STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINING, LAND AND WATER
Southeast Regional Office, 400 Willoughby, P.O. Box 111020
Juneau, AK 99811-1020, (907) 465-3400

EARLY ENTRY AUTHORIZATION
Under AS 38.05.850
(Early Entry for Tideland EEA Site)

Juneau International Airport (City & Borough of Juneau), hereinafter "Grantee" is issued this Early Entry Authorization (EEA) by DNR, Division of Mining, Land and Water, hereinafter "Grantor" to survey and develop an easement for the grantee of the easement, the Federal Aviation Administration on the following described land:

08 MALSR: Copper River Meridian, Township: 40 South, Range: 65 East, Section: 34 - N1/2

26 MALSR: Copper River Meridian, Township: 40 South, Range: 66 East, Section: 32 - SE1/4
Copper River Meridian, Township: 41 South, Range: 66 East, Section: 1 - NE1/4

08 MALSR: An easement generally 50 feet in width, and about 2400 feet in length for the MALSR light array and 12 feet in width and about 900 feet in length for the approach road to the 08 MALSR, easement parcel is located at the west end of the runway of the Juneau International Airport and within the Mendenhall Wetlands State Game Refuge.

26 MALSR: An easement generally 50 feet in width, and about 1800 feet in length, and located at the east end of the runway of the Juneau International Airport and within the Mendenhall Wetlands State Game Refuge.

The Development Plan for this easement is shown on Attachment "B" dated May 30, 2008 for figures 1,2,4-10 and August 4, 2008 for figure 3. This EEA is issued for the purpose of: reconstructing and development of an approach road to the 08 MALSR and constructing the 26 MALSR and to complete the as-built survey as required for the issuance of a public easement under AS 38.05.850.

This EEA is issued subject to full compliance with all of the general conditions stated below and the Special Stipulations of Attachment "A".

This EEA is effective beginning March 1, 2011 and ending on April 30, 2016, unless sooner terminated at the State's discretion. This EEA is not a property right and conveys no interest in State land. This EEA is a temporary authorization and is revocable immediately by written notice, with or without cause.

GENERAL CONDITIONS:

1. Easement Development. This EEA grants non-exclusive use for the purpose of entry, site development, as-built survey, and for use of authorized temporary improvements placed in the proposed easement corridor until the easement is granted. This EEA does not grant an interest in the land and as such is revocable immediately, with or without cause. Development shall be limited in form and scope to those improvements, and the general alignment shown on Attachment "B". Land use shall not exceed the easement dimensions explicitly approved on Page 1, unless approved in writing by the regional office prior to installation or construction. Only those improvements as shown on Attachment "B" are authorized to be constructed and maintained by this EEA. Use of the land for any other purpose is prohibited.

2. Failure to secure easement. Grantee agrees to remove those improvements specified by the regional manager and to return the site to its prior state as approved by the regional manager, if Grantee fails to secure the easement within 5 years after the date of execution of this entry EEA. This period may be extended by the director if he makes a written determination that the delay was caused by circumstances beyond Grantee's control. If said improvements or property are not removed from State land within the time allowed, they shall at the State's discretion become the property of the State. Grantee shall be held liable for any and all costs incurred by the State to dispose of or clean up the authorized area in violation of this condition.

3. As-Built Survey. An acceptable as-built easement diagram shall be submitted to this office prior to the expiration of this EEA.
4. **Existing Easements.** Should this easement superimpose on an already dedicated right-of-way or easement, nothing in this early entry EEA is intended to allow Grantee to interfere with the primary purpose of the dedicated right-of-way or easement; such interference is an actionable cause at law. Nothing in this EEA is intended to deny the Division of Land the right to grant other parallel or crossing easements providing that they do not significantly interfere with the senior easement or providing that the senior user is compensated.

5. **Non-Exclusive Use.** The State reserves the right to allow other like or compatible uses of the easement and the right to require such users to enter into an equitable maintenance agreement with the holder of this EEA. The equitableness of any such agreement shall be determined by the Director.

