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SUPERIOR COURT OF THE STATE OF WASHINGTON
FOR SNOHOMISH COUNTY

EASTGLEN HOMEOWNERS ASSOCIATION, a
Washington nonprofit corporation; and
SAVEBOTHELL, a Washington nonprofit
corporation,

Petitioners,

v.

SNOHOMISH COUNTY; LAND DEVELOPMENT
CONSULTANTS, INC., a Washington for-profit
corporation; NP SNOHOMISH COUNTY 228TH
APARTMENTS, LLC, a Delaware Limited
Liability Company,

Respondents.

NO. 24-2-03111-31

LAND USE PETITION ACT PETITION

A. PETITION

1. Name and mailing address of the Petitioners.

Eastglen Homeowners Association, P.O. Box 82713, Kenmore, WA 98028.

SaveBothell, 23403 8TH Place W, Bothell, WA 98021.

2. Name and mailing address of Petitioners' attorney.

Dianne K. Conway of Gordon Thomas Honeywell LLP, P.O. Box 1157, Tacoma, WA
98401.

1 **3. The name and mailing address of the local jurisdiction whose land use decisions**
2 **are at issue.**

3 Snohomish County, 3000 Rockefeller Avenue, Everett, WA 98201.

4 **4. Identification of the Decision-Making Body or Officer.**

5 SaveBothell and Eastglen Homeowners Association (Eastglen), collectively referred
6 to as the “Petitioners,” challenge the Snohomish County Planning and Development
7 Services Director’s April 3, 2024 decision approving a request to modify the requirements
8 of SCC 30.63A.570 for project file number 23-104913-LDA.

9 **5. Identification of Each Person to Be Made a Party under RCW**
10 **36.70C.040(2)(b)–(d)**

11 Owner representative/Applicant:

12 Land Development Consultants, Inc. (dba LDC, Inc. and LDC Corporation).
13 20210-142nd Avenue NE
14 Woodinville, WA 98072

15 Owner:

16 NP Snohomish County 228th Apartments, LLC (“NP”)
17 4825 NW 41st Street, Suite 500
18 Riverside, MO 64150

19 **6. Facts Demonstrating that Petitioners Have Standing to Seek Judicial**
20 **Review**

21 6.1. Petitioner Eastglen is incorporated as a Washington non-profit corporation
22 and also qualifies as a homeowner’s association under RCW ch. 64.38. Eastglen owns
23 extensive, high-value, Category II depressional and riverine wetlands that are down slope
24 of NP’s proposed project. Under Eastglen’s Covenants, Conditions, and Restrictions
25 (CC&R’s), Section 7.36, Eastglen is obligated to protect and maintain wetland plantings
26 and replace wetland and landscape plantings that die. Eastglen has formally offered legal

1 access to NP so that neighboring owner/applicant NP may perform Method 1 wetland
2 monitoring on Eastglen's wetlands for a period of not less than 1-year, as prescribed in
3 Snohomish County's 2021 *Drainage Manual*, Volume I, Appendix I-D Wetland Protection
4 Requirements, C. Wetland Protection Levels. Both Snohomish County and NP have
5 refused to perform the wetland monitoring required in the 2021 *Drainage Manual*.

6
7 6.2 Petitioner SaveBothell is incorporated as a Washington non-profit
8 environmental organization with members in both King and Snohomish Counties as well
9 as in the project area. SaveBothell's members' quality of life is benefited by knowing that
10 the water quality of Crystal Creek, listed on Snohomish County's Chinook Distribution Map
11 dated February 1, 2016, as a fish-bearing stream is protected for their enjoyment, as well
12 as observing the flora and fauna in the Eastglen Category II wetland.

13 SaveBothell's mission is to: "Coordinate community members efforts to control
14 development." To that end, SaveBothell has spent almost two years drawing neighbors
15 and neighborhoods together, educating them of the dangers and harms posed by the NP
16 development. Volunteers have spent thousands of hours, and the community at large has
17 spent tens of thousands of dollars, to help educate the Snohomish County PDS of the
18 negative impacts this development will have on the environment of the local community.
19 The environment, as defined in Merriam-Webster is "the circumstances, objects, or
20 conditions by which one is surrounded; the aggregate of social and cultural conditions
21 that influence the life of an individual or community". Environmentally, the entire
22 SaveBothell community representing 1000's of neighbors, support each other's efforts to
23 protect our environment. One of those main efforts has been supporting Eastglen in their
24 granting permission to NP for access to the Eastglen wetlands. The SaveBothell
25 community includes all 60 homes in Eastglen, so SaveBothell is very invested in
26

1 protecting the environment for Eastglen members, as well as surrounding neighborhoods
2 that enjoy the preservation of the Eastglen wetlands.

3 6.3 The Petitioners and their members will be adversely affected and are
4 prejudiced by the harm to the Eastglen wetland by NP's failure to maintain the wetland
5 hydroperiod. Hydroperiod is defined as, "A seasonal occurrence of flooding and/or soil
6 saturation; it encompasses depth, frequency, duration, and seasonal pattern of
7 inundation." Protection of Eastglen's wetland functions and values depends on
8 maintaining the existing wetland's hydroperiod, which means maintaining the annual
9 fluctuations in water depth and their timing as closely as possible.

