

APPENDIX D

CONSTRUCTION SAFETY AND PHASING PLAN

CONSTRUCTION SAFETY AND PHASING PLAN
Adak Airport Runway, Taxiway, and Apron Pavement
Rehabilitation

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TABLE OF CONTENTS

(1) COORDINATION	1
(a) Preconstruction Conference	1
(b) Daily Status Reports	1
(c) Contractor Progress Meetings	1
(d) Scope or Schedule Changes	2
(e) FAA ATO Coordination	2
(f) Coordination for Taxiway and Runway Closure.....	2
(g) Project Stake Holders List	2
(2) PHASING	3
(a) Phase Elements	4
(b) Construction Safety Drawings	5
(3) AREAS AND OPERATIONS AFFECTED BY THE CONSTRUCTION ACTIVITY.....	6
(a) Identification of Affected Areas	6
(b) Mitigation of Effects.....	6
(4) PROTECTION OF NAVIGATION AIDS (NAVAIDS) AND VISUAL AIDS	7
(a) General.....	7
(b) FAA Owned NAVAIDS	7
(c) Runway Edge Lighting	7
(d) Taxiway Edge Lighting	7
(e) Apron Edge Lighting	7
(f) Runway Threshold Lighting.....	7
(g) Runway Centerline Lighting	7
(5) CONTRACTOR ACCESS.....	7
(a) General.....	8
(b) Location of Stockpiled Construction Materials	8
(c) Vehicle and Pedestrian Operations	8
(i) Construction Employee Parking Areas.....	8
(ii) Construction Vehicle and Equipment Parking	8
(iii) Access and Haul Roads.....	9
(iv) Marking and Lighting of vehicles	9
(v) Description of Proper Vehicle Operations	9
(vi) Training Requirements for Vehicle Drivers	10
(vii) Situational Awareness.....	10
(viii) Airport Security	10
(ix) Two-Way Radio Communication	12
(x) Vehicle Operations.....	12
(6) WILDLIFE MANAGEMENT	13
(a) Trash.....	13
(b) Standing Water	13
(c) Poorly Maintained Fencing and Gates	13
(d) Disruption of Existing Wildlife Habitat	13
(7) FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT	13
(a) Inspections	13
(b) Hauling	13
(8) HAZARDOUS MATERIALS (HAZMAT) MANAGEMENT	14
(9) NOTIFICATION OF CONSTRUCTION ACTIVITIES	15

Appendix D
Construction Safety and Phasing Plan

(a)	Maintenance of a List of Responsible Representatives/ Points of Contact	15
(b)	Notices to Airmen (NOTAM)	15
(c)	Emergency Notification Procedures	15
(d)	Coordination with Local Emergency Personnel	15
(e)	Notification to the FAA	16
(10)	INSPECTION REQUIREMENTS.....	17
(a)	Daily (or more frequent) Inspections.....	17
(b)	Final Inspections	17
(11)	UNDERGROUND UTILITIES	17
(12)	PENALTIES	18
(13)	SPECIAL CONDITIONS.....	18
(a)	Emergency Landings	18
(b)	Water for Dust Control	19
(c)	Half-Width Construction activities.....	19
(d)	Visual Aids/Runway Edge and Threshold Lighting	19
(e)	Runway Markings.....	19
(f)	NOTAMs	19
(g)	Other Conditions.....	19
(14)	RUNWAY AND TAXIWAY VISUAL AIDS, MARKING, LIGHTING, SIGNS, AND VISUAL NAVAIDS	19
(a)	General.....	19
(b)	Markings	20
(c)	Airport Lighting and Visual NAVAIDS	20
(i)	Runway Edge and Threshold Lighting.....	20
(ii)	Taxiway Edge Lighting.....	20
(15)	MARKING AND SIGNS FOR ACCESS ROUTES.....	21
(16)	HAZARD MARKING AND LIGHTING	21
(a)	Purpose	21
(b)	Equipment.....	21
(c)	Spacing of Barricades.....	21
(d)	Maintenance	21
(17)	PROTECTION OF RUNWAY AND TAXIWAY SAFETY AREAS, OBJECT FREE AREAS, OBSTACLE FREE ZONES, AND APPROACH/DEPARTURE SURFACES.....	22
(a)	Runway Safety Area (RSA).....	22
(b)	Runway Object Free Area (ROFA)	22
(c)	Runway Obstacle Free Zone (ROFZ).....	22
(d)	Taxiway Safety Area (TSA) and Taxiway Object Free Area (TOFA)	22
(e)	Runway Approach/Departure Surfaces	23
(18)	OTHER LIMITATIONS ON CONSTRUCTION.....	23
(a)	Prohibitions.....	23
(i)	Airport Closures	23
(ii)	No Crossing of Active Runway	23
(iii)	Airport Marking System	23
(iv)	Flare Pots	23
(b)	Restrictions	23
(i)	Use of Tall Equipment	23
(ii)	Use of Tools with Open Flames	24
(iii)	Open Trenches, Excavations, and Stockpiles	24
(iv)	Vehicle Use.....	24

Appendix D
Construction Safety and Phasing Plan

(v) Stockpiles 24

APPENDICES

Appendix C.1 – Construction Safety Drawings

ACRONYMS

<u>Acronym</u>	<u>Definition</u>
AC	Advisory Circular
ADEC	Alaska Department of Environmental Conservation
ADK	Adak Airport
AOA	Air Operations Area All airport areas where aircraft can operate, either under their own power or while in tow. The AOA includes runways, taxiways, and apron areas.
AS	Alaska Statute
ASDA	Accelerate Stop Distance Available
ATO	Air Traffic Organization
AWOS	Automated Weather Observing System
CFR	Code of Federal Reference
CSPP	Construction Safety and Phasing Plan
CTAF	Common Traffic Advisory Frequency
DOT&PF	Alaska Department of Transportation & Public Facilities EEEB Electrical Equipment
Enclosure Building	
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FOD	Foreign Object Debris
FSS	Flight Service Station
GA	general aviation
HAZMAT	hazardous materials
HIRL	High Intensity Runway Lighting
HMCP	Hazardous Materials Control Plan
IAW	in accordance with
LDA	Landing Distance Available
MIRL	Medium Intensity Runway Lighting
MITL	Medium Intensity Taxiway Lighting
NAVAID	navigational aid
NOTAM	Notice to Airman
OFA	Object Free Area
OFZ	Obstacle Free Zone
PAPI	Precision Approach Path Indicator
REIL	Runway End Identifier Lights
RNAV	area navigation
ROFA	Runway Object Free Areas
RSA	Runway Safety Area
SAE	Society of Automotive Engineers
SCC	System Support Center
SPCC	Spill Prevention, Control and Countermeasure
SPCD	Safety Plan Compliance Document
SWPPP	Storm Water Pollution Prevention Plan
TOFA	Taxiway Object Free Areas
TODA	Takeoff Distance Available
TORA	Takeoff Run Available
TSA	Taxiway Safety Area
VASI	Visual Approach Slope Indicators

(1) COORDINATION

This document presents, in conjunction with the referenced plan sheets and specifications, the Construction Safety and Phasing Plan (CSPP), for the Adak Airport Runway, Taxiway, and Apron Pavement Rehabilitation (Project). This document was prepared to inform the Contractor of limitations on their operations during construction to minimize disruption to airport operations.

