TECHNICAL MEMORANDUM

Date: September 27, 2012 **Project No.:** 113-95753
To: Kevin Doyle **Company:** HDR Inc.

From: Robert Dugan, CPG; Eric Cannon, CPG

RE: **REVISION OF GEOLOGIC HAZARD SUMMARY – JUNEAU ACCESS IMPROVEMENTS SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT**

The Department of Transportation and Public Facilities (ADOT&PF) has created a new alignment for the Juneau Access Improvements project. This project will extend the highway to the north from Juneau along the east side of Lynn Canal. In 2006, Golder Associates Inc. (Golder) carried out an extensive geotechnical investigation of a 22 mile segment of this alignment designated as Zone 4. This work was summarized in: Final Report, Lynn Canal Highway, Phase I, Zone 4 Geotechnical Investigation, State Project Number 71100.

Zone 4 extended from Independence Creek to the Katzehin River and was characterized by steep, mountainous terrain. The geotechnical effort included the identification and preliminary evaluation of geologic hazards affecting the alignment. The alignment at that time was designated as the 2006 IRP alignment. Since 2006, ADOT&PF has revised the route and created a new 2012 Supplemental Environment Impact Statement (SEIS) Alignment. In order to accurately reflect the geologic hazards that affect the new alignment Golder was asked to re-evaluate the geologic hazards previously identified in 2006 and to update the information for each hazard with respect to the 2012 SEIS Alignment.

The following three tables and appendix have been updated to reflect the shifts in alignment. In particular, Golder re-defined the 2006 IRP locations of the previously identified geologic hazards (approximately 110 hazards) with respect to the new SEIS 2012 Alignment and recalculated the Hazard Index Number (HIN) for those hazards where the alignment has shifted. The following updated elements are attached:

- Table 4 – All Hazards Sorted by Ascending 2012 SEIS Location
- Table 5 – All Hazards Sorted by Hazard Type and Ascending Hazard Index Number (HIN)
- Table 6 – All Hazards Sorted by Ascending Hazard Index Number (HIN) and Ascending 2012 SEIS Location
- Appendix G – Geologic Hazard Summary

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