6. **Public Trust Doctrine.** The Public Trust Doctrine guarantees public access to, and the public right to use, navigable and public waters and the land beneath them for navigation, commerce, fishing, and other purposes. This authorization is issued subject to the principles of the Public Trust Doctrine regarding navigable or public waters. The Grantee is authorized to make exclusive use of the Grantee's improvements, but is not authorized to preclude or restrict public access on and through the authorized area. DMLW reserves the right to grant other interests consistent with the Public Trust Doctrine.

7. **Notification.** The Grantee shall immediately notify the Department of Environmental Conservation (DEC) by telephone, and immediately afterwards send DEC a written notice by facsimile, hand delivery, or first class mail, informing DEC of: any unauthorized discharges of oil to water, any discharge of hazardous substances other than oil; and any discharge or cumulative discharge of oil greater than 55 gallons solely to land and outside an impermeable containment area. If a discharge, including a cumulative discharge, of oil is greater than 10 gallons but less than 55 gallons, or a discharge of oil greater than 55 gallons is made to an impermeable secondary containment area, the Grantee shall report the discharge within 48 hours, and immediately afterwards send DEC a written notice by facsimile, hand delivery, or first class mail. Any discharge of oil, including a cumulative discharge, solely to land greater than one gallon up to 10 gallons must be reported in writing on a monthly basis. The posting of information requirements of 18 AAC 75.305 shall be met. Scope and Duration of Initial Response Actions (18 AAC 75.310) and reporting requirements of 18 AAC 75, Article 3 also apply.

The Grantee shall supply DEC with all follow-up incident reports. Notification of a discharge must be made to the nearest DEC Area Response Team during working hours: Anchorage (907) 269-3063, fax (907) 269-7648; Fairbanks (907) 451-2121, fax (907) 451-2362; Juneau (907) 465-5340, fax (907) 465-2237. The DEC oil spill report number outside normal business hours is (800) 478-9300.

8. **Alaska Historic Preservation Act.** The Grantee shall consult the Alaska Heritage Resources Survey (907) 269-8721 so that known historic, archaeological, and paleontological sites may be avoided. The Alaska Historic Preservation Act (AS 41.35.200) prohibits the appropriation, excavation, removal, injury, or destruction of any State-owned historic, prehistoric (paleontological) or archaeological site without a EEA from the commissioner. Should any sites be discovered during the course of field operations, activities that may damage the site will cease and the Office of History and Archaeology in the Division of Parks and Outdoor Recreation (907) 269-8721 shall be notified immediately.

9. **Inspection.** Authorized representatives of the State of Alaska shall have reasonable access to the subject parcel for purposes of inspection. The Grantee may be charged fees under 11 AAC 05.010(a)(7)(M) for routine inspections of the subject parcel, inspections concerning non-compliance, and a final close-out inspection.

10. **Other Authorizations.** The issuance of this EEA does not relieve the Grantee of the responsibility to obtain authorizations required by other agencies for this activity.

11. **Compliance with Governmental Requirements.** The Grantee shall, at its expense, comply with all applicable laws, regulations, rules and orders, and the requirements and conditions included in this authorization. Grantee shall ensure compliance by its employees, agents, contractors, subcontractors, licensees, or invitees.

12. **Public Access.** All operations will be conducted in a manner that will minimize potential conflicts with other users of the area. Public access shall not be restricted in any way.

13. **Valid Existing Rights.** This authorization is subject to all valid existing rights in and to the permitted area. The State of Alaska makes no representations or warranties whatsoever, either expressed or implied, as to the existence, number, or nature of such valid existing rights.

