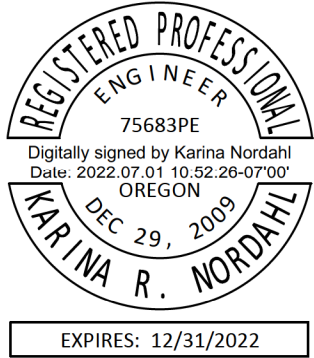




**Received  
Planning Division  
8/12/2022**

## Technical Memorandum

**To:** Silas Shields  
**From:** Karina Nordahl, PE  
**Copies:** Gabriel Kruse  
**Date:** June 10, 2022  
**Subject:** South Cooper Mountain Neighborhood Park Stormwater  
**Project No.:** 20430



The South Cooper Mountain Heights Subdivision is a residential development in Beaverton, Oregon near the intersection of SW 175<sup>th</sup> Ave and SW Scholls Ferry Road. The Land Use Application (LD2015-0013) included a neighborhood park between Phase 2 and Phase 3 of the development. Otak, Inc. is under contract with Lennar Northwest, Inc. to provide preliminary design drawings for land use approval and ultimately, the final design of the neighborhood park. Stormwater runoff from the neighborhood park is collected via surface drains and conveyed to the Phase 2 and Phase 3 stormwater management facilities. These facilities, PH2 Pond serving Phase 2, and PH3 Pond serving Phase 3 are under construction.

During the design of the facilities in PH2 and PH3, an assumption was made regarding the basin areas and percentage of impervious areas within the neighborhood park. This technical memorandum provides a summary of the assumed neighborhood park basin areas that were used for the design of PH2 Pond and PH3 Pond and the preliminary design basin areas (or current design basin areas), to demonstrate that the neighborhood park design is in compliance with the previous land cover assumption. For additional information on the design of PH2 Pond refer to *the South Cooper Mountain Heights Subdivision Phase 2 Stormwater Management Plan* (Otak, 2018). For additional information on the design of PH3 Pond refer to the *South Cooper Mountain Heights Subdivision Phase 3 Stormwater Management Plan* (Otak, 2017).

**Basin Areas**

Table 1 shows assumed basin areas included for the neighborhood park for the design of PH2 Pond and PH3 Pond as documented in their respective reports (Otak, 2017 and Otak, 2018). Table 2 shows the basin areas based on the design of the neighborhood park. A comparison of the tables shows that the neighborhood park’s impervious area from the preliminary design is slightly less than was assumed for the PH2 Pond and PH3 Pond design, but the total basin areas have remained the same. This means that the stormwater ponds will have a small amount of additional capacity since higher impervious areas generate more runoff than pervious areas. Figure 1 attached shows the preliminary neighborhood park design basin areas.

**Table 1—Assumed Basin Areas Summary From Pond Designs**

Basin Name	Impervious Area (ac)	Pervious Area (ac)	Total Area (ac)
South (Phase 3)	0.08	0.33	0.41
North (Phase 2)	0.44	1.78	2.22
Total	0.53	2.11	2.63

**Table 2—Preliminary Neighborhood Park Design Basin Areas Summary**

Basin Name	Impervious Area (ac)	Pervious Area (ac)	Total Area (ac)
South (Phase 3)	0.02	0.39	0.41
North (Phase 2)	0.23	2.00	2.22
Total	0.25	2.39	2.63

