

## MEMORANDUM FOR RECORD

**SUBJECT:** Department of the Army Combined Decision Document for Permit Application: POA-2016-12, Gastineau Channel.

This decision document constitutes the Environmental Assessment, 404(b)(1) Guidelines Evaluation, Public Interest Review, and Statement of Findings that informed the Corps decision on the permit application described below.

### **1.0 Application as described in public notice, dated 1/21/2016**

#### **1.1**

Applicant:

Richard Harris  
R.H. Development LLC  
PO Box 32403  
Juneau, AK 99803

**1.2** Location and waterway: Section 32, T. 40 S., R. 66 E., Copper River Meridian; USGS Quad Map Juneau B-2; USS 1568, TR B1, 7400 Glacier Highway, in Juneau, Alaska.

**1.2.1** Latitude: 58.360434° North Longitude: 134.544145° West

**1.3** Existing conditions: The proposed project site is an undeveloped tract. The site is heavily forested and contains a grouping of uplands and forested wetlands, including perennial streams.

**1.4** Project Description from Public Notice: The applicant requests authorization to discharge approximately 1,200 cubic yards of crushed rock and 4,000 cubic yards of shot-rock fill material into approximately 1.6 acres of waters of the United States consisting of forested wetlands and perennial streams in order to construct eight duplex housing units and six fourplex housing units. The work would include the relocation of the lower reach of two streams to allow drainage off the property.

**1.5** Avoidance and minimization statement from applicant: "We have searched for quality buildable land available in the Juneau area, which has the least amount of wetlands. In Juneau there is little to no land available that is not encompassed with wetlands, there is much less expensive lands that entail much more wetlands per acre than the site we have chosen.

Our project team has avoided impacts to wetlands through a long and costly process of changing the housing density of our project site, allowing for many more housing units to be created on less acreage. Example: A housing development to the west of our site has

used 10 acres of land to develop 24 housing units. Our Project will provide 24 housing units on 1.75 acres of land, minimizing the impacts to wetlands and the environment.”

1.6 Compensatory mitigation proposal from applicant: No compensatory mitigation is proposed.

1.7 Project Changes Subsequent to Public Notice: NA

## **1.8 Purpose and need**

1.8.1 Project purpose and need as described by applicant: The applicant's stated purpose is “to construct higher density housing to help alleviate the demand in Juneau.”

1.8.2 Basic project purpose: To provide housing

1.8.3 Water dependency determination: The Proposed project is not water dependent

1.8.4 Overall project purpose: Construct higher density dwellings to help alleviate the housing demand in Juneau.

## **2.0 Authority**

2.1 Section 404 of the Clean Water Act (33 U.S.C. Section 1344 )

2.2 Does the project also require authorization under Section 14 of the Rivers and Harbors Act (33 U.S.C. 408)? No

2.3 Jurisdictional determination information: There are waters of the U.S. within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area consisting of: 1. Wetlands adjacent to TNWs; 2. Relatively permanent waters (RPWs) that flow directly or indirectly into TNWs; 3. Wetlands directly abutting RPWs that flow directly or indirectly into TNWs.

## **3.0 Scope of Analysis**

*The scope identified in sections 3.1 – 3.3 to ensure compliance with NEPA, ESA and NHPA Section 106 is based on the final proposed project.*

### **3.1 National Environmental Policy Act (NEPA):**

*Scope of determination for NEPA review is found at 33 CFR 325, Appendix B, Paragraph 7.b. The following factors are considered in determining whether sufficient federal “control and responsibility” exists:*

(1) Whether or not the regulated activity comprises “merely a link” in a corridor type project.

(2) Whether there are aspects of the upland facility in the immediate vicinity of the regulated activity which affect the location and configuration of the regulated activity.

(3) The extent to which the entire project will be within the Corp's jurisdiction.

(4) The extent of the cumulative federal control and responsibility.

3.1.2 Determination of scope. Based on an examination of NEPA (33 CFR Part 325, Appendix B) and applicable program guidance (e.g. Council on Environmental Quality's (CEQ)

Considering Cumulative Effects Under National Environmental Policy Act and the Standard Operating Procedures for the U.S. Army Corps of Engineers Regulatory Program, July 2009), we have determined that the appropriate scope for this project is: Only within the footprint of the regulated activity within the delineated water.

Explanation: 1. The proposed residential development does not comprise "merely a link" in a corridor type project. 2. The proposed project would be located in waters of the United States that directly abut uplands that the applicant owns. However, the location of the project is not dependent on the uplands rather it is for purposes of avoidance and minimization of impacts to the aquatic environment. 3. Only the portion of the fill in waters of the United States, including wetlands, is within the Corps' jurisdiction. 4. The proposed activity could not proceed without a Corps permit. However, there are no other indicators of Federal control and responsibility, such as Federal funding or Federal direction or regulation.

### 3.2 **National Historic Preservation Act (NHPA) "Permit Area":**

*The NHPA Scope is defined as "permit area". The permit area for an undertaking is defined in 33 CFR 325, Appendix C. The following three (3) tests must all be satisfied for an activity undertaken outside of waters of the United States to be included within the "permit area".*

#### 3.2.1 Tests:

☐ a. The activity outside of waters of the United States would not occur but for the authorization of the work or structures within waters of the United States.

☐ b. The activity outside waters of the United States is integrally related to the proposed work or structures within waters of the United States (or conversely, the proposed work or structures within waters of the United States must be essential to the completeness of the overall project or program).

☐ c. The activity outside the waters of the United States is directly associated (first order impact) with the proposed work or structures within waters of the United States.