10
11 6.4 The Petitioners' interests are among those that Snohomish County is
12 required to consider when determining the impacts to the wetland's hydroperiod. Instead,
13 Snohomish County has waived its own requirements with no evaluation or mitigation of
14 subsequent harm to the wetland from NP's proposed project.

15
16 6.5 The Planning, Development, and Services Director is the sole determiner of
17 project-specific modifications of the regulations and standards in chapters 30.63A and
18 30.63B SCC, the *Drainage Manual*, and the stormwater-applicable requirements of the
19 EDDS pursuant to the requirements of SCC 30.63A.830(1). Pursuant to SCC
20 30.63A.830(10), the Director's stormwater modification decision is the County's final
21 decision on the modification request unless reconsideration is requested under SCC
22 30.63A.835. The hearing examiner may not review the Director's final decision on the
23 modification request under either the hearing examiner's original or appellate jurisdiction.
24 The Petitioners are thus denied any administrative appeal opportunity under County code.

25
26 6.6 Under SCC 30.63A.835(1), only the Applicant may file a written request for
reconsideration of a modification under SCC 63A.830. The Petitioners have exhausted

1 their administrative remedies to the extent required by law. No administrative appeal of
2 the challenged stormwater modification is available within Snohomish County.

3 **7. Separate and Concise Statement of Each Error Alleged to Have Been**
4 **Committed Together with a Concise Statement of Facts Upon Which Petitioner Intends to**
5 **Rely.**

6 7.1 The project at issue in this case is the Director's April 3, 2024
7 administrative approval of a stormwater modification to its 2021 *Drainage Manual* to
8 avoid wetland protections to allow construction of a multifamily development containing
9 eight, five-story apartment buildings with a total of 544 residential dwelling units and
10 associated amenities, which will cover most of the existing site with impervious surfaces.
11 This project is not currently under construction.

12 7.2 The NP property was previously operated as a sand and aggregate mine for
13 many years by Fruhling Sand and Topsoil, Inc. Mining excavation over many years
14 resulted in a 125-foot deep excavation on the hillside above the Eastglen homes and
15 wetlands. After aggregate mining became uneconomical, Fruhling began accepting waste
16 soil from construction projects around the region to fill in excavation. The soil imported to
17 fill the old mine site was not engineered, tested, or monitored for compaction testing.

18 7.3 The Fruhling property was purchased by NP on July 27, 2021. NP
19 proceeded to make multiple development-permit applications to Snohomish County,
20 including the current permit that is the subject of this petition, under project file number
21 23-104913-LDA. On or about February 7, 2024, NP submitted a stormwater modification
22 request, because its proposed design for the project could not comply with the wetland
23 protection requirements of Minimum Requirement 8 and Appendix I-D of the County's
24 *Drainage Manual*. Rather than requiring applicant NP to reduce the amount of impervious
25
26

1 surface of its project such that it could comply with mandatory wetland protections,
2 Snohomish County approved NP's request on April 3, 2024. In essence, Snohomish
3 County waived all requirements for NP to protect the Eastglen wetlands by controlling the
4 stormwater runoff rate by infiltration such that the hydroperiod can be maintained.
5 Snohomish County erred in its *carte blanche* approval of this stormwater modification as
6 discussed below.
7

8 7.4 First, NP incorrectly modeled the stormwater runoff from the NP property using
9 the Western Washington Hydraulic Model (WWHM). To estimate the predeveloped
10 stormwater runoff, the engineer must enter one of two soil type parameters into the
11 computer model, either: (1) Type A/B soil types, if soils are gravelly and free draining,
12 such as at the Fruhling site; or (2) Type C soils if the predeveloped site is glacier till soil.

13 Glacier till soil, also referred to as "hardpan," is that has been ground into fine,
14 flour-like particles and have been compacted by the weight of nearly 1-mile of glacier ice
15 that existed in the Puget Sound area during the Vashon glaciation period approximately
16 15,000-20,000 years ago. Glacier till soil can have compressive strength up to 10,000
17 pounds per square foot to support building loads, but infiltration through glacier till is very
18 slow or less than 0.5-inches per hour. The fill soil at NP's site requires additional
19 compaction before construction, but no testing to determine infiltration rates was
20 performed by NP or required by the County.
21

22 Type A/B soils result where glaciers dropped large deposits of rock and gravel
23 either during glacier advance or retreating periods. Such is the case at Fruhling aggregate
24 mine site property. NP's own geotechnical report indicates that the soil is compressible
25 such that surcharging is required to prevent unwanted settlement. The fill soil imported
26

1 by Fruhling does not have density required to meet the glacier till Type C soil criteria that
2 was used in their WWHM design, therefore modeling using Type A/B soil is required.

