓	
E27	Saum Creek Greenway	54.22	25%	G			●			●	●					●		●	\$ -	\$ 4,376,436	\$ 4,376,436	●	\$ 203,325	●		●	\$ 216,880	✓	
E28	Shaniko Greenway	3.30		G												●		●	\$ -	\$ 48,732	\$ 48,732	●	\$ 12,375	●		●	\$ 13,200		
E29	Tualatin River Greenway	30.39	50%	G			●		●	●	●					●		●	\$ -	\$ 5,483,771	\$ 5,483,771	●	\$ 113,963	●		●	\$ 121,560	✓	
	Subtotal Existing Greenways	119.63			0	0	8	0	1	4	3	3	0	0	0	10	0	8	\$ -	\$ 16,204,180	\$ 16,204,180	10	\$ 448,613	10	0	10	\$ 478,520		
Existing School Joint-Use Facilities																													
E30	TuHS Leonard Pohl Field <sup>2</sup>		-	JU												●				\$ -	\$ 563,024	\$ 563,024				●		\$ 13,700	
E31	TuHS-Byrom Elementary Cross Country Running Trail		-	JU															\$ -	\$ 42,865	\$ 42,865				●		\$ -		
	Subtotal Existing Joint-Use Facilities				0	0	0	0	0	0	0	0	0	0	1	0	0	0	\$ -	\$ 605,889	\$ 605,889	0	\$ -	0	2	0	\$ 13,700		
Existing Shared Use Paths																													
E32	65th Avenue Shared Use Path	0.47	-	SUP															\$ -	\$ -	\$ -	●	\$ 1,763	●			\$ 1,410		
E33	Boones Ferry Road Shared Use Path (Byrom Elementary to Arapaho Road)	0.41	-	SUP														●	\$ -	\$ -	\$ -	●	\$ 1,538	●			\$ 1,230		
E34	Byrom Elementary Shared Use Path (Martinazzi Ave. to Boones Ferry Rd.)	0.80	-	SUP															\$ -	\$ -	\$ -	●	\$ 3,000	●			\$ 2,400		
E35	Cherokee Street Shared Use Path (108th Ave to Rail Road ROW)	0.09	-	SUP															\$ -	\$ -	\$ -	●	\$ 338	●			\$ 270		
E36	I-5 Shared Use Path (Warm Springs St. to Sagert St.)	1.54	100%	SUP			●			●									\$ -	\$ 462,000	\$ 462,000			●			\$ 4,620	✓	
E37	Ice Age Tonquin Trail	3.06	75%	SUP	●		●			●	●							●	\$ -	\$ 723,500	\$ 723,500	●	\$ 11,475	●			\$ 9,180	✓	
	Subtotal Existing Shared Use Paths	6.37			1	0	2	0	0	2	1	0	0	0	0	0	0	2	\$ -	\$ 1,185,500	\$ 1,185,500	5	\$ 18,113	6	0	0	\$ 19,110		
	TOTAL EXISTING PARKLAND	316.82			6	0	14	0	3	9	13	7	6	4	2	25	11	25	\$ -	\$102,350,319	\$102,350,319	26	\$ 1,477,563	26	7	24	\$1,537,540		
Proposed Parks and Facilities																													
P1	Jurgens Park addition	5.15	100%	LNP	●	●	●			●	●								\$ 1,287,500	\$ 2,660,000	\$ 3,947,500	●	\$ 32,188		●		\$ 38,625	✓	
P2	Tualatin Community Park addition	3.0	100%	LNP	●	●	●			●	●								\$ 750,000	\$ 1,585,000	\$ 2,335,000	●	\$ 18,750		●		\$ 22,500	✓	
P3	Basalt Creek park	20.0	100%	CP	●	●	●			●	●								\$ 5,000,000	\$ 12,110,000	\$ 17,110,000	●	\$ 150,000		●		\$ 150,000	✓	
P4	East Tualatin / Bridgeport Elementary partnership		100%	JU											●				\$ -	\$ 200,000	\$ 200,000			●			\$ 5,000	✓	