3.2.2 Scope Determination: Activities outside waters of the United States are proposed but not included because all of the above tests do not apply to this project.

3.2.3 NHPA Scope Summary and Description: All of the above tests do not apply to this project, therefore the permit area and scope for NHPA are the same. The permit area for NHPA is the property that the applicant's project would occur on described as Section 32, T. 40 S., R. 66 E., Copper River Meridian; USGS Quad Map Juneau B-2; Latitude 58.360434° N., Longitude 134.544145° W.; USS 1568, TR B1, 7400 Glacier Highway, in Juneau, Alaska.

### 3.3 **Endangered Species Act (ESA) "Action Area":**

*The ESA scope is defined as "action area". The action area means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action; and, is an undertaking as defined in 50 CFR 402.02, Definitions.*

- 3.3.1 Determined Scope: The action area for ESA is the footprint of the applicant's proposed project within the property it would occur on described as Section 32, T. 40 S., R. 66 E., Copper River Meridian; USGS Quad Map Juneau B-2; Latitude 58.360434° N., Longitude 134.544145° W.; USS 1568, TR B1, 7400 Glacier Highway, in Juneau, Alaska.

**4.0 Public Involvement** (Public Notice required by 33 CFR 325.3):

4.1 Public Notice Information

Application Received: 12/30/2015

Application Complete: 12/30/2015

Date of Public Notice Issued: 1/21/2016

End Date for Public Notice Comment Period: 2/20/2016

Additional Information: N/A

4.2 Public Meeting(s): No

Discussion/Explanation: N/A

4.3 Public Notice Comments:

a. Comments Received From: Alaska Department of National Resources (ADNR)

Date Received: 1/26/2016

Comment/Issue: The Trust Land Office (TLO) manages the land corpus for the Alaska Mental Health Trust Authority (Trust). Upon review, it was determined that the proposed project is adjacent to a Trust parcel (Parcel CRM-1267); this parcel is located directly east of and adjacent to the above referenced project. While the Trust does not object to the proposed development, we do have concerns about potential changes to the hydrology of the project on Parcel CRM-1267, as a result of impacts/changes to the natural hydrology and drainage systems. In the application, it states that the proposed work would include approximately 5,200 cubic yards of fill material being introduced to forested wetlands and perennial streams, and would require the relocation of the lower reach of two streams to allow drainage off the property. I could not find any information in the application stating that the proposed work would not negatively affect, or create detrimental impacts to neighboring properties – such as redirecting water in the direction of our property.

- 4.4 Corps acknowledgment of comments: Regarding the ADNR's comment, the applicant proposes to relocate the lower reach of two streams contained within the project site. These tracts are on the subdivided portion of the applicant's property. One stream would be relocated to the common property lines of lots 10 and 11 and lots 6 and 5. Another stream would be relocated to the common property lines of lots 13 and 14 and lots 15 and 16. The streams would continue to flow on the applicant's property and continue to empty into the Old Glacier Highway roadside ditch system into culverts that direct flow to Gastineau Channel. The applicant does not propose to direct any flow from the relocated streams on to the ADNR property. It is not anticipated that the proposed work would negatively affect, or create detrimental impacts to neighboring properties by the proposed stream relocation.

- 4.5 Issues Identified by the Corps: None.
- 4.6 Comments/Issues Forwarded to Applicant: No  
Date Comments Forwarded: N/A
- 4.7 Applicant provided response to comments: N/A  
Summary of response: N/A
- 4.8 Corps Purview – The following comments are not discussed further in this document as they are outside the Corp’s purview: N/A
- 4.9 Additional information: N/A
- 4.10 Public Hearing Request – (33 CFR 327) *Requests for a public hearing shall be granted unless the district engineer determines that the issues raised within the request(s) for a public hearing are insubstantial or there is otherwise no valid interest to be served by the hearing. The district engineer will make such a determination in writing, and communicate his reasons to all requesting parties.*

Public Hearing: No public hearing was requested or held for this project.

Discussion/Explanation: N/A

- 5.0 **Alternatives Analysis** – (40 CFR 230.10, HQ Regulatory SOP July 2009, RGL 95-1, RGL 84-09) *If the project is sited in a special aquatic site (such as a wetland), and if the project does not need to be in or near the special aquatic site to fulfill its basic purpose (i.e., the project is not “water-dependent”), it is presumed that there are practicable alternatives that do not involve special aquatic sites. To overcome this presumption, the applicant must clearly demonstrate to the Corps that practicable alternatives are not available. If the presumption is not overcome, the Corps must deny the permit application. If the project is not sited in a special aquatic site and/or is water-dependent, the applicant is not required to overcome the presumption that upland alternatives are available. However, the Corps must still address whether there are any upland alternatives (or alternatives with less impact), and if any are identified, the applicant must clearly demonstrate that they are not feasible. If such a demonstration cannot be made, the Corps must deny the permit application. The Corps performed an evaluation of alternatives, as described below:*
- 5.1 Overall Project Purpose (as independently defined by Corps): The overall project purpose is the same as the Corps determined overall project purpose (See Section 1.8.4).
- 5.2 No Action Alternative: This alternative would result in no additional impacts to the aquatic environment within the proposed project area. However, it would result in a denial of the permit application, and it would not meet the applicant’s stated purpose, and would not alleviate the applicant’s private need for the proposal.
- 5.3 Off-site locations and configurations: The applicant considered several properties as potential locations for the proposed project: a) Lot 1, Channel View Subdivision, USS 2433, land cost \$249,000.00, D-3 Zoning (3 dwelling per acre), 15 Acres. This Parcel was less cost per acre, but it was delineated all wetlands and zoned too low of a housing