Aircraft operation for arriving aircraft includes 15 minutes prior to landing in addition to time on the runway and taxiway. An aircraft operation for departing aircraft includes 15 minutes after takeoff, in addition to time on the taxiway and runway.

Whenever the Project documents call for coordination, notification, contact or other interaction, any such activity shall be done by the Contractor; and it shall be done through, in the presence of, or with the written approval of the Engineer. Such activity could be with the DOT&PF Airport Manager, DOT&PF airport management, DOT&PF Maintenance and Operations, Air Carriers, Airport Tenants, airport users, any local, state or federal agency, any private group or association, or members of the general public.

(a) Preconstruction Conference

The Contractor will meet with the Engineer for a preconstruction conference before beginning construction. Submit all of the documents required in Section GCP-80-03(a-p) of the Specifications to the Engineer at least five working days before the preconstruction conference.

(b) Daily Status Reports

Provide daily status reports to the Engineer. Include in the daily reports changes in status of the Project and airport conditions, as well as foreseeable changes in work affecting airport operations (areas and timing). Deliver reports at a time acceptable to the Engineer.

(c) Contractor Progress Meetings

Hold weekly progress meetings with the Engineer at times and places acceptable to the Engineer. Provide facilities with a toll free number so that the Engineer's invitees may attend telephonically. Airport safety, security, and short term construction schedules shall be a standing agenda item for each progress meeting. Additionally, the Contractor shall provide updated construction information for Project stakeholders, when requested, and administrate and hold an informational public meeting one week prior to active construction. Invite representatives for the following:

- FAA Maintenance
- Airport Manager
- Airport Maintenance
- Air Carriers
- Air Taxis
- Airport Safety and Security Officer (SSO)
- Transportation Security Administration (TSA)
- Any other airport related business affected by the construction

(d) Scope or Schedule Changes

The Contractor shall schedule and sequence its work in accordance with the phasing requirements. The Contractor shall not change its schedule, perform unscheduled work or perform work out of sequence within any of the specified Project phases unless prior written approval is received from the Engineer. As a standing condition of approval of any schedule or sequence change, the Contractor shall perform additional coordination in accordance with CSPP section 1.

Lead-time is required to coordinate any alteration to critical airport functions such as runway dimensional changes, partial runway, taxiway, apron, or airport closures, NAVAID deactivations and temporary outages, and de-energizing runway Visual Aids. The following lead times are required for the Contractor to initiate coordination efforts through the Engineer and provide schedule information for the first season, lead times could change if the Project goes to a second season:

Entity / Group / Agency / Organization	Lead Time
DOT&PF Airport Manager*	14 Days
Emergency Services (Local Fire)*	14 Days
FAA Air Traffic Organization (ATO)**	30 Days
Airport Tenants / Users	30 Days
Air Carriers	30 Days

*Any Airport safety or security issue, and all emergencies or accidents require immediate notification

**Reference CSPP Section 1c. Note that other coordination with FAA may require different lead times, such as e- filing of FAA form 7460-1 for hazardous equipment intended for use by the Contractor. See below section 9e.

NAVAID outage requires 45-day advance notice with FAA Airport Sponsor Strategic Event Submission Form.

(e) FAA ATO Coordination

Coordinate all construction activities with: the FAA Systems Support Center Manager, Mark Mahoney at 907-586-7470; and the Adak Airport Manager, Innocent Dushkin at 907-592-8026.

Coordinate all required FAA-owned facility outage(s) at least 30 days in advance through Mark Mahoney Manager, FAA System Support Center (ADK SSC) at 907-568-7470. For any runway closure request for ADK RW 5/23, contact the Adak Airport Manager, Innocent Dushkin at 907-592-8026.

(f) Coordination for Taxiway and Runway Closure

Coordinate with the airport manager at 907-592-8026, Guardian Flight, and LifeMed a minimum of 72 hours before closing a taxiway or runway. The airport manager will coordinate with Alaska Airlines. Guardian Flight's phone number is (907) 245-6230. LifeMed's phone number is (907) 563-6633.

(g) Project Stake Holders List

The following is a preliminary list of Project stakeholders. The Contractor shall ensure that the following entities receive appropriate Project coordination as identified above, working through the Engineer. This

Appendix D
Construction Safety and Phasing Plan

list is preliminary, and additional stakeholders may be identified during the development of the Contractors SPCD, as well as during the Project's construction.

Stakeholder	Interest	Contact Name	Contact Email DOT & PF
Maintenance & Operations Regional Aviation Office Design	Airport Manager	Innocent Dushkin	innocent.dushkin@alaska.gov
	Safety and Security	David Cummings	david.cummings@alaska.gov
	Manager	Chuck Tripp, P.E.	chuck.tripp@alaska.gov
FAA			
Airports Division	Project Manager	Venus Larson, P.E.	Venus.larson@faa.gov
Airports Division	Area Planner SSC	Katrina Moss	katrina.moss@faa.gov
FAA Northwest SSC	Manager	Zach Armstrong	zach.armstrong@faa.gov (907) 271-6790
Cold Bay FSS			(907) 532-2466
Air Carriers / Users			
Alaska Airlines	Air Passenger \ Cargo		(206) 392-6340
Guardian Flight Alaska	Medevac		(907) 245-6230
LifeMed Alaska	Medevac		(907) 563-6633
Local Government			
Eastern Aleutian Tribes Office	Paul Mueller		PaulM@eatribes.net
Police Dept.			(908) 592-3323
Adak Medical Center			(907) 592-8383
City Clerk's Office			(907)592-4500
Fire Department			(907)592-4145

(2) PHASING

The Project will affect the Runway Safety Area (RSA), Runway Obstacle Free Zone (ROFZ), Taxiway Safety Area (TSA), and Taxiway Object Free Area (TOFA) Surfaces. See 2.17 for limitations on construction within these areas. Work areas and active runway are depicted on the sequencing sheets A7-A11 of the Plans.

Aircraft Rescue and Fire Fighting access routes shall remain open. Utilities, including water supplies for

firefighting shall be uninterrupted.