Project Identification #	Exhibit A to Resolution No. 5407-18	Acreage	Percentage of Site to Be Developed <sup>1</sup>	Type	Build				Enhance							Steward			Costs			Replace	Costs	Maintain			Costs	SDC Eligible	
					Master Plan/Feasibility Study	Parkland Acquisition or Easements	Site Development	Major Facility Construction	Added Recreational Element (s)	Added Trail	Added Art	Minor Renovation	Major Renovation	Special Use Building Renovation	Enhancement Through Partnership	Natural Resource Restoration	Deferred Maintenance	Accessibility Improvements (See ADA Transition Plan)	Subtotal: Parkland Acquisition or Easements	Subtotal: Improvement Costs	Total Capital Cost	Capital Reinvestment and Replacement	Total Capital Reinvestment and Replacement	Standard Maintenance	Enhanced Maintenance	Natural Resource Maintenance	Total Maintenance Cost	Capacity Enhancement	
P5	Pony Ridge/ Heritage Pine partnership		100%	JU						●	●				●				\$ -	\$ 210,000	\$ 210,000							\$ 5,000	✓
P6	Central Tualatin sports park	9.0	100%	SU	●	●	●			●	●								\$ 2,250,000	\$ 4,585,000	\$ 6,835,000	●	\$ 56,250		●		\$ 67,500	✓	
P7	Community recreation center	5.0	100%	SU	●	●	●	●		●	●								\$ 1,250,000	\$ 32,585,000	\$ 33,835,000	●	\$ 31,250		●		\$ 37,500	✓	
P8	Additional park opportunities	11.8	100%	SU	●	●	●	●											\$ 2,950,000	\$ 5,975,000	\$ 8,925,000	●	\$ 73,750	●			\$ 70,800	✓	
P9	Tournament sports complex	10.0	100%	SU	●	●	●	●			●								\$ 2,500,000	\$ 10,085,000	\$ 12,585,000	●	\$ 62,500		●		\$ 75,000	✓	
	Subtotal Proposed Parks and Facilities	63.95			7	7	7	3	0	6	7	0	0	0	2	0	0	0	\$ 15,987,500	\$ 69,995,000	\$ 85,982,500	7	\$ 424,688	2	6	0	\$ 471,925		
Proposed Natural Parks & Areas																													
P10	New natural park and areas	12.7	100%	NA	●	●	●			●	●								\$ 2,540,000	\$ 5,115,000	\$ 7,655,000	●	\$ 63,500		●		\$ 31,750	✓	
	Subtotal Proposed Natural Parks & Areas	12.70			1	1	1	0	0	1	1	0	0	0	0	0	0	0	\$ 2,540,000	\$ 5,115,000	\$ 7,655,000	1	\$ 63,500	0	1	0	\$ 31,750		
Proposed Greenways and Shared Use Paths																													
P11	New greenways and shared use paths	15.1	100%	G	●	●	●	●		●	●								\$ 3,775,000	\$ 9,565,000	\$ 13,340,000	●	\$ 56,625	●		●	\$ 60,400	✓	
P12	Westside Trail bridge	1.0	100%	G	●	●	●			●					●				\$ 250,000	\$ 5,325,000	\$ 5,575,000	●	\$ 3,750	●			\$ 3,000	✓	
	Subtotal Proposed Greenways and Shared Use Paths	16.10			2	2	2	1	0	2	1	0	0	0	1	0	0	0	\$ 4,025,000	\$ 14,890,000	\$ 18,915,000	2	\$ 60,375	2	0	1	\$ 63,400		
	TOTAL PROPOSED PARKLAND	92.75			10	10	10	4	0	9	9	0	0	0	3	0	0	0	\$ 22,552,500	\$ 90,000,000	\$ 112,552,500	10	\$ 548,563	4	7	1	\$ 567,075		
Proposed Additional Planning																													
P13	Community (Urban) Forestry Plan				●														\$ -	\$ 100,000	\$ 100,000						\$ -		
P14	Comprehensive Fee Analysis and Plan				●														\$ -	\$ 100,000	\$ 100,000						\$ -		
P15	Resource Management Plan				●														\$ -	\$ 100,000	\$ 100,000						\$ -		
P16	Marketing and Outreach Plan				●														\$ -	\$ 100,000	\$ 100,000						\$ -		
	TOTAL ADDITIONAL PLANNING				4	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -	\$ 400,000	\$ 400,000	0	\$ -	0	0	0	\$ -		
	TOTAL EXISTING PARKLAND, PROPOSED PARKLAND & ADDITIONAL PLANNING	409.6			20	10	24	4	3	18	22	7	6	4	5	25	11	25	\$ 22,552,500	\$ 193,356,208	\$ 215,908,708	36	\$ 2,026,125	30	14	25	\$ 2,118,315		

Notes:  
All costs reflect general planning-level cost estimates based on 2018 dollars, not accounting for inflation. See the Cost Matrix Overview and Assumptions for definitions of each cost category.