density for the applicant's proposed project;<sup>1</sup> b) Lot X USS 2391, Mendenhall Loop Road, land cost \$579,900.00, D-5 Zoning (5 dwelling per acre) 3 Ac. This Parcel is zoned at a much lower density than needed in order to build the type of housing the applicant proposes to build. Also, the sellers disclosed that the City had placed restrictions on the property, such as street improvements that would drive the price of development too high; c) Fr. USS 668, Lemon Creek area, land cost \$1,200,000.00, 39 Acres. Additionally, this parcel has the right zoning for the desired development, but is entirely wetlands, which would result in more impacts to the aquatic environment than the current proposal; d) USS 708, Douglas Island, land cost \$800,000.00, 100 Acres. The applicant determined that this parcel is too large for the type of development proposed; e) Lot 8A1 Vintage Blvd., Mendenhall Valley, land cost \$966,552.00, 40,273 square Feet. The applicant determined that the price to acquire the property is too high. Also the Vintage Park land Covenants would not allow for the type of development that the applicant proposes to build; f) Waterfront tract in Auke Bay, land cost \$3,490,000.00, 3.44 Acres. The applicant determined that the price the property is too high to develop.

The applicant considered several undeveloped lots on Sasha Avenue in the Mendenhall Valley, but the owner declined to sell when asked.

Pile-supported structures generally cause less impact to aquatic resources than solid fill structures. An alternative to achieve the purpose of the proposed fill for the residential development that could potentially reduce impacts to aquatic resources or other public interest concerns, such as, aesthetics and land use is a structural design using piling with no fill. However, based on similar projects in other locations (file numbers POA-1985-696-2, Port Frederick and POA-2005-2019, Auke Nu Cove) and information provided by the applicant, a fully pile supported platform or a partial pile-supported structure would represent substantially higher costs than the proposed project and would be excessive.<sup>2</sup>

The proposed project would be constructed on property owned by the applicant, and it would be unreasonably expensive to require the applicant to obtain another tract of land in Juneau. The tract is a mixture of uplands and waters of the United States, including wetlands, which do not contain Essential Fish Habitat, endangered species, or critical habitat. Therefore, requiring the applicant to locate the proposal to another site would risk adversely impacting a more environmentally sensitive aquatic resource (see Section 6.0 Evaluation of the 404(b)(1) Guidelines (40 CFR 230) and 7.1 Discussion of the public interest factor(s) relevant to the decision).

#### 5.4 On-site configurations: On-site potential alternatives designs would be the same as off-site configurations. See Section 5.3.

---

<sup>1</sup> The proposed project location is a combination of wetlands and uplands.

<sup>2</sup> In 2006, the cost to construct a pile supported platform design was \$200 dollars per square foot. The impact area of the proposed vehicle staging expansion would be 0.34 acres. Under this design scenario, this project component alone would cost in excess of \$2,962,080. According to the applicant's project funding and expenditure information, the entire project as proposed would cost \$55,000 and \$70,000.

5.5 Practicable Alternatives carried forward: Due to costs factors, logistical factors, and environmental risk factors, no practicable alternative to the proposed fill is available

**6.0 Evaluation of the 404(b)(1) Guidelines (40 CFR 230):**

(40 CFR 230) For each of the below listed evaluation criterion, this section describes the potential impact, any minimization measures that would be used to reduce the level of impact, and the resultant impact level. For the purpose of this evaluation, the fill associated with this project is: See Section 1.4 Project Description from Public Notice

6.1 Potential effects on physical and chemical characteristics of the aquatic ecosystem (Subpart C):

- 6.1.1 Substrate: Negligible Effect – The proposed project site substrate consists of alluvial sediments made up of slit, sand, gravel, and cobblestone that is overlain with a discontinuous layer of organic material. The proposed fill material would consist of clean sand, gravel and crushed rock, which would be compatible with the underlying parent material. The Corps has determined that impacts would be minimal.
- 6.1.2 Suspended Particulates / Turbidity: Minor Effect (Short Term) – Elevated levels of suspended particulates and turbidity would result from the proposed excavation and filling activities and from erosion of improperly stabilized embankments. Settled particulate matter can smother aquatic life forms and coat aquatic vegetation. Using proper construction, operation, and maintenance practices, and ensuring the effective use of silt fences, rock check dams, riprap protection, rock lined channels, sediment barriers, energy dissipaters, sediment basins, and similar structures would mitigate this impact. The DA permit, if issued, would include special conditions requiring the use of turbidity barriers and erosion control measures. The Corps has determined that impacts would be minimal.
- 6.1.3 Water: No Effect – The proposed fill material would consist of locally obtained sand/gravel/rock. If a DA permit were issued, a special condition would be imposed requiring the use of clean fill material. Therefore, no impact to water quality would be expected provided all necessary construction and operational controls are implemented (see Section 6.1.2 Suspended Particulates / Turbidity).
- 6.1.4 Current Patterns & Water Circulation: Minor Effect (Long Term) – There are several streams that originate from the mountain sides within the proposed project area, and at least three flow into the proposed project site. The wetland at the site is at a lower elevation than the surrounding property and is formed on an ancient alluvial fan having a shallow gradient and is characterized by channel flow, ground water infiltration, sheet flow, and precipitation. The flow regime at the site is seasonally affected by periods of heavy rainfall and snow melt. The applicant proposes to relocate the lower reach of two streams contained within the project site in order to make the site more functional for the residential construction. Currently the streams bisect eight lots within the project area. These tracts are on the subdivided portion of the applicant's property, which are adjacent to Old Glacier Highway. One stream would be relocated to the common property lines of lots 10 and 11 and lots 6 and 5. Another stream would be relocated to the common property lines of lots

13 and 14 and lots 15 and 16. The streams would continue to flow on the applicant's property and continue to empty into the Old Glacier Highway roadside ditch system into culverts that direct the flow to Gastineau Channel. The proposed work would change the physical location of a portion of the stream channels but would not alter their flow regimes.