If, at any time during the Project, the Contractor becomes aware of any other areas that are or could be affected by the performance of work, the Contractor shall promptly revise the construction safety plan drawings to show them, update the SPCD and submit to the Engineer for approval. Work in any other area not shown in the safety and phasing drawings is prohibited until written approval of the updated SPCD and revised construction safety drawings is received from the Engineer.

The primary objective of the Project is improving the surfacing for the runway and taxiway to meet the current standards of AC 150/5300-13A. The Project will be completed using multiple phases as described in this Construction Safety and Phasing Plan (CSPP)

Runway 5/23 will be half-width during two phases of work. Sequencing is designed to have not more than a 3-inch vertical change in the RSA of an active runway to the maximum extent practicable. Runway 5/23 will be closed at nighttime during paving of Runway 5/23.

Aircraft Rescue and Fire Fighting access routes shall remain open. Utilities, including water supplies for firefighting shall be uninterrupted.

The Contractor shall schedule and sequence work based on the phasing requirements.

(a) Phase Elements

Any Contractor activities affecting the operations of the Adak Airport (ADK) is subject to advance authorization from the Airport Manager, through the Engineer. The Contractor shall follow Section 1 of the CSPP in coordinating activities for the duration of the Project.

Prior to any change to an AOA, all temporary markings, hazardous area barricades, temporary lighting, and any other items required by this CSPP and approved SPCD shall be installed and accepted by the Engineer. All such work shall be coordinated and authorized in advance.

Haul routes for each phase are designated in the plans and the Contractor is responsible for maintaining them in satisfactory condition as the work progresses. This includes controlling haul route dust at all times. The Contractor shall coordinate and secure approved access prior to beginning any work on the airport.

The Project will consist of the following tasks:

- Rehabilitate the pavement on Runway 5/23
- Rehabilitate the pavement on Taxiway 'A'
- Groove Runway 5/23
- Re-stripe
- Replace joint sealant on an apron

(i) Phase 1: Runway 5/23 North Half Closure

Phase 1 requires closing the north half of Runway 5/23. The south half of Runway 5/23 will remain open for operations for the duration of this phase. Complete all cold planing and paving on the north half or

Runway 5/23 in order to make the north half of Runway 5/23 match the final typical section. Pave and cold plane around runway centerline flush lights.

Place new temporary runway edge lights and temporary threshold lights on the south half of Runway 5/23. Place new temporary markings on the south half of Runway 5/23 and obliterate markings on the north half of Runway 5/23. Cover or disable runway edge lights and threshold lights on north half of Runway 5/23.

Phase 2: Runway 5/23 South Half Closure

Phase 2 requires closing the south half of Runway 5/23. The north half of Runway 5/23 will remain open for operations for the duration of this phase. Complete all cold planing and paving on the south half of Runway 5/23 in order to make south half of the Runway 5/23 match the final typical section. Pave and cold plane around runway centerline flush lights. Remove the south half of the arrestor system.

Place temporary taxiway markings on Runway 18/36. Either Taxiway 'A' or Runway 18/36 (striped as a taxiway) must be open to air traffic during this phase, with an area open for aircraft to cross on the south half of Runway 5/23 in order to allow access to the active north half of Runway 5/23.

Relocate temporary runway edge lights and temporary threshold lights to the north half of Runway 5/23. Place new temporary markings on the north half of Runway 5/23 and obliterate markings on the south half of Runway 5/23. Cover or disable runway edge lights and threshold lights on south half of Runway 5/23.

(ii) Phase 3 – Phase 5: Rehabilitate Taxiway 'A'

Phase 3 – Phase 5 requires closing portions of Taxiway 'A', as shown on Sheet A9. Reroute air traffic along Runway 18/36 in order to maintain access to the three aprons along Taxiway 'A'. Complete all cold planing and paving on Taxiway 'A' in order to make the surface of Taxiway 'A' match the final typical section.

(iii) Phase 6: Replace Joint Sealant on Apron

Phase 6 requires placing joint sealant on an apron connected to Taxiway 'A'. This phase may worked on concurrently with other tasks, and this phase may be completed in any order during the phasing sequence.

(b) Construction Safety Drawings

Construction safety drawings are included in this CSPP and the planset. The drawings are available in Autodesk format (*.dwg) files, and as Adobe (*.pdf) format, through the Engineer. Modify these drawings to fit your proposed means and methods to complete the Project if needed, but no modification is allowed to change the phasing requirements. Submit your construction safety drawings with revisions, if any, along with a work schedule and SPCD for approval within 30 days of receiving NTP #1.

SPCD information can be found in advisory circular (AC) 150/5370-2 *Operational Safety on Airports During Construction*. The latest edition of this AC and most others can be obtained free of charge from the FAA on the internet: http://www.faa.gov/airports/resources/advisory_circulars/

(3) AREAS AND OPERATIONS AFFECTED BY THE CONSTRUCTION ACTIVITY

(a) Identification of Affected Areas

Areas that are anticipated to be affected by the performance of work for each required phase of this Project are shown on the construction safety drawings included in this CSPP and the planset. If, at any time during the Project, the Contractor becomes aware of any other areas that are or could be affected by the performance of work, the Contractor shall promptly revise the construction safety plan drawings to show them, update the SPCD and submit to the Engineer for approval.

Work in any other area not shown in the safety and phasing drawings is prohibited until written approval of the updated SPCD and revised construction safety drawings is received from the Engineer.

Aircraft Rescue and Fire Fighting access routes shall remain open. Utilities, including water supplies for firefighting shall not be uninterrupted.

If, at any time during the Project, the Contractor becomes aware of any other areas that are or could be affected by the performance of work, the Contractor shall promptly revise the construction safety plan drawings to show them, update the SPCD and submit to the Engineer for approval. Work in any other area not shown in the safety and phasing drawings is prohibited until written approval of the updated SPCD and revised construction safety drawings is received from the Engineer.

(i) Closing, or Partial Closing of Runways, Taxiways and Aprons

Runway 5/23 and Taxiway 'A' will be affected by the Project as described in section 3 above. Coordination with Project stakeholders must begin at least 14 days prior to each construction phase. Stakeholder and public updates will be provided in accordance with Project specifications.

(ii) Interruption of Utilities, Including Water Supplies for Firefighting

Due to electrical work scheduled for the Project, interruptions of electricity at various areas of the airport are anticipated. Coordinate with the Airport Manager and local emergency personnel prior to electrical outages.

Verify there are no water supply lines, communication lines, electrical lines, or gas lines within the work limits. If located these lines must be protected from damage unless relocation of the utility line is required. If the any utility line is damaged it will be repaired at the Contractor's expense.

(iii) Construction Areas near Air Operations Area (AOA)

All staging areas and haul routes will be kept away from the AOA to the extent practicable. Haul routes that approach AOAs must be marked or flagged to prevent incursion into object free areas (OFAs) or other restricted areas during aircraft operations.