14. **Reservation of Rights.** The State reserves the right to grant additional authorizations to third parties for compatible uses on or adjacent to the land subject to this authorization.
15. **Indemnification.** Grantee assumes all responsibility, risk and liability for all activities of Grantee, its employees, agents, invitees, contractors, subcontractors, or licensees directly or indirectly conducted in connection with this EEA, including environmental and hazardous substance risks and liabilities, whether accruing during or after the term of this EEA. Grantee shall defend, indemnify, and hold harmless the State of Alaska, its employees, and agents from and against any and all suits, claims, actions, losses, costs, penalties, and damages of whatever kind or nature, including all attorney's fees and litigation costs, arising out of, in connection with, or incident to any act or omission by Grantee, its employees, agents, invitees, contractors, subcontractors, or licensees, unless the sole proximate cause of the injury or damage is the negligence or willful misconduct of the State or anyone acting on the State's behalf. Within 15 days Grantee shall accept any such cause or action or proceeding upon tender by the State. This indemnification shall survive the termination of the EEA.

16. **Assignment.** The Grantee may not transfer or assign this EEA to another individual or corporation.

17. **Change of Address.** Any change of address must be submitted in writing to the Regional Manager.

18. **Violations.** This authorization is revocable immediately upon violation of any of its terms, conditions, nonpayment of fees, or upon failure to comply with any other applicable laws, statutes and regulations (federal and state). Should any unlawful discharge, leakage, spillage, emission, or pollution of any type occur due to Grantee's, or its employees', agents', contractors', subcontractors', licensees', or invitees' act or omission, Grantee, at its expense shall be obligated to clean the area to the reasonable satisfaction of the State of Alaska. Per 11 AAC 96.145, the Grantee must be in compliance with provisions of this and other authorizations granted under AS 38.05 or 11 AAC 96 before a new authorization may be granted by DNR.

**Advisory Regarding Violations of the EEA Guidelines:** Pursuant to 11 AAC 96.145, a person who violates a condition of a EEA issued under 11 AAC 96 is subject to any action available to the Department of Natural Resources (DNR) for enforcement and remedy, including EEA revocation, civil action for forcible entry and detainer, ejectment, trespass, damages, and associated costs, or arrest and prosecution for criminal trespass in the second degree. DNR may seek damages available under civil action, including restoration damages, compensatory damages, and treble damages under AS 09.45.730 or 09.45.735, for violations involving injuring or removing trees or shrubs, gathering geotechnical data, or taking mineral resources.

If a person responsible for an unremedied violation of 11 AAC 96 or a condition of a EEA issued under 11 AAC 96 applies for a new authorization from DNR under AS 38.05.035 or 38.05.850, DNR may require the applicant to remedy the violation as a condition of the new authorization, or to begin remediation and provide security under 11 AAC 96.060 to complete the remediation before receiving the new authorization. If a person who applies for a new authorization under AS 38.05.035 or 38.05.850 has previously been responsible for a violation of 11 AAC 96 or a condition of a EEA issued under this chapter, whether remedied or unremedied, that resulted in substantial damage to the environment or to the public, DNR will consider that violation in determining the amount of the security to be furnished under 11 AAC 96.060, and may require the applicant to furnish three times the security that would otherwise be required.

The Regional Manager reserves the right to alter the above conditions before the EEA is issued, in which case the Grantee will be so advised. DNR has the authority to implement and enforce these conditions under AS 38.05.850. If compliance with these conditions not achieved, it may be sufficient cause for surrendering the performance bond, penalty deposit, revoking this EEA immediately and denial of future authorizations as authorized under 11 AAC 96.145. Direct all questions on this EEA to the Division of Mining, Land and Water Southeast Region, 400 Willoughby Ave., P.O. Box 11020, Juneau, Alaska 99811-1020, telephone (907) 465-3400.

**Signature of Grantee or Authorized Representative hereby accepts and agrees to comply with all of the terms and conditions of this EEA:**

____________________
Name

____________________
Title

5/15/11
Date

**Signature of Authorized DNR Representative:**

____________________
David L. Kelley, SE Regional Manager

6/6/11
Date
ATTACHMENT “A”
TO
EEA ADL 107382

SPECIAL STIPULATIONS

1. **Authorized Officer (AO):** The AO for the Southeast Land Office, Division of Mining, Land and Water is the Regional Manager, Southeast Regional Land Office. The AO may designate a representative for administration for specific portions of this authorization. The AO has the authority to suspend all or any construction, operation or maintenance activities suspected to be in violation of the conditions/special stipulations. Such a suspension shall remain in force until corrective action is taken. If corrective action is not taken within thirty (30) days after receipt of written notice, the EEA may be terminated. The AO has the right but not the obligation, to undertake corrective action at the expense of the Grantee, when such action is necessitated by neglect on the part of the Grantee to take corrective action.

