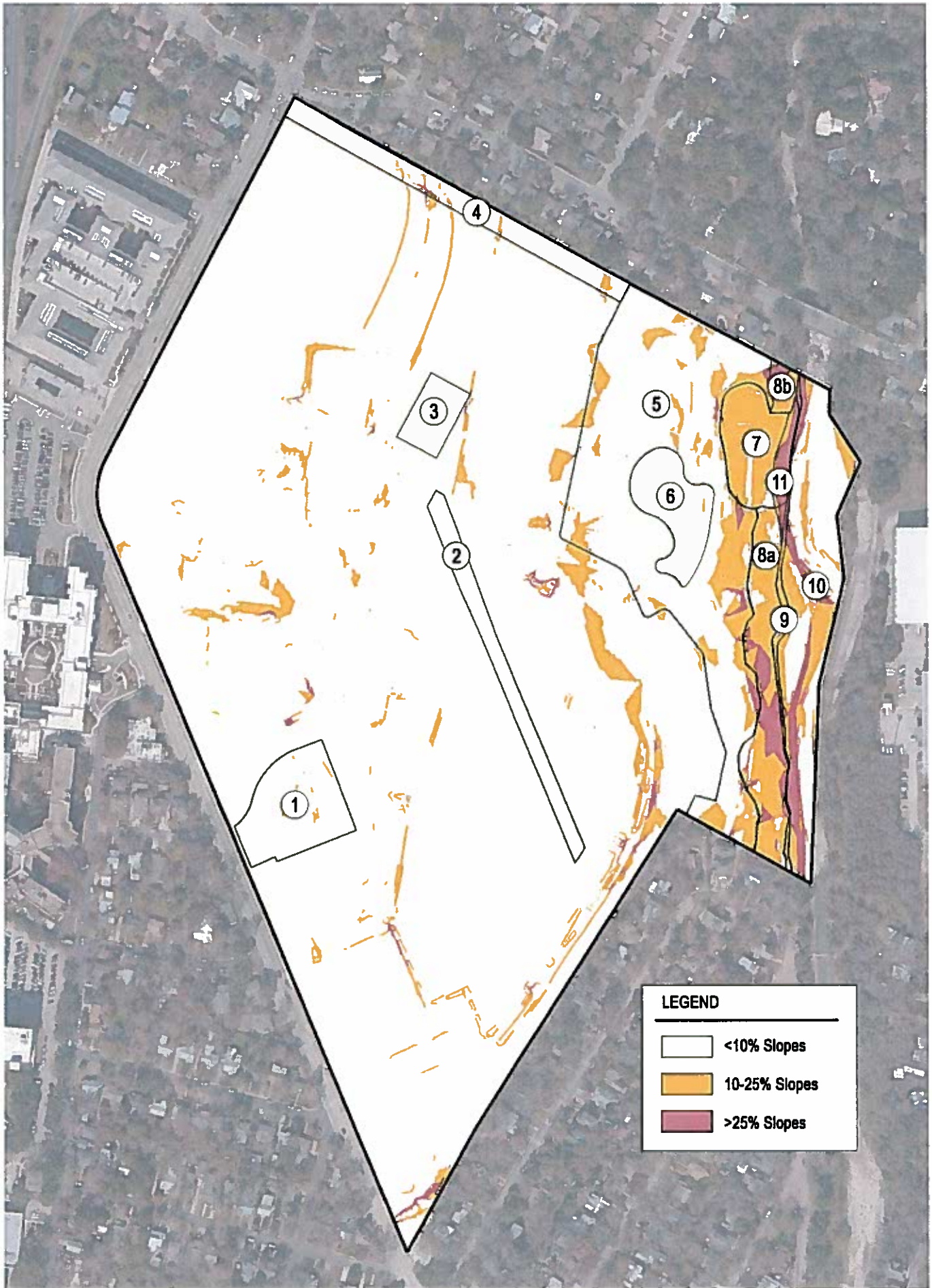


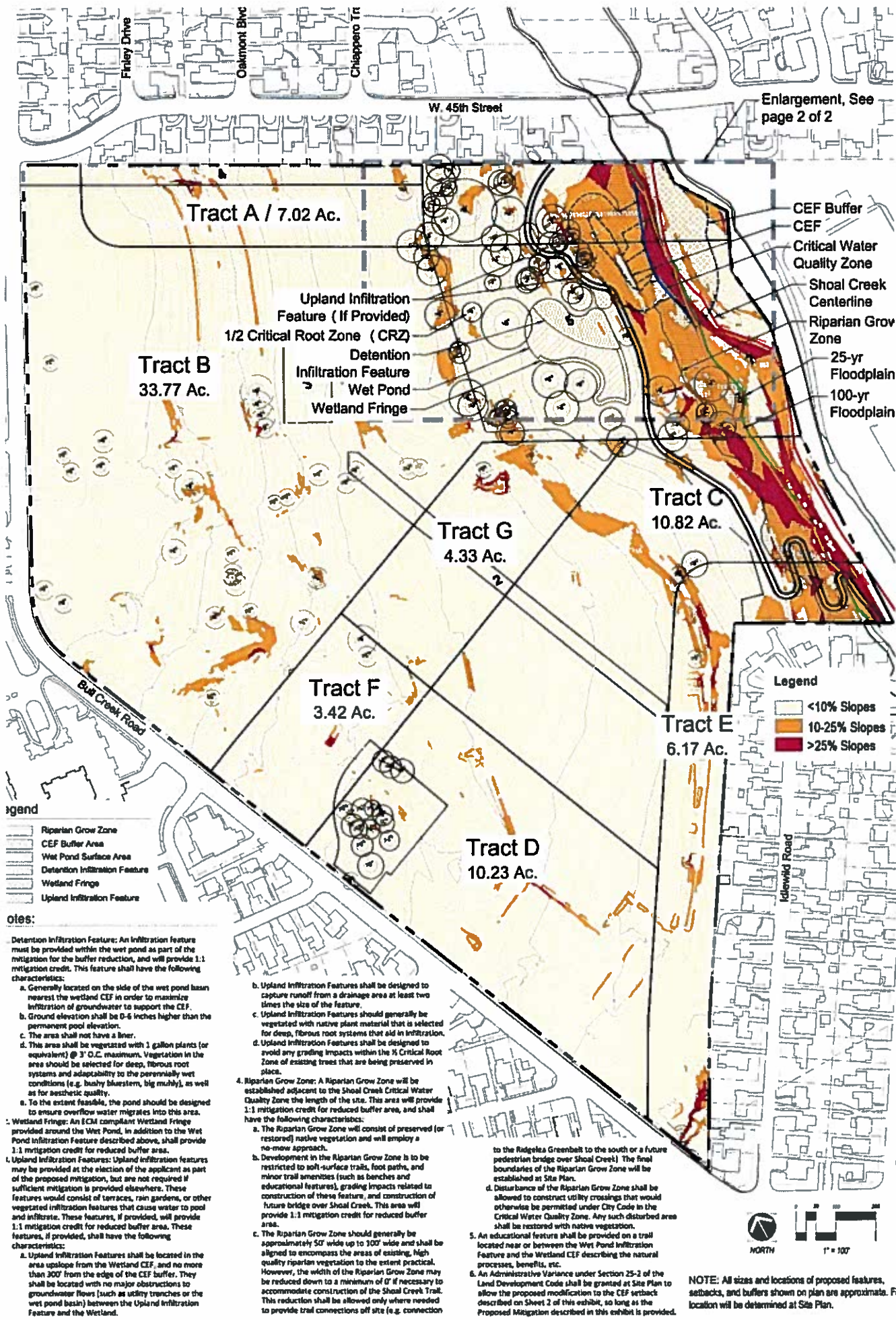
Parkland Slope Analysis
 The Grove at Shoal Creek
 February 15, 2016

Map Code	Park Description	Acreage of Park in Slope Category			Total Park Acreage
		<10% Slope	10-25% Slope	>25% Slope or Floodplain	
1	Neighborhood Park	1.22	0.03	0.00	1.25
2	Central Greenbelt	1.00	0.00	0.00	1.00
3	Plaza	0.50	0.00	0.00	0.50
4	North Greenbelt	0.78	0.08	0.01	0.87
5	Signature Park	3.77	1.64	0.13	5.54
6	Wet Pond	0.00	0.00	1.00	1.00
7	CEF and Buffer	0.00	0.00	0.94	0.94
8	Grow Zone	0.16	1.24	0.44	1.84
9	Signature Park - 100 yr FP	0.00	0.00	0.23	0.23
10	Signature Park - 25 yr FP	0.00	0.00	3.20	3.20
11	CWQZ (Outside FP)	0.00	0.00	0.24	0.24
NA	Flex Park Space	1.46	0.38	0.16	2.00
	TOTAL ACREAGE	8.89	3.38	6.35	18.62

Description	Acres	Percent of Requirement
Total Required Park Space	12.88	100%
Total Provided Park Space	18.62	145%
Total Credited Parkland	12.88	100%
Total Park Space under 10% slopes	8.89	69%



Parkland Slope Analysis
The Grove at Shoal Creek
February 17, 2016



Enlargement, See page 2 of 2

Tract A / 7.02 Ac.

Tract B
33.77 Ac.

Tract G
4.33 Ac.

