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SEPA ADDENDUM TO 2009 MODIFIED MDNS FOR NORTH HILL PRELIMINARY SUBDIVISION (Duvall File No. SU07-006): CHANGE IN LOCATION FOR OFF-SITE STORMWATER OUTFALL

June 1, 2016

Proposal/Changes to Proposal: *Duvall North Hill Preliminary Subdivision was approved July 16, 2009, and extended for one year on April 18, 2016, to July 16, 2017. This Addendum to the 2009 Modified Mitigated Determination of Non-significance (MDNS) for the Duvall North Hill Preliminary Subdivision addresses an adjusted location for the subdivision's off-site stormwater conveyance and outfall and new information related to the same.*

Applicant: Centex Homes

Project Background: The North Hill Subdivision is located in the City of Duvall, along the northern boundary of the City to the north of the Riverside School District Cedarcrest High School property. Off-site stormwater discharge from the project to unincorporated King County to the north was included in the North Hill preliminary subdivision approval issued in the Notice of Decision, July 16, 2009, by the Duvall Hearing Examiner ("North Hill Subdivision"). North Hill Subdivision Condition No. 41 requires that the applicant meet all King County permits and requirements for the off-site stormwater outfall. Since acquiring the North Hill property in 2014, Centex Homes has worked with King County to develop a final design and acceptable location for stormwater outfall under the King County Surface Water Design Manual (KCSWDM) and other applicable County code provisions. This Addendum addresses the proposed final design and location of stormwater conveyance and outfall.

Lead Agency: City of Duvall, Planning Department

Responsible Official: Lara Thomas, Planning Director
City of Duvall
P.O. Box 1300
Duvall, WA 98019

Purpose of Addendum and Summary of New Information: This Addendum supports permitting by King County and other agencies for a change in location and additional information for the North Hill Subdivision off-site stormwater conveyance and outfall. The off-site drainage pipe will convey treated stormwater down the slope to the north of the subdivision within easements across private property obtained by the Applicant. Under the revised proposal, as required by King County, plat stormwater will be piped to the bottom of the off-site slopes and

cross under Cherry Valley Road to a revised outfall location, then conveyed through an excavated swale to discharge upland of the Ordinary High Water Mark (OHWM) of Waterwheel Creek. The purpose of this Addendum is to describe the change in the stormwater outfall plan and provide site specific information related to the new stormwater conveyance and outfall location.

Stormwater Proposal Subject to Modification: At the time of North Hill Preliminary Plat Approval, it was conceived that the detained and treated stormwater would be discharged off-site to the north of the plat along the existing slopes in one or more drainage subbasins. The 2009 MDNS Description of Proposal described that "[t]he applicant proposes an off-site stormwater outfall within King County at parcel number 1826079077, immediately north of the project area. The off-site parcel is zoned RA-10 and is approximately 18.94 acres. The City of Duvall is taking lead agency status in accordance with WAC 197-11-932…" The 2009 MDNS provided the following Mitigation Measure for stormwater:

> *2. Stormwater Mitigation: A storm water facility will be constructed within an individual tract located within the project and the stormwater facility shall be dedicated to the City at Final Plat. A Level 2 Downstream analysis will be required from the site to NE Cherry Valley Road and all appropriate King County permits and requirements shall be met for the stormwater outfall.*

The MDNS stormwater condition was included as Condition 41 to the approved North Hill Preliminary Subdivision.

Revised Stormwater Proposal Reviewed in Addendum: The revised proposal is for a change in location of the stormwater outfall. The revised proposal consists of a buried stormwater discharge pipe that transitions to an above-ground stormwater pipe within slope areas north of the project. The pipe then transitions to a buried pipe beneath Cherry Valley Road and discharges outside the 100-year floodplain (associated with Cherry Creek and Waterwheel Creek) at an outfall catch basin equipped with energy dissipation on King County Parcel No. 0726079033. On that parcel a shallow drainage swale will be excavated from the outfall pipe structure to a rock-lined confluence above the ordinary high water mark of Waterwheel Creek. The drainage swale and rock-lined confluence are located within the mapped 100-year floodplain, and are also within King County shoreline jurisdiction with a shoreline management designation of Resource Conservancy.