(b) Mitigation of Effects

Runway 5/23 and Taxiway 'A' will be affected by the Project as described in section 3 above. Coordination

with Project stakeholders must begin at least 14 days prior to each construction phase. Stakeholder and public updates will be provided in accordance with Project specifications.

All construction related activities that will change the AOA will be coordinated with the Airport Manager and airport users prior to beginning work.

(4) PROTECTION OF NAVIGATION AIDS (NAVAIDS) AND VISUAL AIDS

(a) General

The Runway 5/23 paving will require activity near NAVAIDS. If any NAVAIDS are damaged during construction, immediately notify the Engineer and Airport Manager. If any FAA owned NAVAIDS are damaged or if an unanticipated outage occurs, in addition notify FAA SCC 907-225-4900 (Section 2.09) and ask FAA to issue a NOTAM. All NAVAIDS are mounted on frangible bases.

All lighting shall be on frangible bases, except the flush centerline lights on Runway 5/23.

(b) FAA Owned NAVAIDS

Runway 5/23 is equipped with PAPIs and REILs for each approach end of the runway.

(c) Runway Edge Lighting

The Runway 5/23 edge lights will be paved around and will remain in place. Handwork may be required when working near the lights to prevent damage during the placing and compaction of asphalt.

(d) Taxiway Edge Lighting

The Taxiway 'A' edge lights will be paved around and will remain in place. Handwork may be required when working near the lights to prevent damage during the placing and compaction of asphalt.

(e) Apron Edge Lighting

The apron edge lights will be unaffected and will remain in place.

(f) Runway Threshold Lighting

The runway threshold lights will be paved around and will remain in place. Handwork may be required when working near the lights to prevent damage during the placing and compaction of asphalt.

(g) Runway Centerline Lighting

The runway centerline lights will be paved around and will remain in place. A rotary mill may be required when working near the lights to prevent damage during the placing and compaction of asphalt. Centerline lights shall be 0" – 0.5" below final grade. Remove spacers from the centerline lights if needed.

(5) CONTRACTOR ACCESS

(a) General

When the Contractor is working within the air operations area (AOA) or Runway Obstacle Free Zone (ROFZ) provide one employee to act as Command Vehicle Operator (CVO) for each work party whose sole duty is to communicate with the Cold Bay Flight Service Station (FSS) and to coordinate operational use of the runway. This person shall be familiar with air carrier operating schedules and operating procedures on an uncertified airport.

The CVO shall have a vehicle equipped with a radio capable of communicating on the CTAF frequency, and a second radio capable of communicating with all other contract vehicles and equipment present on the Project. The CVO vehicle shall be equipped with an amber rotational beacon and a blue rotating beacon that may be operated independently. The CVO shall continuously occupy the dual radio equipped vehicle during all construction activities within the AOA or Runway Obstacle Free Zone (ROFZ).

When required to clear the work area during airport operations, the CVO shall activate the blue rotating beacon to notify all personnel to clear the AOA and ROFZ. The CVO will notify Cold Bay FSS when all equipment and personnel are clear of these areas. The blue rotating beacon shall remain on as long as personnel and equipment are required to be clear of these areas.

(b) Location of Stockpiled Construction Materials

See the construction safety drawings included in this CSPP and the planset for the staging and stockpile location.

Prevent stockpiles from becoming a wildlife attractant consistent with requirements in section 2.06.

Prevent stockpiled material from becoming FOD consistent with requirements in section 2.07.

Material stockpiles and tall equipment such as temporary asphalt plants shall be located as far as possible from the runways within the designated staging area.

(c) Vehicle and Pedestrian Operations

(i) Construction Employee Parking Areas

In addition to information included elsewhere in the CSPP, the following provisions apply:

- Coordinate vehicle parking areas for Contractor and subcontractor employees with the Airport Manager, through the Engineer. Coordinate in advance and ensure that the location(s) designated by the Airport Manager are used at all times in a manner that prevents unsafe conditions and damage to airport or private property.
- Do not park or operate motorized vehicles on unimproved surfaces.
- Do not park vehicles within 15 feet of any roadway open to public traffic.

(ii) Construction Vehicle and Equipment Parking

Contractor staging areas for work on the Project are available within the work area, subject to the authorization by the Airport Manager, through the Engineer, and the conditions cited in this section.

Before occupying an authorized temporary use/staging area, mark the staging area limits with lath and

flagging or other measure and then arrange a joint inspection with the Engineer to record the area's original condition. When the temporary staging area is no longer needed, arrange a joint inspection with the Engineer to ensure the area is returned to an acceptable improved condition.

(iii) Access and Haul Roads

See the construction safety drawing included in this CSPP and the planset for access and haul routes.

Do not haul across pavement surfaces that are open to air traffic. Do not haul on completed paved surfaces when partially completed or existing paved surfaces are available.

Use water as necessary on haul routes for dust control.

FOD shall be controlled along haul routes within the active movement areas as described in section 2.07.

Use water as necessary on haul routes for dust control.

(iv) Marking and Lighting of vehicles

Vehicles may be any color or combination of colors other than solid black or white. In accordance with (IAW) AC 150/5210-5, paragraph 3f.

Vehicles not escorted by a properly lighted vehicle must be equipped with a yellow flashing light and flag during the day; and with a yellow flashing light during nighttime. Lights must flash at 75 ± 15 flashes per minute. Lights must have peak intensity within the range of 40 to 400 candelas (effective) from 0° (horizontal) up to 10° above the horizontal and for 360° horizontally. The upper limit of 400 candelas (effective) is necessary to avoid damage to night vision. From 10° to 15° above the horizontal plane, the light output must be 1/10th of peak intensity or between 4 and 40 candelas (effective). (IAW AC 150/5210-5, paragraph 5b and c.)

Yellow flashing light per the following chromaticity requirements: The Society of Automotive Engineers (SAE) Standard J578 Revised December 2006, Color Specification, defines the acceptable color boundary limits and measurement of emitted red, white, signal blue, and yellow light for vehicle lights. This standard applies to the overall emitted color of light from the device in lieu of emitted light from any small area of the lens. The color of emitted light must fall within the color boundaries per SAE J578 Revised December 2006 (color boundary equations are in the standard) using color measurement methods detailed in the standard. See FAA Engineering Brief #67, Light Sources Other Than Incandescent and Xenon for Airport and Obstruction Lighting Fixtures, for additional information and Alternative Lighting Devices.

All vehicles, other than those that are properly equipped and authorized by the Airport Manager to routinely traverse any portion of the AOA, must be marked with a flag on a staff attached to the vehicle so that the flag will be readily visible. The flag must be at least a 3-foot by 3-foot square having a checkered pattern of international orange and white squares at least 1-foot on each side. (IAW AC 150/5210-5, paragraph 4d.) During low visibility periods flags will need to be lit to aid in pilot vision of the working equipment.

