CITY OF ISSAQUAH
REVISED MITIGATED DETERMINATION OF NONSIGNIFICANCE (MDNS)

Revised SEPA Determination – This SEPA Determination revises the SEPA Determination (MDNS) issued on January 7, 2016. After further field evaluation, Anti-Aircraft Creek has been re-classified as a fish-bearing stream. The applicant has revised the proposed culvert design to allow for fish passage. A SEPA mitigation measure has been added that the culvert shall meet criteria of the Washington State Department of Fish and Wildlife (WDFW) for a fish passable culvert.

This revised MDNS is issued consistent with WAC 197-11-340(2)(f).

Description of Proposal: Replace existing culverts on Anti-Aircraft Creek at the intersection of Newport Way NW and NW Oakcrest Drive. The existing culvert is vulnerable to sedimentation and has low capacity resulting in flooding of Newport Way NW. The objective of the proposal is to alleviate flooding and maintenance problems, to realign a portion of Anti-Aircraft Creek to its natural drainage pattern, and to provide for fish passage. The project consists of replacing the existing undersized culverts with larger split box culverts and improving channel grading. The culvert design has been revised by the applicant to allow for fish passage.

Proponent: City of Issaquah Public Works Engineering
P.O. Box 1307
Issaquah, WA. 98027
Attn: Kerry Ritland

Project Name/ Permit Number: Anti-Aircraft Creek Culvert Replacement
ASDP15-00011

Location of Proposal: Newport Way NW and NW Oakcrest Dr.

Lead Agency: City of Issaquah

Determination: The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

Comment/Appeal Period: This MDNS is issued under WAC 197-11-340(2) and 197-11-680(3)(a)vii. There is a 21-day combined comment/appeal period for this determination, between **February 25, 2016 to March 17, 2016.** Anyone wishing to comment may submit written comments to the Responsible Official. The Responsible Official will reconsider the determination based on timely comments. Any person aggrieved by this determination may appeal by filing a Notice of Appeal with the City of Issaquah Permit Center. Appellants should prepare specific factual objections. Copies of the environmental determination and other project application materials are available from the Issaquah Development Services Department, 1775 12th Avenue NW.

Appeals of this SEPA determination must be consolidated with appeal of the underlying permit, per IMC 18.04.250

Notes:

1. This threshold determination is based on review of the following application information prepared by Mead & Hunt: Site Plan, Stream and Culvert Profiles, Supporting Narrative, dated February 16, 2016; Anti-

Aircraft Creek Culvert Replacement Analysis Report, dated February 22, 2016; SEPA Checklist, dated February 2016; Mead & Hunt Technical Memo – Wetland Sediment Deposition, dated December 17, 2015; Cultural Resources Assessment (Cultural Resource Consultants, Inc., June 22, 2015); Wetland and Stream Review for Issaquah Farms Property, (ESA, dated February 18, 2016); and other documents in the file.

2. Issuance of this threshold determination does not constitute approval of the permit. The proposal will be reviewed for compliance with all their applicable codes which regulate development activities, including: Land Use Code, Critical Area Regulations, Shoreline Master Program, Clearing and Grading Ordinance, and Surface Water Design Manual.

Findings:

1. Stream Classification – Anti-Aircraft Creek originates on upper Cougar Mountain, crosses Newport Way NW, and is a tributary to Tibbetts Creek. The lower reach of the stream is classified as a Class 2S stream with salmonids in the City's *Stream Inventory and Habitat Evaluation Report* (Parametrix, 2003); due to its assumed connection to Tibbetts Creek, the stream rating was based on a qualitative field assessment. Initial site studies concluded a wetland complex, located between Tibbetts Creek and Newport Way NW, prevented fish access to the stream segment adjacent to Newport Way NW. However, the stream was re-evaluated in the field on February 1, 2016 with the Washington Department of Fish and Wildlife (WDFW) and the stream had significantly higher flows than previously observed and it was determined that the wetland area would not preclude fish passage during high flow events and therefore the stream meets criteria for fish usage based on WAC 222-16-030 (ESA, February 18, 2016). Therefore, Anti-Aircraft Creek is rated as a Type F (Fish Bearing) stream (per WDNR Stream Typing) and a Class 2S stream (City of Issaquah) which requires a 100-foot stream buffer.