3 Comments provided to the County by Lider Engineering were ignored and not
4 responded to by either the County or NP.

5 By modeling the site using Type C soil, Northpoint erroneously makes it appear
6 that there is less stormwater infiltration and more stormwater runoff from this site than
7 currently exists. This will have a significant adverse impact on the hydroperiod for the
8 Eastglen wetlands, as all stormwater runoff will be diverted from a single point outfall into
9 Crystal Creek. In turn, stormwater runoff from winter storms will be gone by summer,
10 impacting Crystal Creek base flows and the wetland's hydroperiod during the region's
11 increasing hot summers. Stormwater that currently infiltrates from the NP property and
12 flows via shallow, subsurface groundwater, helps maintain the summer wetness or
13 hydroperiod of the Eastglen wetlands. The loss of this stormwater will adversely affect the
14 wetlands quality and character. No mitigation measures have been proposed for this
15 impact by the County for its approval of the petitioned modification to the *Drainage*
16 *Manual*.

17 Had NP correctly used Type A/B soil rather than Type C soil, the true impacts to
18 the Eastglen wetlands would have been revealed to be much more severe than the
19 WWHM computer modeling currently provided by NP indicates.

20 7.5 Snohomish County's 2021 *Drainage Manual*, Volume I, Appendix I-D,
21 Section C Wetland Protection Levels states in part:

22 "Method 1 requires a minimum one year of monitoring followed by continuous
23 simulation modeling of the wetland stage. This method shall be applied to
24
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1 Category I or II depressional or riverine impounding (including special
2 characteristics Category I or II) wetlands that the project proponent owns, or the
3 project proponent has legal access to – for purposes of conducting monitoring in
4 the wetland.”

5
6
7 “Method 1 takes into account wetland specific information and field data,
8 therefore, it allows more detailed evaluation of effects of stormwater on wetland
9 functions. In cases where the project proponent neither owns nor has legal access
10 to the Category I or II wetlands receiving stormwater from a proposed project,
11 Method 2 shall be used.” (Emphasis added)

12
13 On multiple occasions Eastglen has expressed its willingness to allow NP legal
14 access to its wetlands to perform Method 1 wetland monitoring as prescribed in the
15 County’s *Drainage Manual*. NP has refused to perform the required wetland monitoring,
16 and Snohomish County has been unwilling to enforce Method 1 monitoring as required in
17 its own *Drainage Manual* as a condition prior to issuance of a Land Disturbing Activity
18 (LDA) permit.

19
20 Upon information and belief, the reason why NP refuses to use the more stringent
21 Method 1 monitoring is because it knows that if it cannot even demonstrate compliance
22 with the less stringent Method 2 method using incorrect soil types, than using Method 1
23 with the correct soil types will demonstrate that the severity of the wetland impacts from
24 their project as currently proposed will adversely affect the wetland without mitigation.

25 7.6 SCC 30.63A.830(6)(c) requires as a condition to a stormwater modification
26 that, “The modification does not adversely impact off-site properties.” In this case

1 Eastglen's wetland will be adversely impacted by the modification due to disruption of its
2 hydroperiod. Because NP incorrectly modeled the wetland hydroperiod and has not
3 performed Method 1 monitoring, it has not demonstrated that the proposed stormwater
4 modification will not adversely affect the Eastglen wetland, or even proposed any
5 mitigation whatsoever, Snohomish County erred in its approval.
6

7 7.7 What Snohomish County has approved is a complete waiver of the
8 requirement to maintain the Eastglen wetland's hydroperiod and a complete waiver of the
9 *Drainage Manual* requirements to protect the wetland hydroperiod that must be
10 evaluated under SCC 30.63A.840 and not as a stormwater modification under SCC
11 30.63A.830.

12 B. REQUEST FOR RELIEF

13 WHEREFORE, Petitioners request the following relief:

14 A. An order reversing and vacating the challenged stormwater modification
15 (attached hereto as Exhibit A);
16

17 B. Remand the challenged stormwater modification back decision to
18 Snohomish County and require that:

- 19 1. WWHM modeling of the correct predeveloped soil conditions be done using
20 Type A/B soils; and
- 21 2. NP perform Method 1 wetland monitoring to maintain the current
22 stormwater flow and hydroperiod to the Eastglen wetlands.
23

24 C. An order prohibiting Snohomish County from issuing any land-disturbing
25 activity permit or any other building permits for the NP project until such time as the
26 Applicant demonstrates compliance with Method 1 wetlands monitoring and modeling
requirements pursuant to Snohomish County's 2021 *Drainage Manual*, Volume I,

1 Appendix I-D Wetland Protection Requirements, using Type A/B soils for the predeveloped
2 condition.

3 D. Attorney's fees and costs, to the extent permitted by law.

4 E. Such other relief as the Court deems just and equitable under the
5 circumstances.

6 Dated this 23rd day of April, 2024.

7
8 GORDON THOMAS HONEYWELL LLP

9
10 By: /s/ Dianne K. Conway

11 Dianne K. Conway, WSBA No. 28542
12 dconway@gth-law.com
13 Attorney for Petitioners

Stormwater Modification or Waiver Request

A. Applicability:

This application is to be used for requests for modifications or waivers from stormwater management regulations pursuant to SCC 30.63A.170.

B. Instructions:

(1) Complete the blanks below. (2) Provide sufficient information to evaluate the request. (3) Contact (425) 388-3311 x2790 to schedule an appointment to submit this request. Supporting documents and fees must be submitted at the appointment.