(v) Description of Proper Vehicle Operations

All vehicles operating on AOAs (runways, taxiways, ramps and parking aprons) shall be in good operating

condition and free of fluid leaks. The Airport Manager or the Engineer may refuse to permit access or direct the removal of any vehicles not meeting these requirements.

Any vehicle that travels on any portion of an AOA, other than properly closed and marked areas, shall be driven by a vehicle operator who has received airport driver training. The vehicle shall be properly marked, lighted and equipped with a working aviation-band, two-way radio and be authorized by the Airport Manager, through the Engineer. The vehicle operator is required to monitor the Common Traffic Advisory Frequency (CTAF) for ADK, 122.9 MHz.

(vi) Training Requirements for Vehicle Drivers

Vehicle operators must present a valid Alaska Driver's License to the Airport Manager to receive authorization to operate contractor vehicles in the Restricted Areas and construction areas.

All Contractor and subcontractor employees who operate vehicles must complete training required by the Regional Aviation Office prior to working on any portions of the airport property. A 72-hour lead-time for the training is required by the Regional Aviation Office. The training must be repeated annually for each season of construction. Training records will be maintained by the Alaska Department of Transportation and Public Facilities (DOT&PF) for each authorized driver.

(vii) Situational Awareness

Vehicle operators at airports face conditions that are not normally encountered during highway driving. Therefore, those persons who have vehicular access to the AOA's must have an appropriate level of knowledge of airport rules and regulations. Any person expected to operate on the AOA must demonstrate a functional knowledge of the English language.

(viii) Airport Security

All personnel seeking regular access to the airport are required to complete a Photo Identification Badge (PIB) Application and receive familiarization training before authorization from the Airport Manager will be granted to enter the airport. Employees who need short duration and limited frequency access may, at the discretion of the Airport Manager, be escorted by a qualified badge holder but shall remain within sight and unaided auditory range of their escort.

For personnel to obtain a PIB they shall undergo a Security Threat Assessment. The Security Threat Assessment can take up to two weeks before approval is granted. Further delays could result from improperly completed PIB Applications or shortfalls in the presentation of proper identification documentation (see U.S. Government I-9 Form).

Coordinate PIB applications with the Airport Manager or the DOT&PF Airport Safety and Security Officer (SSO) (Section 2.09).

Assign a responsible person the duty of Authorized Signatory. He/she will be trained under the Department's approved Authorized Signatory Training. This training will require approximately one hour and will be provided by the Department. Prior to sending any applicants to the Airport Manager the Authorized Signatory will be responsible for reviewing each PIB Application for completeness, that each applicant has correct documents to provide identity and work authorization, and that the applicant has the correct PIB Application fees. The Authorized Signatory will then sign the appropriate block on page 1

of the PIB Application. The Authorized Signatory is responsible for maintaining control of all PIBs issued to the Contractor or Subcontractor(s). PIB forms are located in Appendix E.

At the Airport Manager's option, an Alaska Public Safety Information Network records check may be made on any personnel applying for access to the airport.

Notify the Airport Manager within 24 hours whenever a badged employee is terminated, for whatever reason. Any PIB issued to the terminated employee shall be returned to the Airport Manager within five (5) days of the employee's termination date.

All PIBs will be issued by the Airport Manager. The Contractor, through the Authorized Signatory, shall ensure that PIBs are returned to the Airport Manager at the completion of the Project or upon termination of any employee PIB holder. Return all PIBs to the Airport Manager within five (5) days of completion of the Project. The following fees will be assessed to the Contractor and paid to the Airport Manager at the time of PIB issuance:

Airport Photo Identification Badge (PIB) \$50
Damaged Badge Fee \$50
Failure to Return Badge \$200
Security Threat Assessment Fee
Fingerprinting Fees (for badges requiring SIDA Access) \$31*
Lost or unaccounted badges \$200

*SIDA badges and associated fees will only be issued to individuals who have a genuine need to be in that area.

The Security Identification Display Area (SIDA) is marked by a 1 foot wide yellow line in front of the terminal. Penalties will be assessed as described in section 2.12 for unauthorized access to the SIDA. In the unlikely event that entry into a SIDA is required, contact the airport manager for escort.

Commented [FTD(1)]: Is there a SIDA?

The Contractor, through the Authorized Signatory, is responsible for the maintenance of records necessary to ensure retrieval of PIBs and final employee clearance. Should an employee lose their PIB they should immediately notify their employer, who would then immediately notify the Airport Manager. The Airport Manager will make a telephone confirmation of the employee's employment status prior to reissuing the PIB.

No person will be permitted access within the airport security fence unless that person has a PIB and the PIB signifies they have access to the area. All PIBs shall be worn on the outermost garment above the waist. Construction PIBs will only be valid in the immediate construction area and direct routes to/from the construction area. Failure to properly wear the PIB or improper use of the PIB may result in confiscation of the PIB by the Airport Manager, removal from the airport, and civil penalties imposed.

Commented [FTD(2)]: The airport only has 2 locked gates, at the north and south by AK Airlines

Training is required for all personnel. Training for construction supervisors and the CVO consists of 10 computer training modules (250 minutes total) in addition to other training required by the Airport Manager. Other personnel shall complete at least four computer training modules (163 minutes total) in addition to other training required by the Airport Manager. Training shall be scheduled by appointment in Adak with the Airport Manager or in Juneau with the SSO.

All contractor operations within the airport security fence shall be coordinated through a Command Vehicle Operator (CVO). Designate at least one employee to act as the CVO. The CVO's sole responsibilities are to operate a dual radio equipped vehicle, communicate with the Cold Bay FSS, and to coordinate operational use of the runway. Any employee designated a CVO shall have at least one year of documented experience in a position equivalent to the responsibilities of the CVO described below, be familiar with air carrier operating schedules, and be familiar with operating procedures on an uncontrolled FAR Part 139 certified airport.

The CVO shall have a vehicle equipped with a radio capable of communicating on the CTAF frequency, and a second radio capable of communicating with all other contract vehicles and equipment present on the Project. The CVO vehicle shall be equipped with an amber rotational beacon and a blue rotating beacon that may be operated independently. The CVO shall continuously occupy the dual radio equipped vehicle during all construction activities within the Air Operations Area (AOA) or Runway Obstacle Free Zone (ROFZ).

When required to clear the work area, the CVO shall activate the blue rotating beacon to notify all personnel to clear the AOA and ROFZ. The CVO will notify Cold Bay FSS when all equipment and personnel are clear of these areas. The blue rotating beacon shall remain on as long as personnel and equipment are required to be clear of these areas.