   The upstream extent of potential fish presence was evaluated by a GIS analysis, concluding that Anti-Aircraft Creek has potential for fish presence up to a point approximately 1,500 feet upstream of Newport Way NW, where the stream slope then exceeds the 16% gradient threshold in WAC 22-16-030. (ESA, February 18, 2016)

   The Washington Department of Fish & Wildlife (WDFW) SalmonScape mapping indicates the existing culvert under NW Oakcrest Dr as an "unknown blockage" and the culverts under Newport Way NW as a "partial blockage." Fish distribution (modeled presence) includes: Sockeye, Coho, Fall Chinook and Winter Steelhead.

2. Background – The culvert replacement project was first identified in the mid-1990s in the Issaquah Creek Basin Plan and has been on the City's stormwater capital facilities plan. A FEMA hazard mitigation grant was submitted in 2012, specifically scoped to address the sedimentation and repetitive flooding impacts on Newport Way NW.

   The upstream conditions of Anti-Aircraft Creek (west of Newport Way NW) show a massive amount of sediment transport due to high energy flows that erode the channel banks and have incised the stream, indicative of unstable channel morphology. Addressing the upstream conditions is not in the scope of this project. However, the culvert system has been designed to transport the upstream sediment load. The proposed culvert system and stream regrading would not cause upstream issues; the hydraulic model shows no evidence of backwater that would have an upstream effect.

   On the east side of Newport Way NW, the culvert would extend through a private property and a proposed development (Riva Townhouses, SDP15-00004), and an easement for the culvert replacement has been obtained. The two projects, the culvert replacement project and the townhouse development, are independent of each other. The townhouse proposal will fully enhance the wetland and stream buffers on the site as mitigation for their development.

3. Project Description - The objectives of the proposed culvert replacement are to: 1) replace existing undersized culverts to increase flood capacity and eliminate roadway flooding; 2) promote fish passage; 3) revise the stream hydraulics to reduce sediment deposition and allow for transport of naturally occurring sediment in the stream system; 4) enhance the stream channel both upstream and downstream of the culvert; 5) reduce overall length of culverts.

   Currently, Anti-Aircraft Creek flows off Cougar Mountain and when it reaches Newport Way NW it takes a circuitous route: on the west side of Newport Way the creek takes a 90-degree jog flowing northward in a flat constructed drainage ditch parallel to Newport Way NW. The flat, drainage ditch section parallel to Newport Way NW acts as a sediment trap, making it prone to clogging and resulting in flooding of the road during large rain events. The stream then flows through a culvert under NW Oakcrest Drive before flowing through parallel culverts under Newport Way NW, where it flows in an open channel to the edge of the wetland complex upstream of Tibbetts Creek.

   On the west, upstream side of Newport Way NW the project enhance approximately 92 linear feet (LF) of the existing stream channel and then create approximately 20 LF immediately upstream (west) of Newport Way NW (within a City-owned drainage tract) to align it with the proposed box culvert under Newport Way NW. This would straighten the stream to create the hydraulics needed to move natural stream sediment through the culvert system. The bottomless box culvert would replace the drainage ditch parallel to Newport Way NW, and the existing culverts under NW Oakcrest Dr and Newport Way NW would be abandoned in place. On the east side of Newport Way NW, the culvert would extend through a proposed development (Riva Townhouses, SDP15-00004); an easement has been obtained from the property owner of the development site. A section of new stream channel (67 LF) would be created and 21 LF of existing stream channel enhanced prior to connecting to the existing stream channel at the west edge of the wetland. The proposal would not extend into or directly impact the wetland.

   The proposal would remove 19 linear feet (LF) of existing culverts and abandon 129 LF of culverts. 146 LF of new culverts would be constructed, resulting in a net change of -2 LF in culvert length compared to the existing condition. Because the project proposal would result in a net decrease to the existing length of culverts, the culvert replacement is not considered a stream impact which requires mitigation.

   Segments of the existing stream channel would be abandoned/filled with the culvert replacement/ realignment, including: the filling the existing, unvegetated drainage ditch on the west side of Newport Way (165 LF), the stream segment north of Oakcrest Dr NW (40 LF), and the existing stream channel on the east side of Newport Way NW (127 LF) and abandoning 146 LF of the existing stream channel between the filled channel and tying into the existing channel. The fill material imported to fill the abandoned stream channel segments shall be certified as a clean source of fill material. In total, the proposal would abandon/fill 478 LF of existing stream channel, enhance 107 LF of existing stream channel and create 86 LF of new channel. It should be noted that the existing stream channel which is in a drainage ditch parallel to Newport Way NW (165 LF) is routinely mowed for maintenance and provides little habitat functions.