1. This number reflects the percentage of the site that will be developed when development projects proceed. For new sites, it is assumed that 100% of the site will be developed. For existing sites, the percentage reflects a portion of the site that is currently undeveloped and will be developed in the next phase of construction.
2. The ADA cost for Leonard Pohl Field also includes part of the cost estimate for ADA improvements to the TuHS portion of the cross-country trail. For details, see the ADA Barrier Analysis cost estimates.

Key:  
Project Identification Number: E = Existing Site; P = Proposed Site  
Park Type: CP- Community Park, LNP- Large Neighborhood Park, SNP- Small Neighborhood Park, SU- Special Use, SUP- Shared Use Path, NP- Natural Park, JU- Joint Use, G- Greenway, NA-Natural Area

Table D-2: Cost Estimates by Park Type and Category

Capital Projects																Operations and Maintenance		
Park Type	Park Type Abbreviation	Build				Enhance						Steward			Reinvest	Maintain		
		Master Plan/Feasibility Study	Parkland Acquisition or Easements	Site Development	Major Facility Construction	Added Recreational Element (s)	Added Art	Minor Renovation	Major Renovation	Special Use Building Renovation	Enhancement Through Partnership	Natural Resource Restoration	Deferred Maintenance	Accessibility Improvements (See ADA Transition Plan) <sup>7</sup>	Capital Reinvestment and Replacement	Standard Maintenance	Enhanced Maintenance	Natural Resource Maintenance
		Flat	Per Acre	Per Acre	Write-in	Flat	Flat	Per Acre	Per Acre	Write-in	Write-in	Flat	Per Acre	Write-in	Per Acre	Per Acre	Per Acre	Per Acre
Large Neighborhood Park	LNP	\$75,000	\$250,000	\$500,000	write-in	\$50,000	\$10,000	\$125,000	\$250,000	write-in	write-in	\$10,000	\$50,000	write-in	\$6,250	\$6,000	\$7,500	\$1,000
Small Neighborhood Park	SNP	\$25,000	\$250,000	\$400,000	NA	\$25,000	\$10,000	\$100,000	\$200,000	NA	NA	\$10,000	\$40,000	write-in	\$5,000	\$6,000	\$6,000	\$1,000
Special Use	SU	\$75,000	\$250,000	\$500,000	write-in	\$50,000	\$10,000	\$125,000	\$250,000	write-in	write-in	\$10,000	\$50,000	write-in	\$6,250	\$6,000	\$7,500	\$1,000
Community Park	CP	\$100,000	\$250,000	\$600,000	write-in	\$100,000	\$10,000	\$150,000	\$300,000	write-in	write-in	\$20,000	\$60,000	write-in	\$7,500	\$6,000	\$7,500	\$1,000
Natural Park	NP	\$75,000	\$200,000	\$500,000	write-in	\$50,000	\$10,000	\$125,000	\$250,000	write-in	write-in	\$20,000	\$50,000	write-in	\$6,250	\$2,000	\$3,000	\$1,000
Natural Area	NA	\$25,000	\$200,000	\$400,000	NA	\$25,000	\$10,000	\$100,000	\$200,000	NA	NA	\$20,000	\$40,000	write-in	\$5,000	\$1,500	\$2,500	\$1,000
Greenway	G	\$25,000	\$250,000	\$300,000	write-in	\$100,000	\$10,000	\$75,000	\$150,000	write-in	write-in	\$20,000	\$30,000	write-in	\$3,750	\$3,000	\$4,000	\$1,000
Joint Use Site	JU	\$25,000	NA	\$300,000	write-in	\$50,000	\$10,000	\$75,000	\$150,000	write-in	write-in	\$10,000	\$30,000	write-in	\$3,750	write-in	write-in	write-in
Shared Use Path	SUP	\$25,000	\$250,000	\$300,000	write-in	\$100,000	\$10,000	\$75,000	\$150,000	write-in	write-in	\$10,000	\$30,000	write-in	\$3,750	\$3,000	\$4,000	\$1,000

## Notes:

All costs reflect general planning-level cost estimates based on 2018 dollars, not accounting for inflation.  
See Cost Matrix Overview and Assumptions for definitions of each cost category.