(ix) Two-Way Radio Communication

All Contractor and subcontractor personnel engaged in activities involving unescorted operation on AOA's will be trained by the Airport Manager, and shall observe the proper procedures for communications at all times, including use of the appropriate radio frequencies. Training on proper communication procedures is essential for maintaining airport operational safety.

When operating vehicles on or near open runways, taxiways or aprons, all Contractor and subcontractor personnel must understand the critical importance of monitoring and maintaining radio contact with inbound and outbound air traffic using the CTAF.

- **Radio Frequency:** Common Traffic Advisory Frequency (CTAF) – 122.9 MHz

All other construction related radio communications not on CTAF shall be limited to Federal Communications Commission (FCC) approved frequencies or radio bands.

(x) Vehicle Operations

All vehicles shall have a copy of the haul routes for the Project. Drivers shall be familiarized with the haul route, locations of NAVAIDs, and the Airport Manager's vehicle rules before beginning hauling. Vehicles crossing active movement areas shall be cleared by the CVO before crossing the movement area. Drivers shall confirm by personal observation that no aircraft is approaching their position when given clearance to cross a movement area. Aircraft always have the right of way.

Service all vehicles in the staging area. Park construction vehicles in the staging area when not in active use. Park construction vehicles outside of the ROFZ when not in immediate use (e.g. while idling). Parked equipment shall not obstruct any NAVAIDs.

(6) WILDLIFE MANAGEMENT

The primary wildlife safety concern at ADK is birds. Birds are attracted by possible sources of food, open water or areas that may provide shelter. Report the presence of birds or animals within the airport property to the Airport Manager in accordance with the airport's wildlife hazard management plan. Do not attempt to disperse birds or animals.

(a) Trash

Control and contain trash within all work areas, and especially within the airport property. It is the responsibility of all personnel who work at ADK to pick up trash and debris on the airfield.

Fish or animal carcasses that attract birds or wildlife can be a safety hazard. Report the presence of fish or animal carcasses to the Airport Manager, or his representative, so they can be removed.

(b) Standing Water

Standing water at construction areas is not allowed. Provide adequate drainage, and erosion and sediment control measures to prevent attracting birds and other wildlife.

(c) Poorly Maintained Fencing and Gates

ADK is not fenced in and does not require gate maintenance.

Commented [FTD(3)]: Do we want to do anything about the locked gates by AK Airlines?

(d) Disruption of Existing Wildlife Habitat

The Project has been properly permitted with the regulatory agencies having jurisdiction over wildlife. Disruption of existing wildlife beyond the Project footprint is prohibited.

(7) FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT

Waste and loose materials, commonly referred to as FOD, are capable of causing damage to aircraft landing gears, propellers, and jet engines. Control of FOD is a primary concern to safe airport operation. All debris must be removed from operational surfaces upon discovery or notification. The Contractor shall provide a pick-up broom truck (street sweeper) or other approved machinery and equipment to accomplish this task.

If FOD is not cleaned on an active runway prior to opening it, penalties will be assessed per section 2.12.

(a) Inspections

Participate in daily safety and final inspections as required in section 10 below. Take immediate action as required to cleanup, and prevent FOD on operational surfaces.

(b) Hauling

Do not haul on or across AOA surfaces (even when closed) unless authorized by the Airport Manager and approved by the Engineer in writing and included in the approved SPCD. Ensure all vehicles that must cross active areas to perform inspections, temporary marking maintenance, or other required activities

are swept clean, and checked for loose equipment, tools, or other objects that could become FOD.

(8) HAZARDOUS MATERIALS (HAZMAT) MANAGEMENT

Develop a Hazardous Materials Control Plan (HMCP), and Spill Prevention, Control and Countermeasure (SPCC) plan as required by the standard specification P-157 as quoted below:

Prepare the HMCP for prevention of pollution from storage, use, containment, cleanup, and disposal of all HAZMAT, including petroleum products related to construction activities and equipment. Include the HMCP as an appendix to the Storm Water Pollution Prevention Plan (SWPPP.) Compile Material Safety Data Sheets in one location and reference that location in the HMCP.

Designate a Contractor's Spill Response Field Representative with 24-hour contact information. Designate a Subcontractor Spill Response Coordinator for each subcontractor. The Superintendent and Contractor's Spill Response Field Representative must have 24-hour contact information for each Subcontractor Spill Response Coordinator and the Utility Spill Response Coordinator.

List and give the location and estimated quantities of HAZMAT (Including materials or substances listed in 40 Code of Federal Regulations [CFR] 117 and 302, and petroleum products) to be used or stored on the Project. HAZMAT must be stored in covered storage areas. Include secondary containment for all HAZMAT storage areas.

Identify the locations where fueling and maintenance activities will take place, describe the activities, and list controls to prevent the accidental spillage of petroleum products and other HAZMAT. Controls include placing absorbent pads or other suitable containment under fill ports while fueling, under equipment during maintenance or repairs, and under leaky equipment.

List the types and approximate quantities of response equipment and cleanup materials available on the Project. Include a list and location map of cleanup materials, at each different work site and readily available off site (materials sources, material processing sites, disposal sites, staging areas, etc.). Spill response materials must be stored in sufficient quantity at each work location, appropriate to the hazards associated with that site.

Describe procedures for containment and cleanup of HAZMAT. Describe a plan for the prevention, containment, cleanup, and disposal of soil and water contaminated by spills. Describe a plan for dealing with contaminated soil and water encountered during construction. Clean up spills or contaminated surfaces immediately.

Describe methods of disposing of waste petroleum products and other HAZMAT generated by the Project, including routine maintenance. Identify haul methods and final disposal areas. Assure final disposal areas are permitted for HAZMAT disposal.

Describe methods of complying with the requirements of Alaska Statute (AS) 46.04.010-900, *Oil and Hazardous Substances Pollution Control*, and 18 Alaska Administrative Code 75. Include contact information for reporting HAZMAT and petroleum product spills to the Project Engineer and reporting to federal, state and local agencies.

Prepare and implement an SPCC Plan when required by 40 CFR 112; when both of the following conditions are present on the Project:

- Oil or petroleum products from a spill may reach navigable waters (as defined in 40 CFR 112); and
- Total above ground storage capacity for oil and any petroleum products is greater than 1,320 gallons (not including onboard tanks for fuel or hydraulic fluid used primarily to power the movement of a motor vehicle or ancillary onboard oil-filled operational equipment, and not including containers with a storage capacity of less than 55 gallons)

Reference the SPCC Plan in the HMCP and SWPPP.

(9) NOTIFICATION OF CONSTRUCTION ACTIVITIES

(a) Maintenance of a List of Responsible Representatives/ Points of Contact

The Contractor shall develop a list of contacts, in consultation with the Airport Manager and Engineer, consisting of both Contractor personnel and DOT&PF employees. Although the primary contacts for all matters involving safety and security remain the Airport Manager, Engineer, and Contractor Superintendent, certain issues may warrant the delegation of response to individuals capable of immediately taking action. Section 1 contains a preliminary list of DOT&PF personnel associated with the Project.