2. **Alaska Coastal Management Program:** Pursuant to AS 46.40 and 11 AAC 110, and the final consistency determination, #AK 0808-03J dated October 1, 2008, Grantee shall comply with the final project description.

3. **Permitted Use.** Improvements shall be consolidated within smallest practicable area, not to exceed the total acreage explicitly approved on page 1 of this permit. Only those uses and improvements depicted on Attachment B are allowed, unless prior Division approval is obtained for additional improvements. Use of the site for any unapproved purpose is prohibited. Permittee, its agents and employees are responsible for accurately siting authorized uses and structures within the permit area. Any unauthorized use of State lands outside the permit area, either by Permittee or by its agents or employees, is strictly prohibited.

4. **Site Disturbance:**
   (a) Site disturbance shall be kept to a minimum to protect local habitats. All activities at the site shall be conducted in a manner that will minimize the disturbance of soil and vegetation and changes in the character of natural drainage systems. Any ground disturbances that may occur shall be contoured to blend with the natural topography to protect human and wildlife health and safety. Particular attention must be paid to preventing pollution and siltation of any waterways and to preventing disturbances to fish and wildlife populations and habitats.

   (b) The Grantee shall take all reasonable precautions to prevent, and suppress, forest, brush and grass fires. The Department of Natural Resources does not assume any responsibility for protecting any temporary improvements or personal property in cases of grass, brush, or forest fires.
(c) Brush clearing is allowed only to the extent necessary to maintain the present development. The Grantee may use dead timber that is down. The Grantee shall not cut standing timber within the authorized area unless specifically authorized by DNR-Division of Forestry.

5. **Destruction of Markers:** All survey monuments, witness corners, reference monuments, mining claim posts, bearing trees, and unsurveyed corner posts shall be protected against damage, destruction, or obliteration. Grantee shall notify Grantor of any damaged, destroyed, or obliterated markers and shall reestablish the markers at Grantee's expense in accordance with accepted survey practices of the Division of Mining, Land & Water.

6. **Vegetation:** The removal of vegetation shall be kept to a minimum and areas requiring disturbance should be seeded or planted as soon as possible after disturbance. To the extent possible, associated vegetation should be left intact to enhance stability, control erosion and enhance scenic qualities.

7. **Timber Use.** Permittee may use dead and down timber, but shall not cut standing timber on the premises unless specifically authorized by the DNR Division of Forestry. Brush clearing is allowed only to the extent necessary for the permitted use.

8. **Fire Prevention, Protection, and Liability.** Permittee shall take all reasonable precautions to prevent and suppress forest, brush, and grass fires and assumes full liability for any damage to State land resulting from the negligent use of fire. The State is not liable for damage to Permittee's personal property and is not responsible for protection of Permittee's activity from fire.

9. **Fuel Storage:** Containers which exceed a total combined capacity of 110 gallons must be stored within an impermeable diked area or portable impermeable containment structure capable of containing 110 percent capacity of the largest independent container. All containers must be clearly marked with the contents and the Grantee’s name. Drip pans and materials, such as sorbent pads, must be on hand to contain and clean up spills from any transfer or handling of fuel. All fuel storage containers and associated materials must be removed by the permit expiration date.