Request is for: X Modification or Waiver of the following stormwater management regulations and standards:

Check applicable SCC Chapter

- Drainage Chapter 30.63A SCC
- Land Disturbing Activity Chapter 30.63B SCC
- Drainage Manual
- EDDS Stormwater Requirements

List specific code provision

30.63A.570
(code does not appear to match the current
drainage manual)

C. Project Information:

PFN: 23-104913 LDA Project Name: Northpoint 228th Apartments

PDS Project Manager: Josh Machen

Applicant or Representative and Firm: Jesse Jarrell, PE - LDC

Applicant Signature:  Phone: 425-286-2416

Address: 20210 142nd Ave NE, Woodinville, WA 98072 Email: jjarrell@ldccorp.com

D. Criteria:

1. Describe the modification or waiver request, including reasons for the request and site-specific details. (SCC 30.63A.830(5)(c) or 30.63A.840(4)(c))

SCC 30.63A.570 (aka MR#8). Project can not completely meet Method 2 modeling required under MR#8 while also meeting MR#7 requirements. Drainage manual specifies when you can't meet MR#7 and MR#8 requirements, ignore MR#7 and meet MR#8 but County has responded for preferring to meet MR#7 and try and get as close to meeting MR#8 as possible since ultimately, the project can not be designed to meet both requirements 100%.

2. Describe how the intent of the stormwater management regulations and standards will be achieved if the modification or waiver is granted. ((SCC 30.63A.830(5)(b) or 30.63A.840(4)(b))

Project will meet MR#7 requirements while also trying to meet MR#8 to the maximum extent feasible. Per Wetland Protection Analysis memo from Wetland Resources, Inc dated November 13, 2023, current MR#7 and MR#8 modeling as shown in LDC drainage report dated November 20, 2023 appears to result in very little effects to seasonal ponding within the downstream wetland. Changes to seasonal ponding elevations within the downstream wetland have been estimated at less than a 0.20 inch increase and a 0.07 in decrease in overall water levels.

3. (Modification only): Describe how the modification or waiver will provide substantially equivalent environmental protection as the adopted stormwater management regulations and standards. (SCC 30.63A.830(6)(a))

As noted above, changes to seasonal ponding elevations within the downstream wetland have been estimated at less than a 0.20 inch increase and a 0.07 in decrease in overall water levels based on current MR#7 and MR#8 calculations. These changes will have little to no affect on the overall functions and values of the downstream wetland.

4. (Modification only): Describe how the modification or waiver is based upon sound engineering practices which will meet design objectives addressing safety, function, environmental protection and facility maintenance. (SCC 30.63A.830(6)(b))

Modification will allow the project to meet general flow control requirements while also meeting wetland hydrology requirements to the maximum extent feasible. Disapproval of the modification will ultimately result in the project not fully meeting flow control requirements and instead focus on just meeting wetland hydrology requirements (aka MR#8 Method 2 requirements) as specified in the Snohomish County Drainage Manual.

5. (Modification only): Describe how the modification does not adversely impact off-site properties. (SCC 30.63A.830(5)(c))

Modification will allow the project to meet general flow control requirements resulting in slower stormwater release rates from the site. Disapproval of the modification will ultimately result in the project not fully meeting flow control requirements and instead focus on just meeting wetland hydrology requirements (aka MR#8 Method 2 requirements) as specified in the Snohomish County Drainage Manual.

6. Describe how the modification or waiver results in the least possible change that could be granted that still meets the intent of chapters 30.63A and 30.63B SCC, (SCC 30.63A.830(6)(d) or 30.63A.840(5)(c)), the Drainage Manual and the stormwater requirements of the EDDS.

Modification will allow the project to meet general flow control requirements resulting in slower stormwater release rates from the site. Disapproval of the modification will ultimately result in the project not fully meeting flow control requirements and instead focus on just meeting wetland hydrology requirements (aka MR#8 Method 2 requirements) as specified in the Snohomish County Drainage Manual. The intent

7. (Waiver only): Describe how application of the stormwater management regulation or standard for which the waiver is requested will deny the applicant all economically viable use of the property. (SCC 30.63A.840(5)(a))

Does not apply as a waiver is not being proposed on the project.

8. (Waiver only): Describe how the waiver will not: (a) increase risk to the public health and welfare; (b) be injurious to other properties in the vicinity or upstream or downstream; and (c) affect the quality of waters of the state. (SCC 30.63A.840(5)(b))

Does not apply as a waiver is not being proposed on the project.