(b) Notices to Airmen (NOTAM)

Before beginning any construction activity, coordinate with the Airport Manager through the Engineer to provide information for all required NOTAMS and allow a minimum of 14 days prior to the date that the NOTAM needs to be issued by. Work that requires issuance of a NOTAM cannot begin until the NOTAM is authorized by the Airport Manager, through the Engineer and its issuance by the FAA is confirmed.

(c) Emergency Notification Procedures

For all non-airport related emergencies contact Local Emergency Personnel (see table below). This includes required medical, fire, or police response on or off airport property. Under emergency conditions involving immediate loss of human life, or threat to wellbeing, contractor personnel may allow access to airport property by uniformed emergency services. Maintain airfield security in all other respects. Notify the Engineer, and the Airport Manager immediately following any emergency calls.

Emergency Contact	
Medical	(907) 592-8383
Police	911 or (907) 592-3323

In all matters involving airport safety and security, the Airport Manager and the Engineer are the primary contacts that the Contractor is required to immediately and first notify upon discovery of any issue or concern.

(d) Coordination with Local Emergency Personnel

Coordinate with local emergency personnel as required by this CSPP and the Airport Manager. Keep local emergency personnel informed of all area closures, restrictions to access routes and service roads on, or

near the airport related to construction activities. Contact and coordinate with local emergency personnel for any planned utility outages, including water supply, or in the event of accidental utility outages. Provide the same information to the local emergency personnel as is provided to all other air carriers, including construction safety drawings and weekly updates.

Prior to storing Hazardous Materials on airport property, get approval from the Airport Manager for the storage location. The Airport Manager will review the proposal to ensure ARFF equipment can access the storage area during an emergency.

(e) Notification to the FAA

Provide all notifications to FAA, through the Engineer as required under the Code of Federal Regulation (CFR) Title 14 and Parts 77 & 157.

Title 14 Part 77 establishes standards and notification requirements for object affecting navigable airspace. This notification serves as the basis for:

- Evaluating the effect of the construction or alteration on operating procedures
- Determining the potential hazardous effect of the proposed construction on air navigation
- Identifying mitigating measures to enhance safe air navigation
- Charting of new objects
- Notification allows the FAA to identify potential aeronautical hazards in advance thus preventing or minimizing the adverse impacts to the safe and efficient use of navigable airspace.

Title 14 Part 157 establishes standards and notification requirement for anyone proposing to construct, alter, or deactivate a civil or joint-use (civil/military) airport. This regulation also addresses proposal to alter the statue or use of such an airport. This notification serves as the basis for evaluating the effects of the proposed action on the safe and efficient use of airspace by aircraft and the safety of persons and property on the ground. These effects include but are not limited to evaluating:

- The effect the proposed action would have on existing or proposed traffic patterns of neighboring airports.
- The effect the proposed action would have on the existing airspace structure and projected programs of the FAA.
- The effect that existing or proposed objects (on file with FAA) within the affected area would have on the airport proposal.
- Notification allows the FAA to identify potential aeronautical hazards in advance, thus preventing or minimizing the adverse impacts to the safe and efficient use of navigable airspace.

Submit an Airport Sponsor Strategic Even Submission Form to provide a 45 day notice prior to the event of construction, located at:

https://www.faa.gov/airports/northwest_mountain/engineering/airspace_analysis/media/strategic-event-notification.pdf

If construction operations require a shutdown of more than 24 hours, or more than 4 hours daily on consecutive days, of a NAVAID owned by the airport but maintained by the FAA, provide a 45-day minimum notice to FAA ATO/Technical Operations prior to facility shutdown. The airport operator shall notify the appropriate FAA ATO Service Area Planning and Requirements (P&R) Group a minimum of 45 days prior to impacting NAVAIDS.

Coordinate work for an FAA owned NAVAID shutdown with the local FAA ATO/Technical Operations office, including any necessary reimbursable agreements and flight checks. Detail procedures that address unanticipated utility outages and cable cuts that could impact FAA NAVAIDs. In addition, provide seven days notice to schedule the actual shutdown.

(10) INSPECTION REQUIREMENTS

(a) Daily (or more frequent) Inspections

Conduct safety and security inspections at least twice daily (every 12 hours) during the construction of the Project. Schedule inspections to not conflict with the active RSA, ROFA, and OFZ detailed in section 17 below. No other work is allowed inside the active runway areas.

Safety and security inspections will be attended by the Engineer, and / or Airport Manager, or their representatives. Repair or remedy all safety and security issues immediately. Do not wait until an inspection to address issues. Inspections are to be used to verify that all required maintenance is being performed in a timely manner.

Notify the Airport Manager and the Engineer regarding any safety or security issues found during the inspections, regardless of cause. Include at least the following items in the inspections (other items may be added at the direction of the Engineer):

- Inspect each temporary marking and all temporary lighting for serviceability, completeness, and durability
- Inspect each required crossing of any active surface for the presence of FOD
- Inspect placement and condition of all barricades located on or near airport runways
- Inspect haul routes for proper markings and barricades. Ensure that vehicles are using only designated haul routes for the phase under construction at the time.
- Ensure that vehicles are using only the designated access points for the phase under construction at the time.
- Inspect runway and taxiway safety areas to ensure they are free of ruts, humps, and depressions over 3”.

(b) Final Inspections

Perform a joint final safety inspection with the Airport Manager and the Engineer prior to the opening of closed runways for aircraft operations. Verify that all runway edge lights and airport markings are serviceable and correct. Remove all FOD as directed, and any other construction related materials not allowed to remain on airport property. RSA's or TSA's must meet the requirements agreed upon by the Contractor, Engineer, and Airport Manager prior to the runway or taxiways reopening.

The final safety inspection may become part of the Project Final Inspection detailed under the standard specifications section 50-15, at the discretion of the Engineer.

(11) UNDERGROUND UTILITIES

As-builts of underground conduit are available on the Department website. The majority of the conduit can be found at the project: Adak Airport Lighting Replacement Rebid in 2008 located at http://dot.alaska.gov/edocs_code/searches/asbuiltsearch.cfm. Coordinate with the FAA for utility

locations involving FAA owned NAVAIDs.