Table D-3 : Proposed Projects Cost Matrix

Project Identification #	Site Name	Percentage of Site to Be Developed <sup>1</sup>	Capital Projects																O&M				
			Build				Enhance							Steward					Maintain				Total Maintenance Cost
			Master Plan/Feasibility Study	Parkland Acquisition or Easements	Site Development	Major Facility Construction	Added Recreational Element (s)	Added Trail	Added Art	Minor Renovation	Major Renovation	Special Use Building Renovation	Enhancement Through Partnership	Natural Resource Restoration	Deferred Maintenance	Accessibility Improvements (See ADA Transition Plan)	Total Capital Cost		Capital Reinvestment and Replacement	Standard Maintenance	Enhanced Maintenance	Natural Resource Maintenance	
Existing Parks and Facilities																							
E1	Atfalati Park	25%			\$ 1,658,750			\$ 10,000		\$ 3,317,500			\$ 10,000	\$ 663,500	\$ 521,682	\$ 6,181,432	\$ 82,938		\$ 99,525	\$ 13,270	\$ 112,795		
E2	Ibach Park	25%			\$ 2,510,000			\$ 10,000		\$ 5,020,000			\$ 10,000	\$ 1,004,000	\$ 487,788	\$ 9,041,788	\$ 125,500		\$ 150,600	\$ 20,080	\$ 170,680		
E3	Jurgens Park	40%	\$ 75,000		\$ 3,118,000			\$ -	\$ 10,000	\$ 3,897,500			\$ 10,000		\$ 218,175	\$ 7,328,675	\$ 97,438		\$ 116,925	\$ 15,590	\$ 132,515		
E4	Lafky Park	-								\$ 200,000					\$ 77,818	\$ 277,818	\$ 10,000	\$ 12,000			\$ 12,000		
E5	Stoneridge Park	-								\$ 46,000		\$ 25,000		\$ 9,200	\$ 33,670	\$ 113,870	\$ 1,150	\$ 1,380			\$ 1,380		
E6	Tualatin Commons	-						\$ 10,000	\$ 603,750				\$ 10,000	\$ 241,500	\$ 222,948	\$ 1,088,198	\$ 30,188		\$ 36,225		\$ 36,225		
E7	Tualatin Commons Park	-						\$ 10,000						\$ 32,000	\$ 19,187	\$ 61,187	\$ 4,000	\$ 3,840			\$ 3,840		
E8	Tualatin Community Park	-	\$ 100,000			\$ 100,000				\$ 8,133,000	\$ 10,000,000		\$ 20,000		\$ 1,176,596	\$ 19,529,596	\$ 203,325		\$ 203,325	\$ 27,110	\$ 230,435		
E9	Tualatin Library	-	\$ 75,000								\$ 5,000,000	\$ 1,000,000			\$ 32,222	\$ 6,107,222					\$ -		
	Subtotal Existing Parks and Facilities		\$ 250,000	\$ -	\$ 7,286,750	\$ -	\$ 100,000	\$ -	\$ 50,000	\$ 803,750	\$ 20,414,000	\$ 15,000,000	\$ 1,025,000	\$ 60,000	\$ 1,950,200	\$ 2,790,087	\$ 49,729,787	\$ 554,538	\$ 17,220	\$ 606,600	\$ 76,050	\$ 699,870	
Existing Natural Parks & Areas																							
E10	Brown's Ferry Park	25%	\$ 75,000				\$ 50,000		\$ 10,000	\$ 10,802,500	\$ 15,000,000		\$ 20,000	\$ 2,160,500	\$ 421,479	\$ 28,539,479	\$ 270,063		\$ 129,630	\$ 43,210	\$ 172,840		
E11	Hedges Creek Wetlands Protection District	-						\$ 10,000					\$ 20,000	\$ 1,162,400	\$ 20,820	\$ 1,213,220	\$ 145,300	\$ 43,590		\$ 29,060	\$ 72,650		
E12	Hervin Grove Natural Area							\$ -					\$ 20,000			\$ 20,000				\$ 290	\$ 290		
E13	Johnnie and William Koller Wetland Park	40%	\$ 25,000		\$ 2,451,200			\$ -	\$ 10,000				\$ 20,000			\$ 2,506,200		\$ 22,980		\$ 15,320	\$ 38,300		