**References**

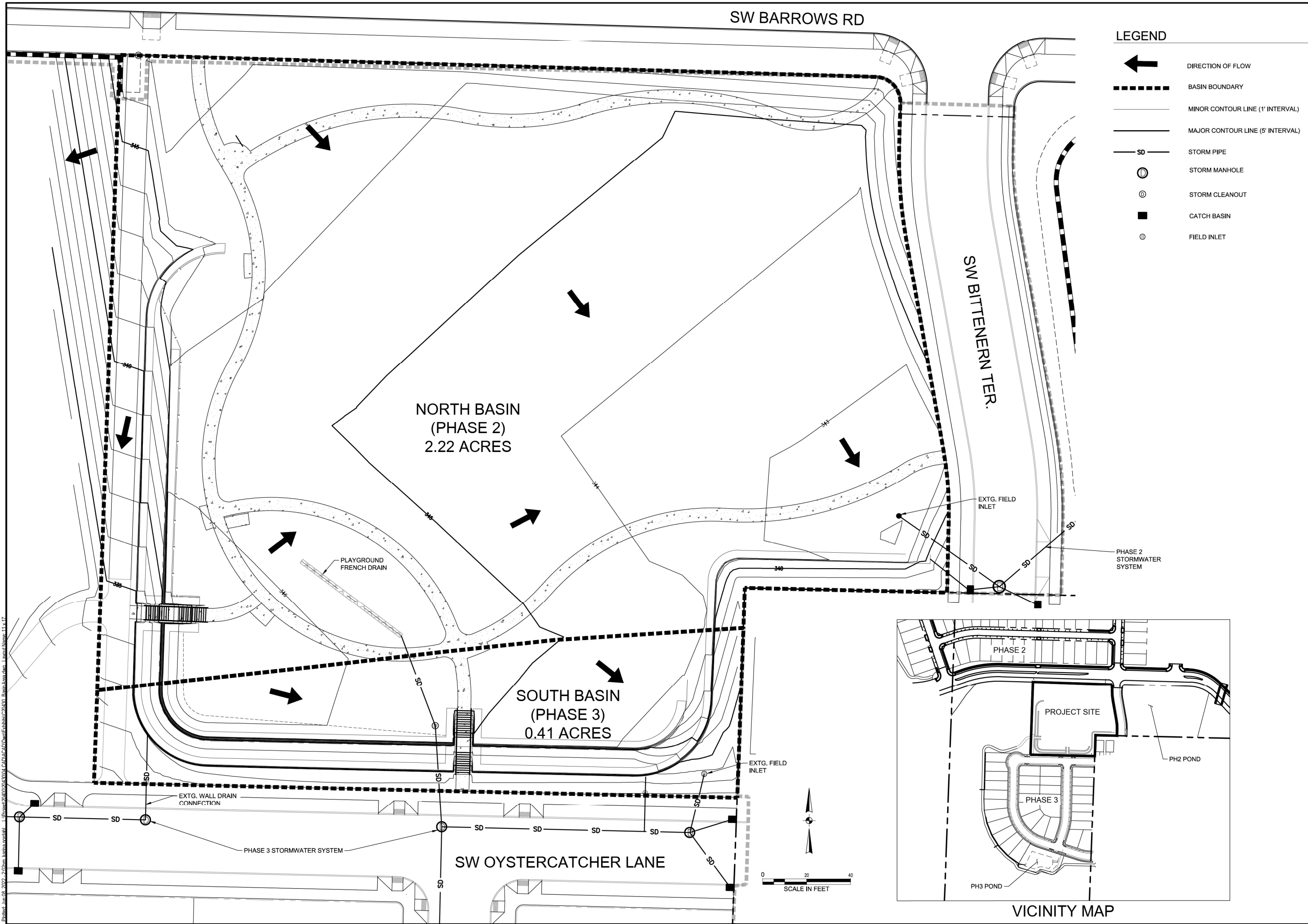
Otak, 2017. *South Cooper Mountain Heights Subdivision Phase 3 Stormwater Management Plan*, October 25, 2017.

Otak, 2018. *South Cooper Mountain Heights Subdivision Phase 3 Stormwater Management Plan*, February 9, 2018.

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DATE	DESCRIPTION



Otak, Inc. 06/15/2022 2:02pm ksharma@otak.com L:\Projects\2022\2022-0615\Drawings\DWG\2022-0615\2022-0615-01-DRAINAGE-BASINS.dwg - 11 x 17