   Based on results of the hydraulic analysis, the proposed culvert conveyance is designed to convey the 100-year design storm for Anti-Aircraft Creek, with a foot of freeboard to ensure water levels would not overtop the culvert and flood Newport Way NW. The culvert system and regrading of the creek would increase flow velocities to address the existing problem of sediment settling and buildup behind the culverts.

   An important design element of the project is to improve the existing problem of sediment deposition caused by the existing drainage ditch and culvert configuration, which results in maintenance issues and flooding Newport Way NW. The new culvert system is designed to carry the sediment load under Newport Way NW and onto the downstream channel. The sediment load is expected to be primarily from the upstream creek channel itself since the larger contributing drainage basin is mostly undeveloped and

forested. The sediment load from the creek is dominated by relatively coarse bed load gravels. It's anticipated that sediment deposition and the erosion process would restore a natural stream forming process; eventually creating a meandering stream channel through the wetland and transporting coarse sediments to supplement spawning gravels in Tibbetts Creek. (See Hunt & Mead Technical Memo – Wetland Sediment Deposition, dated December 17, 2015)

4. Stream enhancement: The proposal would enhance 107 LF of existing stream channel and create approximately 86 LF of stream channel; immediately upstream (west) of Newport Way NW and downstream of the new culvert. Existing native vegetation shall be retained and protected to the extent feasible and all disturbed areas shall be fully restored with native plantings. The applicant shall provide more detailed plans for the new, enhanced stream segments; specifying streambed gravels, placement of large woody debris and stream buffer planting, prior to issuance of construction permits. The entire stream buffer and wetland buffer on the east side of Newport Way NW will be enhanced as part of the proposed development project (Riva Townhouses, SDP15-00004).

5. Cultural Resources: A Cultural Resources Assessment (Cultural Resource Consultants, Inc., June 22, 2015) was completed for the proposal and concluded there is no evidence of archaeological or historic sites in the project location. No further investigation is recommended.

6. Permits: In addition to City permits, the proposal will require review and permit approvals by the Washington State Department of Fish & Wildlife (Hydraulic Project Approval, HPA) and the U.S. Army Corps of Engineers (Section 404 Permit). The HPA will review details of the culvert design to ensure it meets standards for a fish passable culvert. It would also include measures for Best Management Practices (BMPs) for erosion control and spill prevention, construction sequencing, limiting the seasonal timing of construction work, specifics for dewatering the channel and diversion of stream water during construction, and potentially other mitigation measures. Copies of these permits shall be provided to DSD prior to issuance of construction permits.

Mitigation Measures: The Mitigated Determination of Nonsignificance is based on the revised SEPA checklist dated February 2016 and submitted application materials. The following SEPA mitigation measures shall be deemed conditions of the approval of the licensing decision pursuant to Chapter 18.10 of the Issaquah Land Use Code. All conditions are based on policies adopted by reference in the Land Use Code.

1. The culvert shall be designed to allow for fish passage, consistent with Washington Department of Fish and Wildlife (WDFW) design criteria. This will be reviewed by WDFW with the Hydraulic Project Approval (HPA).

2. The fill material imported to fill the abandoned stream channel segments shall be certified as a clean source of fill material.

3. Existing native vegetation shall be retained and protected to the extent feasible and all disturbed areas shall be fully restored with native plantings.

4. The applicant shall provide a more detailed plan for the new and enhanced stream segments; specifying streambed gravels, placement of large woody debris and stream buffer planting, prior to issuance of construction permits.

5. The proposal will require review and permit approvals by the Washington State Department of Fish & Wildlife (Hydraulic Project Approval, HPA) and the U.S. Army Corps of Engineers (Section 404 Permit). Copies of these permits shall be provided to DSD prior to issuance of construction permits.

SEPA Responsible Official:	Peter Rosen
Position/Title:	Environmental Planner, SEPA Responsible Official
Address/Phone:	P.O. Box 1307, Issaquah, WA 98027-1307 (425) 837-3094
Date: 2/25/2016	**Signature:** _____

cc: Washington State Department of Ecology
Muckleshoot Indian Tribe
U.S. Army Corps of Engineers
Washington State Department of Fish and Wildlife
Washington State Department of Archeology and Historic Preservation (DAHP)
Issaquah Development Services Department
Parties of Record