(This page to be completed by Planning and Development Services Staff)

E. Analysis of Justification for Modification:

- Conformance to existing standard
- Adverse Topography
- Comparable to or exceeds standards
- Aesthetics
- Improved safety
- Maintainability
- Public cost savings
- Other

Director's Findings of Fact:

See attached Memorandum from Kelli Hale, PE HMA Engineering LLC dated April 2, 2024 (Attached)

Staff Recommendations:

- Approve
- Conditional Approval
- Deny
- Denial without Prejudice

Basis:

See attached Memorandum from Kelli Hale, PE HMA Engineering LLC dated April 2, 2024 (Attached)

Additional Review Received (certain projects may require review by other parties as applicable):

- Fire Marshal
- Biologist
- Traffic
- Right of Way

Final PDS Administrative Decision:

- Approved
- Approved with conditions
- Denied
- Denied without Prejudice

Conditions, if applicable:

Signature: **Huey, Michael**
Digitally signed by Huey, Michael
 DN: E=Michael.Huey@co.snohomish.wa.us, CN=Huey, Michael
 Date: 2024.04.03 17:35:58-0700
 Chief Engineering Officer or County Engineer, as applicable

Date: **4/3/3024**



Snohomish County
Planning and Development Services

Dave Somers
County Executive

Mike McCrary, Planning Director
3000 Rockefeller Avenue M/S #604
Everett, WA 98201-4046
(425) 388-3311 FAX (425) 388-3832

MEMORANDUM

TO: Joshua Machen, AICP Senior Planner, PDS
Mike McCrary, Planning Director, PDS

FROM: Kelli Hale, PE HMA Engineering LLC

DATE: April 2, 2024

PROJECT: 228th Multifamily Development

FILE NO.: 22 102098 SPA

SUBJECT: Recommended Approval of Stormwater Modification

PART I: SUMMARY INFORMATION

LOCATION AND PROJECT SUMMARY: The 26-acre subject site is located at 1010 228th Street Southwest, in Bothell, Washington in unincorporated Snohomish County (Snohomish County tax parcel number 27043600200300). Applicant proposes to develop the site with an eight-building apartment complex with 544 proposed units and associated improvements including for parking, transportation, open space, and drainage.

PRESENT SITE CONDITIONS: The site has been historically used as a sand and gravel open pit mine and later for the storage of sand, gravel, topsoil, and other fill materials by the Fruhling Sand and Topsoil Company. Topography on the site consists of three distinct terraces decreasing in elevation to the west that will generally remain as such in the developed condition. Existing slopes range from moderate to steep across the site. A network of drainage features collects and conveys surface flows generated on the subject site. The majority of the surface water on the two lower terraces is directed towards several catch basins and an oil-water separator located near the entrance of the site. The water is then conveyed through a series of settling ponds before discharging to Stream C, which then flows northwest for approximately 50 feet before converging with Crystal Creek, flowing offsite to the west, and into Wetland B. A small portion of the surface water on the two lower terraces flows southwest and converges with Wetland A and Stream A contained within Wetland A. The flow path of Stream A continues offsite under 9th Place Southwest and converges with the southern portion of the Wetland B complex. The upper-most terrace drains to a quarry spill channel and settling pond in the southern portion of the site. The settling pond has no known outlet.

Wetland B is a large depressional wetland complex located directly west of the northern portion of the site parcel's western boundary and continues further offsite to the south-east. Crystal Creek is the primary source of hydrology to Wetland B. Crystal Creek enters through the northeastern corner of Wetland B, disperses throughout, occasionally rechannelizes, and ponds in low points and near impoundments. The topography of Wetland B has a slight southernly aspect which directs flows south and outlets by means of a culvert under 232nd Place Southwest. Portions of the wetland at higher topographic elevations are seasonally saturated due to a high water table.

MODIFICATION REQUEST:

Stormwater flows from the developed portions of the site will be collected and routed via closed pipe conveyance to a detention vault facility located at the northwestern portion of the site. Stormwater from collected in the detention vault will discharge from the site through an existing pipe east of Stream C at a rate that mimics the site's pre-developed forested condition. A small amount of stormwater that is collected from existing infrastructure located along the top of the central and southern portion of the project site and currently discharges to Stream A will be redirected to the detention vault and discharge point at Stream C. Drainage is otherwise designed to discharge from the site at existing locations.

Applicant is requesting modification to the requirements of SCC 30.63A.570, Minimum Requirement 8. SCC 30.63A.570 provides that "when a project will result in the direct or indirect (through a conveyance system) discharge of stormwater into a wetland or wetland buffer, . . . levels of wetland protection shall apply as set forth in volume I, Appendix I-D of the Drainage Manual." Pursuant to the Drainage Manual, Appendix I-D, the Applicant is utilizing Method 2: Site Discharge Modeling for wetland hydroperiod protection. Method 2 modeling criteria requires a project proponent to utilize historic precipitation records and an approved continuous runoff hydrologic model to demonstrate that both average daily and average monthly inflows from the development do not fluctuate from pre-development flows in amounts greater than 20% for each day or 15% for each month. Applicant's modeling results in exceedances from the range for average daily flows on 82 days and an exceedance from the range for average monthly flows in October. The Applicant is requesting a Modification to allow the project to comply with Method 2 modeling criteria to the maximum extent feasible.