E14	Little Woodrose Nature Park	-								\$ 818,750			\$ 20,000	\$ 327,500	\$ 209,369	\$ 1,375,619	\$ 40,938	\$ 13,100		\$ 6,550	\$ 19,650		
E15	Saarinén Wayside Park	-											\$ 20,000			\$ 20,000		\$ 120		\$ 60	\$ 180		
E16	Sequoia Ridge Natural Area	-											\$ 20,000	\$ 26,000		\$ 46,000		\$ 975		\$ 650	\$ 1,625		
E17	Sweek Ponds Natural Area	-						\$ 10,000	\$ 468,000		\$ 500,000		\$ 20,000	\$ 187,200	\$ 76,584	\$ 1,261,784		\$ 11,700	\$ 4,680		\$ 16,380		
E18	Sweek Woods Natural Area	-											\$ 20,000			\$ 20,000		\$ 7,545		\$ 5,030	\$ 12,575		
E19	Victoria Woods Natural Area	-											\$ 20,000	\$ 88,800	\$ 119,750	\$ 228,550		\$ 3,330		\$ 2,220	\$ 5,550		
	Subtotal Existing Natural Parks & Natural Areas		\$ 100,000	\$ -	\$ 2,451,200	\$ -	\$ 50,000	\$ -	\$ 40,000	\$ 1,286,750	\$ 10,802,500	\$ 15,500,000	\$ -	\$ 200,000	\$ 3,952,400	\$ 848,002	\$ 35,230,852	\$ 456,300	\$ 91,640	\$ 141,330	\$ 107,070	\$ 340,040	
Existing Greenways																							
E20	Chieftain/Dakota Greenway	50%			\$ 921,000					\$ 460,500			\$ 20,000		\$ 119,478	\$ 1,520,978	\$ 23,025	\$ 18,420		\$ 6,140	\$ 24,560		
E21	Hedges Creek Greenway	50%			\$ 1,749,000								\$ 20,000		\$ 29,218	\$ 1,798,218	\$ 43,725	\$ 34,980		\$ 11,660	\$ 46,640		
E22	Helenius Greenway	100%			\$ 129,000								\$ 20,000			\$ 149,000	\$ 1,613	\$ 1,290		\$ 430	\$ 1,720		
E23	Hi-West Estates Greenway									\$ 119,250			\$ 20,000		\$ 51,088	\$ 190,338	\$ 5,963	\$ 4,770		\$ 1,590	\$ 6,360		
E24	Indian Meadows Greenway	10%			\$ 114,600					\$ 286,500			\$ 20,000		\$ 123,949	\$ 545,049	\$ 14,325	\$ 11,460		\$ 3,820	\$ 15,280		
E25	Nyberg Creek Greenway	75%			\$ 1,300,500			\$ -	\$ 10,000				\$ 20,000		\$ 51,156	\$ 1,381,656	\$ 21,675	\$ 17,340		\$ 5,780	\$ 23,120		
E26	Nyberg Creek (South) Greenway	100%			\$ 690,000			\$ -					\$ 20,000			\$ 710,000	\$ 8,625	\$ 6,900		\$ 2,300	\$ 9,200		
E27	Saum Creek Greenway	25%			\$ 4,066,500			\$ -	\$ 10,000				\$ 20,000		\$ 279,936	\$ 4,376,436	\$ 203,325	\$ 162,660		\$ 54,220	\$ 216,880		
E28	Shaniko Greenway												\$ 20,000		\$ 28,732	\$ 48,732	\$ 12,375	\$ 9,900		\$ 3,300	\$ 13,200		
E29	Tualatin River Greenway	50%			\$ 4,558,500		\$ 100,000	\$ -	\$ 10,000				\$ 20,000		\$ 795,271	\$ 5,483,771	\$ 113,963	\$ 91,170		\$ 30,390	\$ 121,560		
	Subtotal Existing Greenways		\$ -	\$ -	\$ 13,529,100	\$ -	\$ 100,000	\$ -	\$ 30,000	\$ 866,250	\$ -	\$ -	\$ -	\$ 200,000	\$ -	\$ 1,478,830	\$ 16,204,180	\$ 448,613	\$ 358,890	\$ -	\$ 119,630	\$ 478,520	
Existing School Joint-Use Facilities																							
E30	TuHS Leonard Pohl Field <sup>2</sup>	-										\$ 400,000				\$ 163,024	\$ 563,024			\$ 13,700	\$ 13,700		
E31	TuHS-Byrom Elementary Cross Country Running Trail	-														\$ 42,865	\$ 42,865				\$ -		
	Subtotal Existing Joint-Use Facilities		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 400,000	\$ -	\$ -	\$ 205,889	\$ 605,889	\$ -	\$ -	\$ 13,700	\$ -	\$ 13,700	