- 6.1.5 Normal Water Fluctuations: Negligible Effect – See Section 6.1.4 Current Patterns & Water Circulation.
- 6.1.6 Salinity Gradients: Not Applicable.
- 6.2 Potential effects on biological characteristics of the aquatic ecosystem (Subpart D):
  - 6.2.1 Threatened or Endangered Species (also see section 10.1): No Effect – There are no threatened or endangered species and no critical habitat present within the action area
  - 6.2.2 Fish, Crustaceans, Mollusks, and Other Aquatic Organisms: Not Applicable – The proposed project would be constructed above the high tide line and there are no fish bearing streams, at the project site.
  - 6.2.3 Other Wildlife: Minor Effect (Long Term) – The excavation and backfilling operations associated with the proposed project would result in loss of habitat for the wildlife that use the proposed project location. It would be expected that a variety of bird species including common raven, Stellar's jay, hummingbird, and chickadee would use the proposed project location for resting or feeding. Additionally, black bear and Sitka black-tailed deer traverse the proposed project location and use it for feeding. However, the deer and bear do not utilize the proposed project location for breeding or shelter. Common small terrestrial mammals at the proposed project location that would be similar to those found in other areas of southeastern Alaska would be various rodent species such as squirrel, vole and shrew. Deer, bear, and many species of bird would be vulnerable to disturbance by the high human use of the developed areas adjacent to the proposed project location. The proposed fill would eliminate temporary cover for a few black bear and Sitka Black-tailed deer including a variety of birds as they traverse the proposed project area. The number of small terrestrial mammals that would be displaced is higher. However, the overall wildlife population at the proposed project location is not high. Low use of the site by wildlife can be attributed to habitat modification and fragmentation and the introduced predators or competitors. Prior residential development within watershed has caused wetland impacts and loss of wildlife habitat. Human use of the area has also resulted in the presence of domesticated animals, such as dogs and cats, in the wetlands, which would contribute to the low population of indigenous species due to harassment and predation or competition for resources.
- 6.3 Potential Effects on Special Aquatic Sites (Subpart E):
  - 6.3.1 Sanctuaries and Refuges: Not Applicable – There are no sanctuaries or refuges within the proposed project site.
  - 6.3.2 Wetlands: Minor Effect (Long Term) – Fills located within wetlands may impede intrinsic flood control functions, which can increase flood heights on adjacent and upstream lands



and increase downstream velocities. Information provided by the applicant indicates that the proposed project location has saturated soils formed from peat that are dominated by deciduous shrubs and other woody vegetation, which would effectively slow runoff by creating frictional drag. The site has a shallow slope, which would increase retention time and the potential for floodwater storage, particularly since this site is characterized by channel, groundwater and sheet flow. Although, these features indicate the presence of flood control functions, the streams occurring within the proposed project area are small, and are not prone to over-bank flooding. The proposed project has low function for flood flow alteration. Wetlands in Southeast Alaska with few exceptions are groundwater driven. However, information provided by the applicant revealed no functional indicators within the project location that would suggest appreciable groundwater discharge or recharge, such as water upwelling, inundation or drift lines. Also, the presence of low permeability wetland soils with an impervious underlying stratum (glacial till) indicates that ground water infiltration rates would be slow and appreciable ground water movement would not occur. Therefore, wetlands occurring at the proposal site have low function for groundwater interchange. The wetland has low function for sediment/toxicant retention, as there are no up-slope sources of pollutants of the proposed project location and that represent potential sources of sediment/toxicants. There are small low flow perennial or intermittent streams occurring at the proposal site, which would indicate that the wetland does function for sediment/shoreline stabilization and carbon/detrital export. The streams occurring on the property are not fish bearing; therefore the wetland does not function for fish habitat. The wetland at the proposed site has low function for wildlife habitat (see Section 6.2.3 Other Wildlife).

- 6.3.3 Mud Flats: Not Applicable – There are no mud flat within the proposed project site.
- 6.3.4 Vegetated Shallows: Not Applicable – There are no vegetated shallows within the proposed project site.
- 6.3.5 Coral Reefs: Not Applicable – There are no coral reefs within the proposed project site.
- 6.3.6 Riffle and Pool Complexes: Not Applicable – There are no riffle and pool complexes within the proposed project site.
- 6.4 Potential effects on human use characteristics (Subpart F):
  - 6.4.1 Municipal and Private Water Supplies: Not Applicable – There are no municipal and private water supplies within the proposed project site.
  - 6.4.2 Recreational and Commercial Fisheries: Not Applicable – There are no fish bearing waters within the proposed project site.
  - 6.4.3 Water-related Recreation: Not Applicable – There are no waters within the proposed project site subject to or would affect water-related recreation.
  - 6.4.4 Aesthetics: Minor Effect (Long Term) – The proposed work would convert the existing forest setting to an urban development, which would change the scenic view people would experience from locations outside of proposed project location. However, the proposed

work would be confined to the applicant's property and he would retain 19.1 acres out of 20.7 total acres of the property in its natural state.