PROCEDURAL BACKGROUND: The Applicant submitted a written modification request, which was received by PDS on February 6, 2024. I have consulted with Snohomish County PDS Staff, including Senior Environmental Planner Erin Harker, and reviewed the applicable County Code provisions and the materials provided by the Applicant, including:

1. Stormwater Modification Request, dated February 2, 2024
2. Stormwater Modification Summary, Solid Ground Engineering, dated February 2, 2024

I also reviewed other project submittal materials that were provided by the Applicant, and referenced in the Applicant's Modification Summary to support the Modification Request, including:

3. Snohomish County 228th Project Wetland Modeling Summary, Clear Creek Solutions Inc., dated October 23, 2023
4. Wetland Protection Analysis for 228th Multifamily Development, Wetland Resources, Inc., dated November 23, 2023

5. NP 228th Apartments Drainage Report, LDC, Inc., dated November 11, 2023
6. 228th Outfall Alternatives Exhibit – WWHM Modeling Comparison, LDC Inc, dated June 6, 2023
7. Geotechnical Report – NP Snohomish County 228th Apartments, Terra Associates, Inc., dated January 6, 2023
8. Critical Areas Study and Mitigation Plan, last revised July 25, 2023.
9. Draft 2024 DOE Stormwater Management Manual for Western Washington, Vol I, Appendix I-C.4; available at https://fortress.wa.gov/ecy/ezshare/wq/SWMMs/Draft2024SWMMWWW/2024_SWMMWW.htm

PART II: CODE AUTHORITY AND APPLICABLE DECISION CRITERIA AND RECOMMENDATION

The PDS Director is authorized to modify any regulation or standard in chapters 30.63A and 30.63B SCC, the Drainage Manual, or the stormwater-applicable requirements of the EDDS for a specific project, provided that the applicant has demonstrated to the Director's satisfaction that the following criteria in SCC 30.63A.860(6) are met:

- (a) The modification provides substantially equivalent environmental protection as adopted stormwater management regulations and standards;
- (b) The modification is based upon sound engineering practices which will meet design objectives addressing safety, function, environmental protection, and facility maintenance;
- (c) The modification does not adversely impact off-site properties; and
- (d) The modification results in the least possible change that could be granted that still meets the intent of chapters 30.63A and 30.63B SCC, the Drainage Manual and the EDDS.

PART III: FINDINGS AND CONCLUSIONS

Part III.A: The Modification Provides Substantially Equivalent Environmental Protection as Adopted Stormwater Management Regulations and Standards (SCC 30.63A.860(6)(a))

1. Wetland B requires Wetland Hydroperiod Protection under Minimum Requirement #8. The Drainage Manual Appendix 1-D includes two methods for Wetland Hydroperiod Protection: "Method 1 requires a minimum one year of monitoring followed by continuous simulation modeling of the wetland stage. . . Method 2 uses a site discharge volume model to evaluate hydrologic changes in a wetland, with no additional wetland monitoring requirement." Drainage Manual Appendix 1-D, pg. 59.

2. The Drainage Manual distinguishes Method 1 and Method 2 and describes when to use Method 2 as follows: "Method 1 takes into account wetland specific information and field data, therefore, it allows more detailed evaluation of effects of stormwater on wetland functions. In cases where the project proponent neither owns nor has legal access to the Category I or II wetlands

receiving stormwater from a proposed project, Method 2 shall be used. Method 2 shall be applied to . . . Category I or II wetlands that are off-site or the project proponent doesn't have legal access to conduct monitoring in the wetland." Appendix 1-D, pg. 59.

3. The Drainage Manual includes the following description and limitation regarding Method 2: "The size of the wetland and its capacity are not known or needed to utilize Method 2. The risk to wetland functions will be assumed to increase as the total discharge volumes from the site into the wetland diverge from the pre-project conditions. The risk will be decreased if the divergence is smaller. . . Method 2 may not result in complete protection of wetland functions and values as these criteria are based on risk to the resource rather than an actual understanding of the impacts." Appendix 1-D, pg. 62.

4. The Applicant has stated to PDS in all project submittal documents that it does not have legal access to Wetland B for the purposes of conducting monitoring Wetland B. Wetland B is located offsite. The Applicant's proposal to utilize Method 2 to demonstrate wetland hydroperiod protection under Minimum Requirement #8 is appropriate under these circumstances.

5. The Applicant provided a supplemental Wetland Protection Analysis that describes the likely impacts of the modeled daily/month outliers identified using Method 2 on the hydrology of the receiving wetland (Wetland B) based on the wetland's known characteristics.

6. LiDAR, topographic maps, and historic aerial photography were used to categorize the wetland using the 2014 Wetland Rating System (Hruby, 2014). Wetland B is described as a large Category II depressional system approximately 11.8 acres in size.

7. Wetland B has a constricted outlet by means of a culvert under 232nd Place Southwest and has a depth of storage of up to two feet as indicated on question D 4.2 on the Wetland B wetland rating form in the Applicant's Critical Area Study, last revised July 25, 2023, and reviewed and confirmed by Snohomish County Staff.

8. Wetland B contains areas totaling approximately 1.5 acres that are seasonally ponded as estimated by Snohomish County staff using historic aerial photography, LiDAR, and topographic maps as recommended by the 2014 Wetland Rating System (Hruby, 2014).

9. The primary source of hydrology to Wetland B is Crystal Creek, which enters through the northeastern corner of the wetland, disperses throughout, occasionally rechannelizes, and ponds in low points and near impoundments. Stream systems such as Crystal Creek are dynamic and experience large fluctuations in volume annually.

10. Surface water runoff from surrounding residential developments discharge to Wetland B and also contribute to the hydrology of Wetland B.