Tract C
10.82 Ac.

Tract F
3.42 Ac.

Tract E
6.17 Ac.

Tract D
10.23 Ac.

- CEF Buffer
- CEF
- Critical Water Quality Zone
- Shoal Creek Centerline
- Riparian Grow Zone
- 25-yr Floodplain
- 100-yr Floodplain

Legend

- <10% Slopes
- 10-25% Slopes
- >25% Slopes

- Legend**
- Riparian Grow Zone
 - CEF Buffer Area
 - Wet Pond Surface Area
 - Detention Infiltration Feature
 - Wetland Fringe
 - Upland Infiltration Feature

Notes:

Detention Infiltration Feature: An Infiltration feature must be provided within the wet pond as part of the mitigation for the buffer reduction, and will provide 1:1 mitigation credit. This feature shall have the following characteristics:

- a. Generally located on the side of the wet pond basin nearest the wetland CEF in order to maximize infiltration of groundwater to support the CEF.
- b. Ground elevation shall be 0-6 inches higher than the permanent pool elevation.
- c. The area shall not have a liner.
- d. This area shall be vegetated with 1 gallon plants (or equivalent) @ 3' O.C. maximum. Vegetation in the area should be selected for deep, fibrous root systems and adaptability to the perennially wet conditions (e.g. bushy bluestem, big bluestem), as well as for aesthetic quality.
- e. To the extent feasible, the pond should be designed to ensure overflow water migrates into this area.

Wetland Fringe: An ECA compliant Wetland Fringe provided around the Wet Pond. In addition to the Wet Pond Infiltration Feature described above, shall provide 1:1 mitigation credit for reduced buffer area.

Upland Infiltration Features: Upland Infiltration features may be provided at the election of the applicant as part of the proposed mitigation, but are not required if sufficient mitigation is provided elsewhere. These features would consist of terraces, rain gardens, or other vegetated infiltration features that cause water to pool and infiltrate. These features, if provided, will provide 1:1 mitigation credit for reduced buffer area. These features, if provided, shall have the following characteristics:

- a. Upland Infiltration Features shall be located in the area upslope from the Wetland CEF, and no more than 300' from the edge of the CEF buffer. They shall be located with no major obstructions to groundwater flows [such as utility trenches or the wet pond basin] between the Upland Infiltration Feature and the Wetland.

- b. Upland Infiltration Features shall be designed to capture runoff from a drainage area at least two times the size of the feature.
- c. Upland Infiltration Features should generally be vegetated with native plant material that is selected for deep, fibrous root systems that aid in infiltration.
- d. Upland Infiltration Features shall be designed to avoid any grading impacts within the 1/2 Critical Root Zone of existing trees that are being preserved in place.

4. Riparian Grow Zone: A Riparian Grow Zone will be established adjacent to the Shoal Creek Critical Water Quality Zone the length of the site. This area will provide 1:1 mitigation credit for reduced buffer area, and shall have the following characteristics:

- a. The Riparian Grow Zone will consist of preserved (or restored) native vegetation and will employ a no-mow approach.
- b. Development in the Riparian Grow Zone is to be restricted to soft-surface trails, foot paths, and minor trail amenities (such as benches and educational features), grading impacts related to construction of these features, and construction of future bridge over Shoal Creek. This area will provide 1:1 mitigation credit for reduced buffer area.
- c. The Riparian Grow Zone should generally be approximately 50' wide up to 100' wide and shall be aligned to encompass the areas of existing, high quality riparian vegetation to the extent practical. However, the width of the Riparian Grow Zone may be reduced down to a minimum of 0' if necessary to accommodate construction of the Shoal Creek Trail. This reduction shall be allowed only where needed to provide trail connections off site (e.g. connection

to the Ridgelea Greenbelt to the south or a future pedestrian bridge over Shoal Creek). The final boundaries of the Riparian Grow Zone will be established as Site Plan.

- d. Disturbance of the Riparian Grow Zone shall be allowed to construct utility crossings that would otherwise be permitted under City Code in the Critical Water Quality Zone. Any such disturbed area shall be restored with native vegetation.

5. An educational feature shall be provided on a trail located near or between the Wet Pond Infiltration Feature and the Wetland CEF describing the natural processes, benefits, etc.

6. An Administrative Variance under Section 25-1 of the Land Development Code shall be granted at Site Plan to allow the proposed modification to the CEF setback described on Sheet 2 of this exhibit, so long as the Proposed Mitigation described in this exhibit is provided.

NOTE: All sizes and locations of proposed features, setbacks, and buffers shown on plan are approximate. Final location will be determined at Site Plan.

The Grove at Shoal Creek Planned Unit Development
Environmental Resource Exhibit