6.5 Evaluation and testing (Subpart G):

- 6.5.1 General Evaluation of Dredged or Fill Material: Fill for the proposal would consist of locally sourced crushed rock and gravel that would not be expected to contain toxic materials. The proposed project location does not have a reported history of industrial or other activity that would be sources of contaminants resulting in the degradation of the soils at the proposed project location. Additionally, the DA permit, if issued, would contain a special condition requiring that all fill material for the authorized work shall be clean, free from toxic pollutants in toxic amounts, and material used for construction or discharge shall not consist of unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Therefore, no impact would be expected.

This evaluation indicates that the proposed discharge material meets the testing exclusion criteria for the reason cited below.

Exclusion: Based on the above information, the material is not a carrier of contaminants.

- 6.5.2 Chemical, Biological, and Physical Evaluation and Testing: Not applicable.

6.6 Actions to minimize adverse effects (Subpart H):

Actions to be undertaken in response to 40 CFR Section 203.10(d) to minimize the adverse effects of discharges of dredged or fill material are incorporated into the discussion in sections 5.1 through 5.5 above. If applicable, additional actions to minimize adverse effects are discussed below, including actions concerning the location of the discharge, actions concerning the material to be discharged, actions controlling the material after discharge, actions affecting the method of dispersion, actions related to technology, actions affecting plant and animal populations, actions affecting human use, and other actions.

- 6.7 Factual Determinations – (Subpart B, section 230.11) *The determinations below are based on the determination of effects described in detail in sections 6.1 – 6.6 above:*

- 6.7.1 Physical substrate: Negligible Effect
- 6.7.2 Water circulation, fluctuation and salinity: Minor Effect (Long Term)
- 6.7.3 Suspended particulates/turbidity: Minor Effect (Short Term)
- 6.7.4 Contaminants: No Effect
- 6.7.5 Aquatic ecosystem and organisms: No Effect
- 6.7.6 Proposed disposal site: Minor Effect (Long Term)
- 6.7.7 Cumulative effects on the aquatic ecosystem: Minor Effect (Long Term) – Cumulative effects are discussed in section 9 of this document.

- 6.7.8 Secondary effects on the aquatic ecosystem: Minor Effect (Short Term) Secondary effects are discussed in section 9 of this document.
- 6.8 Restrictions on Discharges (Subpart B, section 230.10) *(an answer marked with an asterisk indicates noncompliance with the Guidelines)*:

No	Based on the discussion in Section 5, are there available, practicable alternatives having less adverse impact on the aquatic ecosystem and without other significant adverse environmental consequences that not involve discharges into "waters of the US" or at other locations within these waters?
Yes	Based on the discussion in section 5, if the project is in a special aquatic site and is not water-dependent, has the applicant clearly demonstrated that there are no practicable alternative sites that do not involve SAS?
	Will the discharge:
No	Violate state water quality standards?
No	Violate toxic effluent standards (under Section 307 of the Act)?
No	Jeopardize endangered or threatened species or their critical habitat?
No	Violate standards set by the Department of Commerce to protect marine sanctuaries?
	Will the discharge contribute to significant degradation of "waters of the US" through adverse impacts to:
No	Human health or welfare, through pollution of municipal water supplies, fish, shellfish, wildlife and special aquatic sites?
No	Life stages of aquatic life and other wildlife?
No	Diversity, productivity, and stability of the aquatic ecosystem, such as the loss of fish or wildlife habitat, or loss of the capacity of wetland to assimilate nutrients, purify water or reduce wave energy?
No*	Recreational, aesthetic, and economic values?

Yes	Will all appropriate and practicable steps (40 CFR 23.70-77) be taken to minimize the potential adverse impacts of the discharge on the aquatic ecosystem?
-----	--

**7.0** **General Public Interest Review** – (33 CFR 320.4 and RGL 84-09) All public interest factors have been reviewed and summarized in the table below. Both cumulative and secondary impact on the public interest have been considered.

						NE No Effect
						- Detrimental
						M Neutral (mitigated)
						0 Negligible
						+ Beneficial
						NA Not Applicable
NE	-	M	0	+	NA	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Conservation
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Economics
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Aesthetics
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	General Environmental Concerns
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wetlands
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Historic Properties
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fish and Wildlife Values
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Flood Hazards
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Floodplain Values
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Land Use
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Navigation
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Shore Erosion and Accretion
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Recreation
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Water Supply and Conservation
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Water Quality
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Energy Needs
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Safety
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Food and Fiber Production
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Mineral Needs
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Considerations of Property Ownership
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Needs and Welfare of the People

**7.1** Discussion of the public interest factor(s) relevant to the decision:

**Factor: Economics**

**Discussion:** A short-term increase in employment opportunities may be provided for local labor forces. Business activity may be elevated in light of logistic support requirements for the contractor(s). We would expect property values and correspondingly tax revenues to increase as a result of development of the property.

**Factor: Aesthetics**

**Discussion:** See Section 6.4.4 Aesthetics

**Factor: General Environmental Concerns**

**Discussion:** The vehicles and equipment that would be used for the proposed work would temporarily increase carbon monoxide/dioxide levels during construction operations, but normal levels would soon return once operations cease. The Corps has determined that environmental impacts would be minimal.