11. Wetland A and Stream A contained within Wetland A are located at the central west boundary of the project site and continue offsite and flow into the southern portion of Wetland B.

Wetland A and Stream A also contribute to hydrology of Wetland B.

12. Wetland A and Stream A receive a small portion of the surface water from the two lower terraces of the project site.

13. In the developed condition, stormwater on the site that is collected from existing roads and other industrial uses located along the top of the central and southern portion of the lowest tier of the project site will be directed away from Wetland A and Stream A and toward the stormwater detention vault that discharges to Stream C, Crystal Creek and Wetland B. Stormwater flows from undeveloped portions of the central and southern portion of the lowest tier will continue to flow into Wetland A and Stream A.

14. The Applicant's Critical Area Study, last revised July 25, 2023, has demonstrated that the slight modifications to the volume and timing in which water reaches the northern and southern portions of Wetland B will not result in measurable changes to the Wetland A/Stream A hydrology or the hydrology of Wetland B.

15. The Applicant's modeling of stormwater leaving the developed site at a location east of Stream C and the north part of Wetland B using the Drainage Manual Method 2 criteria resulted in exceedances from the range for average daily flows on 82 days and an exceedance from the range for average monthly flows in October.

16. According to the Wetland Protection Analysis, a majority of the modeled daily exceedances occurred in the drier months when water levels are lower, and Wetland B has more capacity to absorb them.

17. As modeled, the maximum daily exceedance beyond what is allowed under the Drainage Manual occurs on September 11th. The Wetland Protection Analysis determined this daily exceedance would result in an increase of the water depth within the estimated 1.5 acre ponded areas of Wetland B of less than .2 inches.

18. The maximum daily reduction beyond what is allowed under the Drainage Manual would result in a decrease of the water depth within the 1.5 acre ponded areas of Wetland B of .072 inches. As modeled, there are no extended periods of reduced volumes.¹

19. The modeled mean monthly total discharge volumes leaving the site slightly exceed the 15% increase in volume allowed by the Drainage Manual for the month of October (exceedance from the modeled pre-developed flow is 118.7%).

20. The modeled mean monthly total discharge volume leaving the site in October is within the threshold of allowed monthly exceedances proposed by Ecology in the DRAFT 2024 Stormwater Management Manual for Western Washington (SWMMWW). Ecology recommends increasing the allowed volume discrepancy from 15% to 20% for months October through December.

21. October is a transition month at the beginning of the water year. According to the Wetland Protection Analysis, October is the time when the hydrology in Wetland B is starting to recharge

¹ The Modification Summary erroneously inverts numbers reported as the maximum the daily water fluctuation increases and reductions from the Wetland Protection Analysis. This memo bases its findings on the information contained in the Wetland Protection Analysis. See Wetland Protection Analysis, pg. 5-6.

but still has capacity to handle the small additional volumes projected by the model. Additional volume in the wetland would likely evaporate, infiltrate, or result in a very shallow surface water.

22. According to the Wetland Protection Analysis, if all of the additional runoff volume from the monthly exceedance occurred as an instantaneous discharge, it would increase the water depth within the 1.5 acre seasonally ponded area of Wetland B by less than one inch (0.7984 inches; 20 mm). However, it is more likely that precipitation would occur in more than one event and result in smaller incremental increases in hydrology spread out over the month.

23. Breeding amphibians are considered to be at risk with wetland fluctuations. Wetland Protection Analysis concluded that breeding amphibians would not be impacted by the volumes leaving the site in October as modeled, which is outside of the breeding season, and the modeled changes in flow will not result in measurable changes to wetland functions or values.

24. Stormwater conditions leaving the project site and entering Wetland B will also be improved from the current pre-developed conditions by providing enhanced water quality treatment under Minimum Requirement 6, and flow control that is designed to mimic flows from a forested site under Minimum Requirement 7.²

25. **Conclusion:** The proposed revisions to the Method 2 criteria in the Draft 2024 SWMMWWV reflect an acknowledgement supported by stormwater professionals that complex wetland systems are dynamic and fluctuations occur within those systems. The Drainage Manual (as also reflected in the Draft 2024 SWMMWWV) acknowledges that modeling and analysis with historic data alone cannot always meet the intent of the Drainage Manual to ensure wetland hydroperiod protection. Method 2 criteria are based on an assumed risk to the wetland rather than an actual understanding of the impacts to the functions and values of the receiving wetland. The Applicant has supplemented the Method 2 modeling results for the project with a Wetland Protection Analysis that includes an analysis of impacts to wetland hydrology based on site-specific conditions of the wetland consistent with the intent of the Drainage Manual.

26. **Conclusion:** There is a high degree of hydrologic fluctuation within Wetland B, and the vegetation and processes within the wetland have adapted to a wide variety of hydrologic conditions. The wetland topography provides the capacity to accept large seasonal changes in stream volumes without resulting in measurable changes to wetland functions or values. The modeled daily average exceedances/reductions and monthly average exceedance in October will not have a significant effect on the seasonal ponding within Wetland B and will not result in measurable changes to the hydrology in the wetland or impacts to its functions.