Summary of New Information: New information for the revised proposal addresses off-site specific conditions and impacts, including 6,100 square feet of Category II wetland that will be excavated for the drainage swale. Within sloped areas to the north of the development site and to the south of Cherry Valley Road, the stormwater pipe will cross above a Category III wetland and Type Np stream on an elevated platform. The above ground stormwater conveyance will result in 4,500 square feet of buffer impacts at this location. Wetland and stream buffer impacts, as well as the direct impact to the Category II wetland required for the drainage swale, will be mitigated through purchase of credit at the Snohomish Basin Mitigation Bank. The

Applicant has provided documentation that the proposed swale and rock-lined confluence to Waterwheel Creek will be exempt from shoreline substantial development permit requirements under King County's Shoreline Master Program (KCC Chapter 21A.25). The stormwater outfall and swale will stay outside of the 100-foot sanitary control area of a community water supply well owned and operated by Cherry Valley Ranch Water Association (CVRWA), located on the parcel immediately east of the identified outfall parcel. The applicant has secured easements along the conveyance route from the subdivision property boundary to the final discharge point at Waterwheel Creek. The addendum evaluates stormwater treatment measures and resulting water quality, as they relate to fish habitat and use within Waterwheel Creek and the underlying aquifer for CVRWA well. In all areas, the environmental analysis concludes the stormwater outfall revision will generate no significant adverse environmental impact.

Additional details of the revised stormwater outfall proposal are included on the construction plan sets prepared by CORE Design, Inc. and submitted to King County for a grading permit and critical areas approval (*"North Hill King County Grading Permit"* Sheets C1.01, C1.02, C2.01, C2.31, C4.01- C4.08, C4.31, and C4.32, 4/14/16). Construction notes on the plans address measures to avoid conflict with nearby water lines for CVRWA. An overview plan is attached as Figure 1 to this Addendum. The proposed design limits disturbance to critical areas and their buffers, and the proposal includes implementation measures that include mitigation for the necessary swale excavation and wetland and stream crossings in accordance with the King County Code. Mitigation includes, but is not limited to, sizing of the conveyance channel to prevent erosion, replanting of the drainage swale with wetland grasses, restoration of temporarily disturbed areas, and provisions for additional compensatory mitigation through purchase of credits in the Snohomish Basin Mitigation Bank. Post construction and operation maintenance of the swale is required to provide performance as designed.

The new information provided through the Addendum does not substantially change the analysis for the 2009 MDNS, but rather provides detailed information on the revised proposal. The revised proposal remains within the affected drainage subbasins and tributaries evaluated in the 2009 MDNS. In the 2009 MDNS stormwater Mitigation Measure, the Applicant was required to meet all appropriate King County permits and requirements for the stormwater outfall. The new outfall location is a result of King County requirements under the KCSWDM, in compliance with the 2009 MDNS Mitigation Measure and Condition 41 of the North Hill Subdivision approval. The new outfall location avoids erosion and slope stability impacts from discharging on slopes, maintains the required on-site detention and treatment provisions, and discharges to the natural point of confluence. The final receiving water for plat stormwater is not changed. The scope of the Level 2 Downstream Analysis required by the 2009 MDNS has been expanded from "NE Cherry Valley Road" to include commensurate areas downstream of the new outfall location. No significant adverse environmental impacts are anticipated with the proposed design and construction of the relocated outfall.