**Factor: Wetlands**

**Discussion:** See Section 6.3.2 Wetlands

**Factor: Fish and Wildlife Values**

**Discussion:** See Section 6.2.2 Fish, Crustaceans, Mollusks, and Other Aquatic Organisms and Section 6.2.3 Other Wildlife

**Factor: Flood Hazards**

**Discussion:** See Section 6.3.2 Wetlands

**Factor: Land Use**

**Discussion:** The City and Borough of Juneau is the primary authority for zoning and land use approvals or denials. No comments were received from the City and Borough of Juneau, which we interpret as no objection to the proposal. The proposed project would be consistent with the existing land use.

**Factor: Water Quality**

**Discussion:** The State 401 water quality certification was issued on February 25, 2016. Pursuant to 33 CFR PART 320.4(d), the certification of compliance with applicable effluent limitations and water quality standards required under the provisions of Section 401 of the Clean Water Act are considered conclusive with respect to water quality considerations unless the Regional Administrator, U.S. Environmental Protection Agency (EPA), advises of other water quality aspects to be taken into consideration. The EPA did not comment on the proposal.

**Factor: Safety**

Discussion: If the project were authorized, the permittee would be expected to operate within all appropriate safety constraints.

Factor: Mineral Needs

Discussion: Sand, gravel, and crushed rock fill would be discharged into wetlands to construct the proposed project. We assume that the fill material would be obtained from nearby quarries for the proposed work and that sufficient quantities are available to complete the work.

Factor: Considerations of Property Ownership

Discussion: Copies of the public notice were mailed to the adjacent property owners identified by the applicant. No comments were received from any adjacent property owner, which we interpret as no objection to the proposal.

Factor: Needs and Welfare of the People

Discussion: The proposed work would provide additional rental housing on the market, which is in short supply in Juneau.

- 7.2 The relative extent of the public and private need for the proposed structure or work: The applicant proposes to construct eight duplex housing units and six fourplex housing units, which he plans to rent or sell. A need for homes exists in Juneau. Accordingly, there is both a private and public benefit for the proposed work. The applicant is in a position to take advantage of the Juneau housing market by providing housing and derive an economic return on his investment. There are limited options for residents of Juneau to obtain housing. The proposed project would increase the available housing alternatives to the public.
- 7.3 Are there unresolved conflicts as to resource use? No
- If so, are there reasonable and practicable alternative locations and/or methods to accomplish the objectives of the proposed action? N/A
- 7.4 The extent and permanence of the beneficial and/or detrimental effects, which the proposed work is likely to have on the public and private use to which the area is suited: If the proposed project were to be authorized as planned, 1.6 acres of wetlands would be destroyed and fauna, particularly avian, would be displaced. However, the proposal would provide additional housing in Juneau and offer the community more choices to purchase or rent at competitive prices.
- 8.0 **Cumulative and Secondary Impacts** – (40 CFR 230.11(g) and 40 CFR 1508.7, RGL 84-9) *Cumulative impacts result from the incremental environmental impact of an action when added to all other past, present, and reasonably foreseeable future actions. They can result from individually minor but collectively significant actions taking place over a period of time. A cumulative effects assessment should consider both direct and indirect, or secondary, impacts. Indirect impacts result from actions that occur later in time or farther removed in distance from the original action, but still reasonably foreseeable.*

- 8.1 Geographic scope: The project site is located within the watershed designated by USGS Hydrologic 10-digit Unit Code (HUC) as 1901030106. This HUC encompasses a geographic area of 59,996 acres within Southeast Alaska, and it would not be appropriate to use this HUC area as the basis for a watershed analysis for the subject proposal. An assessment of an area this large would not provide a meaningful understanding of the impacts that would result from the proposed work. Therefore, the defined geographic area for this proposal is the approximately 1,257.39 acres that comprise the Lemon Creek watershed within which the proposed project site is contained.



- 8.2 Temporal scope: 35 Years

Explain selected timeframe: Time period during which documented and known environmental impacts have occurred.

- 8.3 Historical conditions of the area subject to this analysis: The site of the proposed project in the southwestern part of the assessment area has no development within waters of the United States. The site consists primarily of Sitka spruce and western hemlock forest. There is some development of individual lots for single-family homes, multi-unit housing, and a mobile home park adjacent to and up-slope of Old Glacier Highway.

Along the Lemon Creek corridor there is a mix of residential development consisting of single-family homes to the west and mobile homes to the east. There is an open pit sand and gravel operation on the east side of the creek.

- 8.4 Major changes to the area and description of current condition: The Corps Regulatory Division has issued the following permits for the discharge of fill material into waters of the United States, including wetlands that have resulted in permanent impacts to the aquatic environment.

<b>DA Permit</b>	<b>Permittee</b>	<b>Watershed</b>	<b>Acres Impacted</b>
POA-2008-464	Home Depot USA	Lemon Creek	0.3
POA-2007-1248	SECON	Lemon Creek	0.1
POA-2006-318	City & Borough Juneau	Lemon Creek	0.794
POA-1992-223	Marciano Duran	Lemon Creek	3.23
POA-2005-1939	City & Borough Juneau	Lemon Creek	2.4
POA-2005-801	Jan Van Dort	Lemon Creek	0.02
POA-2001-687	ADOT&PF	Lemon Creek	0.07
POA-2002-1185	City & Borough Juneau	Lemon Creek	0.007
POA-2004-324	City & Borough Juneau	Lemon Creek	0.46
POA-2002-1100	SECON	Lemon Creek	0.027
POA-1991-355	City & Borough Juneau	Lemon Creek	9.4
POA-2003-778	City & Borough Juneau	Lemon Creek	5.42
		<b>Total</b>	<b>22.23</b>