27. **Conclusion:** Although the project fails to strictly comply with Method 2 modeling requirements, the Applicant's supplemental Wetland Protection Analysis demonstrates with site specific information that the modeled outliers will not have a substantial impact on the hydroperiod of Wetland B. The Applicant's approach for compliance with Minimum Requirement #8 provides substantially similar environmental protection as is required by the Drainage Manual.

² The Modification Summary erroneously refers to the stormwater requirement to provide water quality treatment as Minimum Requirement 5. Water quality treatment is Minimum Requirement 6.

Part III.B: The Modification Is Based Upon Sound Engineering Practices Which Will Meet Design Objectives Addressing Safety, Function, Environmental Protection, And Facility Maintenance (SCC 30.63A.860(6)(b))

1. The Applicant has submitted engineering calculations, expert opinions, reports, and other supporting documents in support of the Stormwater Modification and overall project design.
2. The Applicant has submitted reports and supporting documentation from its design consultants to demonstrate the project's compliance with Minimum Requirement 8, Method 2 wetland hydroperiod modeling criteria to the extent feasible, and all other applicable County drainage regulations.
3. The Applicant provided an analysis of design alternatives for the detention vault outfall design, as well as design alternatives based on strategies for wetland hydroperiod protection described in the Drainage Manual, that includes a rationale for rejecting each alternative.
4. The project site has been modeled in the Western Washington Hydrology Model (WWHM) for both Minimum Requirement 7 and 8. The project modeling was then reviewed by the WWHM software architect, Clear Creek Solutions, which confirmed that the models were constructed correctly based on the inputs provided.
5. The Applicant provided site-specific study by Wetland Resources professionals that describes the potential impacts to the offsite wetland resulting from the identified exceedances in the Method 2 modeling criteria for the project. An inability of the project to strictly comply with the Method 2 modeling criteria is the basis for the Modification Request.
6. **Conclusion:** The design alternatives studied by the Applicant and described in the Modification Summary would not result in greater hydroperiod protection for Wetland B.
7. **Conclusion:** The modification request is based upon sound engineering practices. The project's compliance with the drainage regulations, as modified with respect to compliance with Minimum Requirement 8, Method 2 modeling criteria to the extent feasible, will meet design objectives addressing safety, function, environmental protection, and facility maintenance.

Part III.C: The Modification Does Not Adversely Impact Off-Site Properties (SCC 30.63A.860(6)(c))

1. Offsite impacts as a result of granting a modification from strict compliance with Method 2 modeling criteria for wetland hydroperiod protection in the Drainage Manual are associated with offsite Wetland B.
2. The Applicant's supplemental Wetland Protection Analysis discusses the specific impacts of Applicant's Modification Request on Wetland B's hydroperiod and concludes compliance with Method 2 to the maximum extent feasible will not result in measurable impacts to the functions and values of Wetland B.
3. Approval of the modification to compliance with Minimum Requirement #8, Method 2 modeling criteria in the Drainage Manual, will ensure the project can meet the flow control requirements of Minimum Requirement #7. Under current site conditions, stormwater discharges are controlled using temporary sediment ponds and minimal water quality controls.

4. **Conclusion:** The project's compliance with Minimum Requirement #7, in conjunction with enhanced water quality treatment required by Minimum Requirement #6 will improve water quality and mimic the historic predeveloped conditions much closer than the existing site even with the approval of the Stormwater Modification.

5. **Conclusion:** The drainage modification to comply with Minimum Requirement 8, Method 2 modeling criteria to the extent feasible, does not adversely impact off-site properties.

Part III.D: The Modification Results In The Least Possible Change That Could Be Granted That Still Meets The Intent Of Chapters 30.63A And 30.63B SCC, The Drainage Manual And The EDDS (SCC 30.63A.860(6)(d))

1. The Applicant supplements the WWHM modeling data required for Method 2 criteria with a site-specific wetland analysis from a qualified professional to verify the effects of the proposal on Wetland B's hydroperiod.

2. The Wetland Protection Analysis performed by Wetland Resources concludes that the effects of modeled daily average volume exceedances/reductions and monthly average volume exceedance making up the proposed modification are negligible to the health of the Wetland B system from a qualified professional's perspective.

3. The Stormwater Modification Summary includes an alternatives analysis that further explains the complications of the project site that makes utilizing strategies for wetland hydroperiod protection described in the Drainage Manual infeasible.

4. **Conclusion:** Where strict compliance with the Method 2 modeling criteria cannot be achieved, the Applicant's approach meets the intent of the Snohomish County Drainage Manual (and Draft 2024 SWMMWW) to ensure the hydroperiod of the receiving wetland is maintained.

5. **Conclusion:** The modification meets the intent of both chapter 30.63A SCC and the Drainage Manual and has negligible impact to the hydroperiod and functions and values of the offsite Wetland B.

PART IV: RECOMMENDATION

I have reviewed the Modification Request and supporting documents listed above and the applicable county code requirements and recommend that the PDS Director **APPROVE** the Modification Request on the basis that the Applicant has met the modification criteria in SCC 30.63A.860(6). I base my recommendation on the findings and conclusions listed in Part III above for each decision criteria.