10. **Notification.** Grantee shall immediately notify DEC by telephone, and immediately afterwards send DEC a written notice by facsimile, hand delivery, or first class mail, informing DEC of: any unauthorized discharges of oil to water, any discharge of hazardous substances other than oil; and any discharge or cumulative discharge of oil greater than 55 gallons solely to land and outside an impermeable containment area. If a discharge, including a cumulative discharge, of oil is greater than 10 gallons but less than 55 gallons, or a discharge of oil greater than 55 gallons is made to an impermeable secondary containment area, Grantee shall report the discharge within 48 hours, and immediately afterwards send DEC a written notice by facsimile, hand delivery, or first class mail. Any discharge of oil, including a cumulative discharge, solely to land greater than one gallon up to 10 gallons must be reported in writing on a monthly basis. The
posting of information requirements of 18 AAC75.305 shall be met. Scope and Duration of Initial Response Actions (18 AAC 75.310) and reporting requirements of 18 AAC 75, Article 3 also apply. Grantee shall supply DEC with all follow-up incident reports. Notification of a discharge must be made to the nearest DEC Area Response Team during working hours: Anchorage (907) 269-3063, fax (907) 269-7648; Fairbanks (907) 451-2121, fax (907) 451-2362; Juneau (907) 465-5340, fax (907) 465-2237. The DEC oil spill report number outside normal business hours is (800) 478-9300.

11. Maintenance: The State assumes no responsibility for maintenance of improvements constructed on State land or liability for injuries or damages attributable to that construction. The authorized area shall be maintained in a neat, clean and safe condition, free of any debris or litter.

12. Solid Waste: All solid waste and debris generated from the activities conducted under this EEA shall be removed to a facility approved by the Alaska Department of Environmental Conservation (DEC) prior to the expiration, completion, or termination of the EEA or activities. Temporary storage and accumulation of solid waste (prior to its removal) shall conform to the following: (1) Solid waste shall be stored in a manner that prevents a litter violation under AS 46.06.080; (2) Putrescible wastes (material that can decompose and cause obnoxious odors) shall be stored in a manner that prevents the attraction of or access to wildlife or disease vectors; and (3) The premises shall be maintained free of solid waste that might create a health or safety hazard.

13. Wastewater Disposal: Disposal of wastewater from any operation associated with this EEA to State lands or water is specifically prohibited, unless otherwise approved by DEC.

14. Fuel and Hazardous Substances: No fuel or hazardous substances are to be stored on the subject parcel. Prior written approval from Grantor is required for a change in this restriction. Such approval may include additional stipulations and a change in the amount required for the performance guaranty.

"Hazardous substances" are defined under AS 46.03.826(5) as (a) an element or compound which, when it enters the atmosphere, water, or land, presents an imminent and substantial danger to the public health or welfare, including fish, animals, or vegetation; (b) oil; or (c) a substance defined as a hazardous substance under 42 U.S.C. 9601(14).

15. Restoration of Site. Upon the expiration or termination of this EEA, Grantee shall vacate the site, remove all temporary improvements, personal property, and other chattels, and return the area to a clean and safe condition. In the event that Grantee fails to comply with this requirement, Grantee shall be held liable for any and all costs incurred by the State to return the permitted area to a clean and safe condition.
16. **08 MALSR Approach road and 08 & 26 MALSR Access roads:**

   a. The 12-foot wide approach road to the 08 MALSR and the access roads including turnarounds for both MALSRs shall be constructed using a geoweb honeycomb placed on a geotextile fabric. The geoweb and fabric will be recessed into the ground up to one foot. The honeycomb will be backfilled with 2 to 4 inches of native material. The final elevation of the top of the road will be flush with the existing ground surface. The hardened roadbed will be marked with fiberglass wands.

   b. Before construction of the approach road begins a representative from ADF&G shall reaffirm the route identified in the 2008 field trip is still the appropriate route and is properly identified and marked.

   c. If there are components of the previous MALSR that are no longer required for this project they shall be removed. If there are buried components that have been exposed by the elements and are no longer required they shall be removed. If they are still part of the project then they will be appropriately protected. If there is any question on whether something should be removed or retained then a representative from ADF&G shall be consulted.