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Required Approvals: This Addendum is provided in support of the permitting agencies for the revised stormwater outfall. The following permits and/or approvals are anticipated for the off-site stormwater conveyance and outfall:

King County

- Shoreline Substantial Development Permit Exemption
- Grading Permit, with critical areas approval

State and Federal

- Washington Department of Fish & Wildlife (WDFW) Hydraulic Project Approval
- U.S. Army Corps of Engineers (USACOE) Nationwide #7 Coverage
- Washington State Department of Ecology (WSDOE) 401 Water Quality Certification associated with Nationwide #7 Coverage

Addendum Materials: This State Environmental Policy Act (SEPA) Addendum for the North Hill Duvall Subdivision offsite drainage facility has been prepared under the direction of the City of Duvall Planning and Public Works departments, and with guidance from King County. Research and analysis were provided by the following firms:

- **CORE Design Inc. –** Lead engineer Michael Moody, P.E., LEED AP, for engineering and design; description of proposal for revised SEPA checklist; project management; document compilation; analysis relative to construction impacts;
- **Raedeke Associates** – Lead author Chris Wright, B.S., Soil and Wetland Scientist, for Critical Areas Study including wetland delineations and typing and impacts analysis; Bill Taylor, M.S. Aquatic Scientist, for evaluation of water quality for fish life;
- **Terra-Associates, Inc. –** Lead author Theodore J. Schepper, P.E., for geotechnical site exploration, soil testing, seismic considerations;
- **SWCA Environmental Consultants** – Lead author Michael Shong, Senior Project Archaeologist, Cultural Resources Assessment for North Hill Offsite Discharge Project, King County;

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- **Associated Earth Sciences, Inc. –** Lead author Curtis J. Koger, L.G., L.E.G., L.Hg, for hydrogeological evaluation of proposal including stormwater and well water quality; and

- **ESA** – Lead author Aaron Booy, Natural Resources Specialist, City contractor for peer review of Applicant materials.

The SEPA Addendum consists of 2016 SEPA Checklist Revisions submitted (March 9, 2016 and April 22, 2016) and Appendix of Additional Information:

A. *Hydrogeologic Review/Wetland Hydrology*, Terra Associates, Inc., September 23, 2015

B. *Geotechnical Report*, Terra Associates, Inc., April 30, 2013

C. *Critical Areas Study, North Hill – Stormwater Pipeline and Outfall,* Raedeke Associates, Inc., February 23, 2016

D. *Technical Memorandum, Off-site Wetland Recharge,* Raedeke Associates, Inc., September 24, 2015

E. *Cultural Resources Assessment for the North Hill Offsite Discharge Project*, SWCA Environmental Consultants, February 22, 2016

F. *North Hill Drainage Adjustment Narrative,* CORE Design Inc., September 24, 2015

G. *North Hill Plat Hydrogeologic Water Quality Evaluation*, AESI, April 13, 2016

H. *North Hill Offsite Outfall Conveyance Depth & Energy Dissipation (Permit: GRDE14-0059)*, CORE Design Inc., April 20, 2016

I. *North Hill Landslide Hazard Drainage Area Impacts Summary,* Letter to B. Benson, City Engineer, Duvall, from M. Moody, CORE Design Inc., March 28, 2016

J. *Technical Information Report*, CORE Design Inc., April 29, 2016

K. *North Hill Modified Mitigated Determination of Non-Significance Consistency*, Letter to L. Thomas, Planning Director, Duvall, from HCMP, March 9, 2016

L. *North Hill Development – Review of Offsite Stormwater Conveyance focused on SEPA Compliance and Consistency with Environmental Permit Requirements*, Letter to L. Thomas, Planning Director, Duvall, April 1, 2016

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M. *Technical Memorandum – Characterization of Water Quality Treatment for Grass Swales*, C. Wright and W. Taylor, Raedeke Associates, Inc., April 26, 2016

N. *North Hill Development – Response to Environmental Document Review*, Letter w/ attachments to L. Thomas, Planning Director, Duvall, from M. Behn, Centex Homes, April 22, 2016

O. *North Hill Development –Second Review of Offsite Stormwater Conveyance focused on SEPA Compliance and consistency with Environmental Permit,* from ESA to L. Thomas, Planning Director, Duvall, May 11, 2016

P. *North Hill Development – Review of Potential Development Impact to Tributary Drainages*, from ESA to L. Thomas, Planning Director, Duvall, May 13, 2016

Conclusion:

This Addendum has been prepared to address the revisions to the North Hill Subdivision Off-Site Stormwater Outfall and discuss new information provided since the 2009 Amended MDNS. The Addendum provides a general description of the revisions to the proposal, summarizes the project background, provides new information and analysis regarding the proposed revisions, and concludes that no new significant environmental impacts will occur from the changes to the project. The Addendum does not substantially change the analysis of significant impacts in the North Hill Subdivision 2009 MDNS; rather, it provides detailed information on the revised proposal. Mitigation measures are specified within the revised proposal. No new probable significant environmental impacts are expected to result from the current proposal.