Project Identification #	Site Name	Percentage of Site to Be Developed <sup>1</sup>	Capital Projects																O&M						
			Build				Enhance							Steward					Maintain						
			Master Plan/Feasibility Study	Parkland Acquisition or Easements	Site Development	Major Facility Construction	Added Recreational Element (s)	Added Trail	Added Art	Minor Renovation	Major Renovation	Special Use Building Renovation	Enhancement Through Partnership	Natural Resource Restoration	Deferred Maintenance	Accessibility Improvements (See ADA Transition Plan)	Total Capital Cost	Capital Reinvestment and Replacement	Standard Maintenance	Enhanced Maintenance	Natural Resource Maintenance				
Existing Shared Use Paths																									
E32	65th Avenue Shared Use Path	-															\$ -	\$ 1,763	\$ 1,410				\$ 1,410		
E33	Boones Ferry Road Shared Use Path (Byrom Elementary to Arapaho Road)	-															\$ -	\$ 1,538	\$ 1,230				\$ 1,230		
E34	Byrom Elementary Shared Use Path (Martinazzi Ave. to Boones Ferry Rd.)	-															\$ -	\$ 3,000	\$ 2,400				\$ 2,400		
E35	Cherokee Street Shared Use Path (108th Ave to Rail Road ROW)	-															\$ -	\$ 338	\$ 270				\$ 270		
E36	I-5 Shared Use Path (Warm Springs St. to Sagert St.)	100%			\$ 462,000			\$ -									\$ 462,000		\$ 4,620				\$ 4,620		
E37	Ice Age Tonquin Trail	75%	\$ 25,000		\$ 688,500			\$ -	\$ 10,000								\$ 723,500	\$ 11,475	\$ 9,180				\$ 9,180		
	Subtotal Existing Shared Use Paths		\$ 25,000	\$ -	\$ 1,150,500	\$ -	\$ -	\$ -	\$ 10,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,185,500	\$ 18,113	\$ 19,110	\$ -	\$ -		\$ 19,110		
	TOTAL EXISTING PARKLAND		\$375,000	\$0	\$24,417,550	\$0	\$250,000	\$0	\$130,000	\$2,956,750	\$31,216,500	\$30,500,000	\$1,425,000	\$460,000	\$5,902,600	\$5,322,808	\$102,956,208	\$1,477,563	\$486,860	\$761,630	\$302,750		\$1,551,240		
Proposed Parks and Facilities																									
P1	Jurgens Park addition	100%	\$ 75,000	\$ 1,287,500	\$ 2,575,000			\$ -	\$ 10,000								\$ 3,947,500	\$ 32,188		\$ 38,625			\$ 38,625		
P2	Tualatin Community Park addition	100%	\$ 75,000	\$ 750,000	\$ 1,500,000			\$ -	\$ 10,000								\$ 2,335,000	\$ 18,750		\$ 22,500			\$ 22,500		
P3	Basalt Creek park	100%	\$ 100,000	\$ 5,000,000	\$ 12,000,000			\$ -	\$ 10,000								\$ 17,110,000	\$ 150,000		\$ 150,000			\$ 150,000		
P4	East Tualatin / Bridgeport Elementary partnership	100%											\$ 200,000				\$ 200,000		\$ 5,000				\$ 5,000		
P5	Pony Ridge/ Heritage Pine partnership	100%						\$ -	\$ 10,000				\$ 200,000				\$ 210,000		\$ 5,000				\$ 5,000		
P6	Central Tualatin sports park	100%	\$ 75,000	\$ 2,250,000	\$ 4,500,000			\$ -	\$ 10,000								\$ 6,835,000	\$ 56,250		\$ 67,500			\$ 67,500		
P7	Community recreation center	100%	\$ 75,000	\$ 1,250,000	\$ 2,500,000	\$ 30,000,000		\$ -	\$ 10,000								\$ 33,835,000	\$ 31,250		\$ 37,500			\$ 37,500		
P8	Additional park opportunities	100%	\$ 75,000	\$ 2,950,000	\$ 5,900,000												\$ 8,925,000	\$ 73,750	\$ 70,800				\$ 70,800		
P9	Tournament sports complex	100%	\$ 75,000	\$ 2,500,000	\$ 5,000,000	\$ 5,000,000			\$ 10,000								\$ 12,585,000	\$ 62,500		\$ 75,000			\$ 75,000		