17. **Existing Power Cable – ADL 106447:**

   a. The easement shall be located by resurveying it. It shall be flagged in a manner that a representative of ADF&G can readily identify its location.

   b. ADF&G based on their field evaluation will determined if the power cable should be removed in its entirety, or portions of it should be removed, or if it should remain in place. If removal occurs then the kind and level of restoration of the disturbed area will be determined by or in consultation with ADF&G.
ADL 107382 - Attachment B
Approved Development Plan (Sheet 1 of 13)

PROJECT LOCATION

MEDIUM INTENSITY APPROACH
LIGHTING SYSTEM w/RUNWAY
INDICATOR LIGHTS (MALSR)
PROJECT

APPLICATION BY:
JUNEAU INTERNATIONAL AIRPORT
1873 SHELL SIMMONS DRIVE
SUITE 200
JUNEAU, ALASKA 99801

LOCATION:
T. 40 S, R. 66 E, Sec. 32
T. 41 S, R. 66 E, Sec. 3
COPPER RIVER MERIDIAN

NOT TO SCALE

PURPOSE: IMPROVE AIRCRAFT APPROACH
WITH RUNWAY & IMPROVE
TRANSITION TO VISUAL REFERENCE
FOR LANDING AT JNA

DATUM: MEAN LOW LOW WATER (MLLW)

DATE: MAY 30, 2008

JUNEAU
ALASKA
DOWNTOWN
JUNEAU
DOUGLAS
ISLAND

DOWNTOWN
JUNEAU
DOUGLAS
ISLAND
ACCESS ROAD / CULVERTS PLAN VIEW

PRE-CAST CONCRETE CULVERTS
APPROXIMATE EXISTING GROUND
CHANNEL BED

A-A CULVERTS SECTION

PURPOSE: IMPROVE AIRCRAFT APPROACH
WITH RUNWAY & IMPROVE
TRANSITION TO VISUAL REFERENCE
FOR LANDING AT JNU

DATUM: MEAN LOW LOW WATER (MLW)

LOCATION: T. 40 S. R. 68 E. Sec. 32
T. 41 S. R. 68 E. Sec. 1
COPPER RIVER MERIDIAN

EAST RUNWAY SLOUGH
CULVERTS - PLAN VIEW
SCALE: 1" = 300'
APPLICATION BY:
JUNEAU INTERNATIONAL AIRPORT
1873 SHELL SIMMONS DRIVE
SUITE 200
JUNEAU, ALASKA 99801

MEDIUM INTENSITY APPROACH
LIGHTING SYSTEM w/ RUNWAY
INDICATOR LIGHTS (MALSIR)
PROJECT

IN: GASTINEAU CHANNEL
AT: JUNEAU, ALASKA
POA-1981-320-FF, GASTINEAU CHANNEL 341

FIGURE 8 OF 10
B TYPICAL MALSR LIGHT TOWER ON PILES

PURPOSE: IMPROVE AIRCRAFT APPROACH WITH RUNWAY & IMPROVE TRANSITION TO VISUAL REFERENCE FOR LANDING AT JNU

DATUM: MEAN LOW LOW WATER (MLLW)

LOCATION: T. 42 S. R. 88 E, Sec. 32
T. 41 S. R. 88 E, Sec. 1
COPPER RIVER MERIDIAN

MALSR LIGHT TOWER PLAN & SECTION VIEW

NOT TO SCALE

APPLICATION BY:
JUNEAU INTERNATIONAL AIRPORT
1573 SHELL SHOVELS DRIVE
SUITE 200
JUNEAU, ALASKA 99801

MEDIUM INTENSITY APPROACH LIGHTING SYSTEM w/RUNWAY INDICATOR LIGHTS (MALSR) PROJECT

IN: GASTINEAU CHANNEL
AT: JUNEAU, ALASKA
PDA-1981-320-FF, GASTINEAU CHANNEL 341

FIGURE 10 OF 10
DATE: MAY 30, 2008
The proposed MALSR Project will install a new medium-intensity approach lighting system with runway alignment indicator lights (MALSR) at both ends of the Juneau International Airport runway (08 MALSR on the west end, 26 MALSR on the east end). The MALSR is a series of lights on standards that align with the runway centerline. Currently, 08 MALSR exists, and is functional, but there is no 26 MALSR. The 08/26 MALSR project will occur in conjunction with the relocation of the runway thresholds and construction of runway safety areas (RSA) outlined in the RSA Project permit applications.