- 8.5 Anticipated cumulative and secondary/indirect impacts (environmental consequences) of the proposed action: The potential secondary impacts directly related to the proposed discharge would be an increase in volume and velocity of storm water runoff and transport of sediment/toxicants, into the adjacent waters. Secondary impacts would include altered animal behavior during construction activities resulting from noise related disturbance, although predicting the degree of impact would be difficult. An increase in air emissions would occur from the increased motor vehicle traffic associated with the proposed project. However, this impact would be minimal. The Corps has determined that potential adverse secondary impacts from the placement of fill, fuel/oil spills, and safety hazards would be minimal, provided that adequate best management practices are employed.
- 8.6 Reasonably foreseeable future actions: The Corps is not aware of any reasonably foreseeable future actions that would occur within the assessment area which would require prior DA authorization.
- 8.7 Effect of the proposed mitigation, including avoidance and minimization, on reducing the project's contribution to cumulative effects in the region: The applicant has avoided to the extent practicable. There are no other sites for the proposal that consist of entirely uplands which would meet the purpose and need and be practicable to develop.



Minimization methods would result in the maintenance of on-site water quality and reduce the potential for inadvertent discharge of sediment off-site to nearby waters, including spills of petroleum products and other hazardous substances.

- 8.8 Conclusions: Overall, the Corps has determined that the project would not result in more than minimal environmental impacts including impacts on fish and wildlife values.

When considering the overall impacts that would result from this project, in context with the overall impacts from past, present, and reasonably foreseeable future projects, the cumulative impacts are not considered to be significantly adverse. It is likely we would receive similar projects in the future, which would go through a comparable review process.

- 9.0 **Mitigation** – 33 CFR 320.4 (r); 33 CFR 332; 40 CFR 230.70-77; 40 CFR 230.90-99 and 40 CFR 1504.12(f):

- 9.1 Avoidance: In evaluating a project area containing waters of the United States, consideration must be given to avoiding impacts on these sites. Avoidance measures for this project are described in Section 1.5 and 5.

- 9.2 Minimization: If waters of the United States cannot be avoided, impacts must be minimized. Minimization measures for this project are described in Section 1.5 and 5.

- 9.3 Compensatory mitigation

- 9.3.1 Is compensatory mitigation required? No

Although the proposed project would result in a loss of 1.6 acres of waters of the United States, the proposed project would be sited within the approximately 1,257.39 acre Lemon Creek watershed, and there would be minimal loss of aquatic function from the proposed work. See Section 7.1 Discussion of the public interest factor(s) relevant to the decision. Little past development has occurred relative to the size of the assessment area that has resulted in substantial loss of waters of the United States as the result of the issuance of Department of the Army permits, and any new proposals subject to the Corps' regulatory authority would undergo a similar review as the current proposal. The proposed work would cause only minimal direct, secondary, and cumulative impacts to waters of the United States, including special aquatic sites, contained within the Lemon Creek watershed. See Section 8.0 Cumulative and Secondary Impacts. Additionally, the proposed project incorporates controls to minimize affects, and the Department of the Army permit, if issued, would be conditioned to minimize impacts to aquatic resources. Therefore, no significant degradation of the aquatic ecosystem would occur as a result of the proposed project. The Corps has determined that the applicant has avoided and minimized to the extent practicable, the proposed project complies with the 404(b)(1) Guidelines, and would not result in the loss of significant aquatic resources (33 CFR 320.4(r)).

- 10.0 **Other Laws, Policies, and Effects**

10.1 Endangered Species Act (ESA):

10.1.1 Name of Species considered: No Endangered Species use the proposed project location.

10.1.2 Effects Determination:

☒ No Effect

10.1.3 Basis for determination: No Endangered Species use the proposed project location and the site is not critical habitat.

10.1.4 Consultation: Not Applicable

10.1.5 Consultation responses(s): N/A

10.1.6 Additional information: N/A

10.1.7 Compliance with ESA: Yes

10.2 Magnuson-Steven Act – Essential Fish Habitat (EFH):

10.2.1 Name of Species considered: The proposed project location contains no fish bearing waters.

10.2.2 Effects Determination:

☒ No Effect

10.2.3 Basis for determination: The proposed project location contains no fish bearing waters, and the site is not Essential Fish Habitat.

10.2.4 Consultation: N/A

10.3 National Historic Preservation Act – Section 106:

10.3.1 Known sites present: No

10.3.2 Survey required/conducted: NA

10.3.3 Effects determination:

☒ No potential to cause effect

For these historic properties eligible or listed in the National Register of Historic Places: All sites considered

10.3.4 Rationale for effects determination: The proposed project will have “no effect” to historic properties based on the nature, location in waters, scope and magnitude of the work.