Revised SEPA Checklist and appendices are available for review at the offices of the City of Duvall Planning Department, address:

15535 Main Street
Duvall, WA 98019

Signature: Lara Thomas

Lara Thomas
Planning Director
SEPA Responsible Official

Date: 6/1/16

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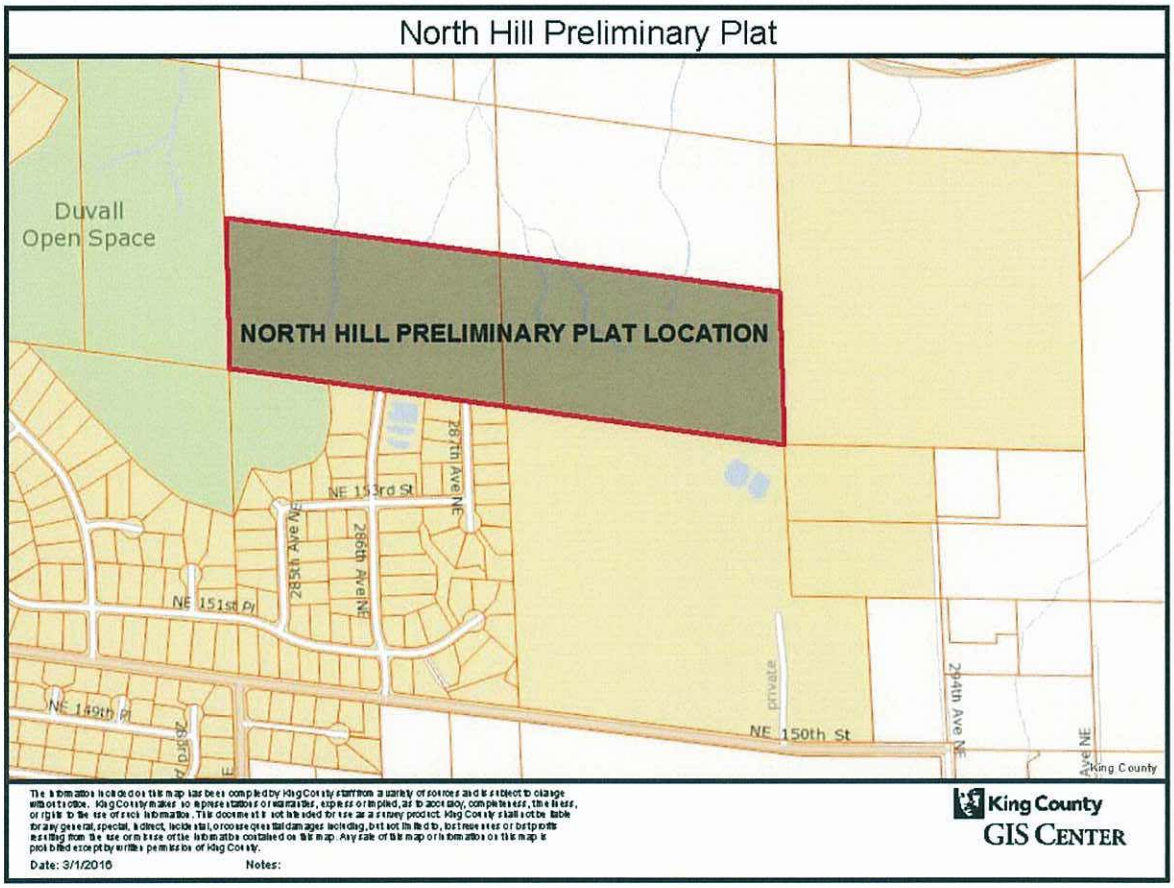
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