The proposed 08/26 MALSR Project is described herein, with additional detail on 08 MALSR available in the July 6, 2007 Record of Decision (ROD) on pages 8-2 and 12-5. Additional detail on 26 MALSR is found in Section 2.7.1 of the Juneau International Airport Final Environmental Impact Statement (FEIS). 08 MALSR includes approximately 2,516 feet of MALSR approach and access road (including two turnarounds) and 2,725 feet of MALSR and lead-in lights (including conduit trench) that will be located outside the west RSA. 26 MALSR includes approximately 1,800 feet of MALSR (access road, culvert crossing, lights, turnarounds, control equipment building, and conduit trench) that will be located outside the east RSA.

The existing 08 MALSR will be adjusted through a 120-foot eastward shift in accordance with a similar displacement of the Runway 08 threshold which will occur as part of RSA construction. The 08 MALSR will consist of 10 light arrays and an additional 5 "lead-in" light arrays. The MALSR arrays will be in the following configuration: eight MALSR light support bars spaced at 200-foot intervals along the extended runway centerline with two additional light bars located 1,000 feet from the runway threshold, one on each side of the runway centerline (creating a hole light configuration at that location). The lights will begin at the Runway 08 landing threshold and extend 1,600 feet west of the threshold. The 1,000-foot, triple configuration MALSR will be located in the east edge of the Mendenhall River channel and the next MALSR light bar will be stationed 220 feet west of that at 1,220 feet from the threshold. To prevent impairment of commercial navigation in the Mendenhall River caused by placement of the MALSR lights within the river channel, the navigable portion of the river channel will be preserved by removing approximately 8,000 cubic yards of west river bank and armor the resulting shore to prevent the 1,220-foot MALSR light. At a point about 1,725 feet west of the 08 threshold, the approach path departs from the extended Runway 08 centerline in a southwesterly direction, a feature known as the "doubled". There will be five lead-in light support bars on the dog-leg alignment beginning 800 feet from the point where the dog-leg intersects the extended runway centerline and the remaining four lead-in lights are spaced at 200-foot intervals.

The new 26 MALSR will improve navigational alignment for Runway 26. The 26 MALSR will consist of 14 MALSR light arrays in the following configuration: 12 light support bars spaced at 200-foot intervals along the extended runway centerline and the additional light bars located 1,000 feet from the runway threshold, on each side of the runway centerline creating a hole light configuration. The lights will begin at the Runway 26 landing threshold (east end of the runway) and extend 2,400 feet east of the threshold.

The first 800 feet of MALSR at each end of the runway will be located on the RSAs (assumed to be airport property) and will consist of three light configurations mounted either flush with the surface, or on low support towers with a breakaway coupling. The remaining MALSR arrays for both 08 MALSR and 26 MALSR will have light configurations mounted on fiberlass towers. These will be installed primarily in intertidal wetlands and will be located within the Mendenhall Welland State Game Refuge (MWSGR).
Light Towers
The two-foot light tower configuration will include two steel piles driven to approximately 20 feet below ground surface. These piles will support a platform above the high tide line which will support the base plate assembly, junction box, and a fiberglass light pole. Lights can be reached either from the light towers or can be folded down to be reached from the ground.