	Subtotal Proposed Parks and Facilities		\$ 550,000	\$ 15,987,500	\$ 33,975,000	\$ 35,000,000	\$ -	\$ -	\$ 70,000	\$ -	\$ -	\$ -	\$ 400,000	\$ -	\$ -	\$ -	\$ 85,982,500	\$ 424,688	\$ 80,800	\$ 391,125	\$ -	\$ -	\$ 471,925		
Proposed Natural Parks & Areas																									
P10	New natural park and areas	100%	\$ 25,000	\$ 2,540,000	\$ 5,080,000			\$ -	\$ 10,000								\$ 7,655,000	\$ 63,500		\$ 31,750			\$ 31,750		
	Subtotal Proposed Natural Parks & Areas		\$ 25,000	\$ 2,540,000	\$ 5,080,000	\$ -	\$ -	\$ -	\$ 10,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,655,000	\$ 63,500	\$ -	\$ 31,750	\$ -	\$ -	\$ 31,750		
Proposed Greenways and Shared Use Paths																									
P11	New greenways and shared use paths	100%	\$ 25,000	\$ 3,775,000	\$ 4,530,000	\$ 5,000,000		\$ -	\$ 10,000								\$ 13,340,000	\$ 56,625	\$ 45,300		\$ 15,100		\$ 60,400		
P12	Westside Trail bridge	100%	\$ 25,000	\$ 250,000	\$ 300,000			\$ -					\$ 5,000,000				\$ 5,575,000	\$ 3,750	\$ 3,000				\$ 3,000		
	Subtotal Proposed Greenways and Shared Use Paths		\$ 50,000	\$ 4,025,000	\$ 4,830,000	\$ 5,000,000	\$ -	\$ -	\$ 10,000	\$ -	\$ -	\$ -	\$ 5,000,000	\$ -	\$ -	\$ -	\$ 18,915,000	\$ 60,375	\$ 48,300	\$ -	\$ 15,100		\$ 63,400		
	TOTAL PROPOSED PARKLAND		\$ 625,000	\$ 22,552,500	\$ 43,885,000	\$ 40,000,000	\$ -	\$ -	\$ 90,000	\$ -	\$ -	\$ -	\$ 5,400,000	\$ -	\$ -	\$ -	\$ 112,552,500	\$ 548,563	\$ 129,100	\$ 422,875	\$ 15,100		\$ 567,075		
Proposed Additional Planning																									
P13	Community (Urban) Forestry Plan		\$ 100,000														\$ 100,000						\$ -		
P14	Comprehensive Fee Analysis and Plan		\$ 100,000														\$ 100,000						\$ -		
P15	Resource Management Plan		\$ 100,000														\$ 100,000						\$ -		
P16	Marketing and Outreach Plan		\$ 100,000														\$ 100,000						\$ -		
	TOTAL ADDITIONAL PLANNING		\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
	TOTAL EXISTING PARKLAND, PROPOSED PARKLAND & ADDITIONAL PLANNING		\$ 1,400,000	\$ 22,552,500	\$ 68,302,550	\$ 40,000,000	\$ 250,000	\$ -	\$ 220,000	\$ 2,956,750	\$ 31,216,500	\$ 30,500,000	\$ 6,825,000	\$ 460,000	\$ 5,902,600	\$ 5,322,808	\$ 215,908,708	\$ 2,026,125	\$ 615,960	\$ 1,184,505	\$ 317,850		\$ 2,118,315		

Notes:

All costs reflect general planning-level cost estimates based on 2018 dollars, not accounting for inflation. See the Cost Matrix Overview and Assumptions for definitions of each cost category.

1. This number reflects the percentage of the site that will be developed when development projects proceed. For new sites, it is assumed that 100% of the site

2. The ADA cost for Leonard Pohl Field also includes part of the cost estimate for ADA improvements to the TuHS portion of the cross-country trail. For details, see the ADA Barrier Analysis cost estimates.

Key:

Project Identification Number: E = Existing Site; P = Proposed Site

Park Type: CP- Community Park, LNP- Large Neighborhood Park, SNP- Small Neighborhood Park, SU- Special Use, SUP- Shared Use Path, NP- Natural Park, JU- Joint Use, G- Greenway, NA-Natural Area