10.3.5 Memorandum of Agreement required: N/A

10.3.6 Date consultation complete: N/A

10.3.7 Additional information: N/A

10.3.8 Compliance with National Historic Preservation Act: Yes

- 10.4 Corps Wetland Policy: Based on the public interest review (Section 7 of this document), the beneficial effects of the project outweigh the detrimental impacts of the project.
- 10.5 Water Quality Certification under Section 401 of the Clean Water Act:
  - 10.5.1 An individual water quality certification was issued
  - 10.5.2 Date of Water Quality Certification decision: February 25, 2016.
  - 10.5.3 Additional information: N/A
- 10.6 Coastal Zone Management Consistency under Section 307c of the Coastal Zone Management Act (CZMA): By operation of Alaska State law, the federally approved Alaska Coastal Management Program expired on July 1, 2011, resulting in a withdrawal from participation in the Coastal Zone Management Act's (CZMA) National Coastal Management Program. The CZMA Federal consistency provision, section 307, no longer applies in Alaska. Federal Register Notice published July 7, 2011, Volume 76 N. 130, page 39857.
- 10.7 Effects on Federal Projects (33 CFR 320.4(g)(4)): This project is not located in the vicinity of an authorized federal project.
- 10.8 Effects on the limits of the territorial seas (33 CFR 320.4(f)): This proposed project does not include any structure or work affecting coastal waters.
- 10.9 Safety of impoundment structures (33 CFR 320.4(k)): This proposed project does not include any impoundment structures.
- 10.10 Activities in Marine Sanctuaries (320.4(j)): This proposed project is not located in a marine sanctuary as established by the Secretary of Commerce under authority of Section 302 of the Marine Protection, Research and Sanctuaries Act of 1972.
- 10.11 Other Authorizations: A City and Borough of Juneau filling and grading permit and building permit would be needed to construct the proposed project.
- 10.12 Significant issues of Overriding National Importance (33 CFR 320.4(j)(2)): N/A.
- 10.13 Discussion: N/A

## **11.0 Final Project Description and Special Conditions**

- 11.1 Final Project Description: The final project description is the same as the applicant's proposed project description which is indicated in Section 1.4 of this document.
- 11.2 Special Conditions: In order to prevent sedimentation and elevated turbidity of waters adjacent to the proposed project, special conditions requiring the implementation and monitoring of turbidity barriers and erosion control measures would be required.

Special Conditions for POA-2016-12, Gastineau Channel:

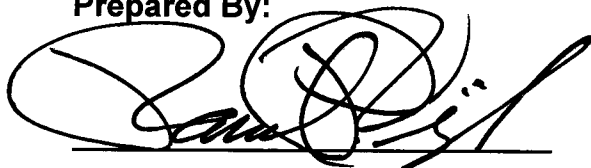
1. To prevent sedimentation into adjacent Waters of the U.S. outside of the authorized footprint the Permittee shall install silt curtain barriers with weighted skirts that extend around all in-water work areas to include work that is adjacent to surface waters. The turbidity barriers shall remain in place, monitored for effectiveness and maintained until the authorized work has been completed and all suspended and erodible materials have been stabilized. Turbidity barriers shall be removed upon stabilization of the work area.
2. The Permittee shall install erosion control measures along the perimeter of all work areas to prevent the displacement of fill material outside the authorized work area as detailed on Drawing 1 of 3. The erosion control measures shall remain in place and be maintained until all authorized work is completed and the work areas are stabilized. Immediately after completion of the final grading of the land surface, all slopes, land surfaces, and filled areas shall be stabilized using sod, degradable mats, barriers, or a combination of similar stabilizing materials to prevent erosion.
3. The Permittee shall use only clean fill material for this project. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, concrete blocks with exposed reinforcement bars, and soils contaminated with any toxic substance, in toxic amounts in accordance with Section 307 of the Clean Water Act.

## **12.0 Findings and Determinations**

- 12.1 Section 176(c) of the Clean Air Act General Conformity Rule Review: The proposed permit action has been analyzed for conformity applicability pursuant to regulations implementing Section 176(c) of the Clean Air Act. It has been determined that the activities proposed under this permit would not exceed de minimis levels of direct or indirect emissions of a criteria pollutant or its precursors and are exempted by 40 CFR Part 93.153. Any later indirect emissions are generally not within the Corps' continuing program responsibility and generally cannot be practicably controlled by the Corps. For these reasons, a conformity determination is not required for this permit action.
- 12.2 Relevant Presidential Executive Orders:
  - 12.2.1 EO 13175, Consultation with Indian Tribes, Alaska Natives, and Native Hawaiians: This action has no substantial effect on one or more Indian tribes, Alaska or Hawaiian natives.
  - 12.2.2 EO 11988, Floodplain Management: This action is not located in a floodplain.
  - 12.2.3 EO 12898, Environmental Justice: The Corps has determined that this proposed project would not use methods or practices that discriminate on the basis of race, color or national origin nor would it have a disproportionate effect on minority or low-income communities.
  - 12.2.4 EO 13112, Invasive Species: There are no invasive species issues involved in this proposed project.

- 12.2.5 EO 13212 and EO 13302, Energy Supply Availability: The project was not one that will increase the production, transmission, or conservation of energy, or strengthen pipeline safety.
- 12.2.6 EO 13547, Stewardship of the Ocean, Our Coasts, and the Great Lakes: The project would not adversely affect America's stewardship of the ocean, coasts, or Great Lakes.
- 12.3 Finding regarding the need for an Environmental Impact Statement: Having reviewed the information provided by the applicant and all interested parties and an assessment of the environmental impacts, we find that this permit action will not have a significant impact on the quality of the human environment. Therefore, an Environmental Impact Statement will not be required.
- 12.4 Compliance with the Section 404(b)(1) Guidelines: Having completed the evaluation in Section 6, the undersigned have determined that the proposed discharge complies with the Guidelines, with the inclusion of the appropriate and practicable conditions to minimize pollution or adverse effects to the affected ecosystem.
- Reason for noncompliance: N/A
- 12.4.1 The proposed action is the Least Environmentally Damaging Practicable Alternative (LEDPA)
- 12.5 Public Interest Determination: We find that issuance of the Department of the Army Permit is not contrary to the public interest.

**Prepared By:**



Randal P. Vigil  
Project Manager

Date:

*April 19, 2016*

**Reviewed By:**



Jamie Hyslop  
Acting Chief, Southeast Section

Date: **April 18, 2016**