MALSR Access Roads
A 12-foot-wide access road will extend along each MALSR alignment generally adjacent to the extended runway (or dogleg) centerline and provide access to the MALSR and land in lights and towers. For 08 MALSR, there will also be an approach road that runs from the end of Industrial Boulevard south to the intersection with the actual access road. For 26 MALSR, the access road will descend the end slope of the proposed RSA (see RSA project permit application) at a 6:1 slope to the grade of the surrounding wetlands. The MALSR access roads (and the 08 MALSR approach road) will be constructed at-grade using a geoweb honeycomb placed on geotextile fabric and recessed into the ground up to one foot. The honeycomb will be backfilled and then topped with 2 to 4 inches of the native material excavated to accommodate the mat. The final elevation of the top of the road will be flush with the existing ground surface (approximately 16-22 feet MLLW). Natural vegetation should be held through the honeycomb and help restore the alignment to a natural function and appearance; the area will continue to be a wetland and serve as wildlife habitat. Communications and power cables will be trenchless and buried. Conduits up to two feet below grade adjacent to the access roads. Vehicle turnarounds, approximately 30 feet by 30 feet (which includes the road surface), will be constructed at each end of the 08 MALSR access road and in the middle and the east (far) end of the 26 MALSR access road. The access road edges will be marked with small fiberglass posts or other small markers. The 08 MALSR road will be at the 1,800-foot light bar, at the west edge of a natural north-south drainage swale. A foot bridge approximately 30 feet in length and 5 feet wide will span the swale and allow foot access to the 1,400-foot and 1,220-foot MALSR light towers. The foot bridge will be mounted on one or two driven steel piles at each end and will be fabricated of fiberglass, aluminum, or other low-maintenance, durable, non-toxic materials. To construct the MALSR access road standard construction equipment will be used including bulldozers, backhoes, graders, drill equipment, dump trucks, and construction mats. Vegetation clearing will be done by hand. Excess material will be removed and used in the RSA construction or disposed of in an approved location, such as the Capitol Landfill.

East Runway Slough Crossing
Approximately 800 feet east of Runway 26 threshold (200 feet from the toe of the RSA), the 26 MALSR access road will cross the relocated East Runway Slough. At this location, the channel will be approximately 190 feet wide. Four (4) pre-cast concrete bottomless arch culverts will be installed in the channel (MALSR Figures 7 and 8). Each bottomless arch culvert will have a width of 48 feet and a length of 40 feet. The channel bed elevations in the culverts will be staggered, ranging from 14 feet to 16 feet with the channel bed of the middle culvert being set at lower elevations to maintain flow at low tide stages. Water flow will be in both directions, depending on whether the tide is ebbing or flowing. The culverts will be inundated and surrounding area (including the 26 MALSR access road) flooded at tides above 20 feet. The arch culvert will be supported by spread footings or a pile foundation, depending on conditions identified in the geotechnical survey. The culvert will be set in structural fill and the footings protected with riprap. The access road over the culverts will be at elevation 24 feet, above HTL.
A small MALSR Control Building will be installed adjacent to the 28 MALSR access road. The building will be supported by piles to keep it above tidal influence and will be located at the middle turnaround for access. The building will be white, 10 feet by 14 feet by 9.5 feet high.

In the course of your proposed activity will you generate, use, store, transport, dispose of, or otherwise come in contact with toxic and/or hazardous materials, and/or hydrocarbons? Yes X

If yes, please list the substances and the associated quantities. Use a separate sheet of paper, if necessary.

During construction and maintenance activities, gas and diesel-powered vehicles, lubricants, oils, hydraulic fluids etc. will be present in vehicles and equipment operating in the project area.

If the proposed activities involve any storage tanks, either above or below ground, address the following questions for each tank. Please use a separate sheet of paper, if necessary, and, where appropriate, include maps or plates: No temporary or permanent fuel storage tanks are proposed. Refueling and construction vehicle maintenance will generally be done in a designated area on uplands on Airport property, from a tank mounted on a truck. It is possible that large equipment that is not very mobile will be fueled from a truck-mounted tank within the 08/26 MALSR construction area on MWSGR. Instead of tracking the distance back across the wetlands to fuel on uplands, in this case, the equipment being fueled and the truck carrying the tank will be required to possess sorbent pads and other appropriate materials for dealing with potential small spills.