(12) PENALTIES

All Contractor and Subcontractor personnel must abide by Contract requirements, including the CSPP and the approved SPCD, at all times for the duration of the Project. The Contractor shall be responsible for payment of any fines levied by any federal, state, or local agency having authority that result from the Contractor's failure to comply with Contract requirements. Any Contractor failure to comply with Contract requirement(s) may result in suspension of work; and individual workers are subject to removal from the Project per section 80-05, third paragraph:

The Contractor shall comply with any written order by the Engineer to remove workers, who, in the opinion of the Engineer, violate operational regulations, violate construction safety plan requirements, violate security plan requirements, perform the work in an unskilled manner, who are intemperate or disorderly, or who jeopardize the safety of the public, other workers or Engineer's personnel. The Contractor shall allow removed workers to return to the project only with the Engineer's written permission. The Engineer may suspend the work if the Contractor fails to furnish suitable and sufficient personnel necessary to perform the work, or fails to remove any worker at the Engineer's order.

No one is allowed to enter the SIDA without proper authorization. Each unauthorized entry into the SIDA can result in an \$11,000 fine from the Transportation Security Administration (TSA). The TSA could issue these fines against both the Contractor and the Department. The Contractor is responsible for any fines assessed to the Department by 17 AAC 45.020(I). Consequently the Contractor could be liable for up to \$22,000 for each violation.

Commented [FTD(4)]: Is there a SIDA?

If, in the opinion of the Airport Manager, the Contractor's operations cause a safety hazard to aircraft the Airport Manager has the authority to close the airport to all aircraft operations until the safety hazard no longer exists. The Contractor will be charged a minimum of \$5,000 per safety hazard for closure of the airport and \$10,000 per hour until the safety hazard is removed and the airport open for operation.

If FOD is not immediately removed from the AOA open to aircraft the Airport Manager may direct others to remove it. The Contractor will be charged the cost incurred by the Airport Manager for removing the FOD.

Anyone who violates the Airport Manager's vehicle operation rules on the airport may have their driving authorization revoked.

(13) SPECIAL CONDITIONS

(a) Emergency Landings

Aircraft declaring an emergency will be allowed to land at the airport. The work area may need to be cleared of personnel and equipment on extremely short notice (15 minutes or less). The Contractor shall be prepared at all times to remove temporary closure markings and runway barricades on short notice. Assign this task to as many personnel as is required to accomplish the removal in a timely and effective

manner as part of the SPCD. Clear the runway and RSA when advised by the FSS, or directed by authority of the Airport Manager or Engineer.

(b) Water for Dust Control

Provide water for dust control as required, and as directed. Dust, smoke, steam, or other airborne particulates caused by Contractor activities may be considered a safety violation as determined by the Airport Manager or Engineer.

(c) Half-Width Construction activities

Half-width construction will be required during Phase 1 and Phase 2 of the Project. Place temporary markings on the active runway, install temporary lighting, cover or disable edge lights on the inactive runway half, and obliterate markings on the inactive runway half prior to opening the runway half-width.

(d) Visual Aids/Runway Edge and Threshold Lighting

Cover or disable existing runway edge and threshold lighting on the closed portion of the runway. Cover or otherwise disable taxiway and runway identifier signs as required. Coordinate with the Airport Manager to turn off the airport rotating beacon when required. Provide temporary threshold lighting properly anchored to withstand jet or propeller blast. Provide temporary runway or extended taxiway edge lighting as required. All temporary lighting must meet the requirements of AC 150/5340-30 *Design and Installation Details for Airport Visual Aids*.

(e) Runway Markings

Remove markings that are not part of the active runway marking system. Provide minimum temporary runway markings as specified on the construction safety drawings included in this CSPP (Appendix D) and the planset. Temporary markings must meet the requirements of AC 150/5340-1 *Standards for Airport Markings*.

(f) NOTAMs

Coordinate with the Airport Manager to provide information required for issuance of NOTAMs a minimum of 14 days prior to the date that the NOTAM needs to be issued by.

(g) Other Conditions

Contractor shall be aware of aircraft procedures when working under low-visibility conditions and ensure that runway sensitive areas are clear before aircraft take-offs and landings. Work during security breaches shall be coordinated in accordance with FAA. Aircraft accidents shall suspend work until clearance is given from FAA. Aircraft take offs and landings shall be suspended in the event of a vehicle/pedestrian deviation until clearance is given from FAA.

(14) RUNWAY AND TAXIWAY VISUAL AIDS, MARKING, LIGHTING, SIGNS, AND VISUAL NAVAIDS

(a) General

See the attached construction safety drawings included in this CSPP and the planset for locations and descriptions of markings, lighting, signs, and visual NAVAIDS.

Lighting is to conform to AC 150/5340-30, Design and Installation Details for Airport Visual Aids, AC 150/5345-50, Specifications for Portable Runway and Taxiway Lights, and AC 150/5345-53 Airport Lighting Certification Program.

During runway closure periods, secure all associated navigational landing aids. For any work on the Project that requires runway closure for work inside the Runway Safety Area (RSA), shutdown or NOTAM the associated instrument and visual landing aids to navigation.

Place lighted 'X' markings on Runway 5/23 when it is closed during the night. Cover or disable edge lighting, PAPIs, REILs, and threshold lighting. Place barricades across the Taxiway 'A' when it is closed and mark with an "X" as shown on sheet A10. Reopen the closed Runway 5/23 in emergency situations and to all aircraft in distress. Nighttime full closures require advanced coordination as described in paragraphs 3 (a). See paragraph 18(a).

Markings shall be in compliance with 150/5340-1, Standards for Airport Markings. Place permanent markings and temporary markings on Runway 5/23 and Taxiway 'A' as shown in sheets L1-L4.

Signs are to conform to AC 150-5345-44, Specification for Runway and Taxiway Signs, AC 50/5340-18, Standards for Airport Sign Systems, and AC 150/5345-53, Airport Lighting Certification Program.

(b) Markings

Temporary closure and threshold markings, as shown on the construction safety drawings included in this CSPP and the planset, will be used during full closure to the runway and taxiways.

(c) Airport Lighting and Visual NAVAIDS

Place lighted 'X' markings on runways that are closed during the night. Cover or disable edge lighting, VASIs, REILs, and threshold lighting. Place barricades across the taxiways and mark with an "X" as shown on sheet A9-A10. Reopen the closed Runway 5/23 in emergency situations and to all aircraft in distress. See 2.09 C. Nighttime full closures require advanced coordination as described in paragraphs 2.01F. See paragraph 2.18.

All visual aids are owned and maintained by the Department. All NAVAIDS are owned and maintained by the FAA.

(i) Runway Edge and Threshold Lighting

Cover or disable edge lighting and threshold lighting during runway and taxiway closures.

(ii) Taxiway Edge Lighting

Taxiway edge lighting will be modified to meet the new requirements in AC 150/5340-30

(15) MARKING AND SIGNS FOR ACCESS ROUTES

Locate the staging areas outside the runway object free area (ROFA). The staging areas shall be connected to the runway by access routes. The access points for the haul routes are shown on sheet A5 of the Plans. Equipment operators shall not travel over the final grade of pavement. Interim runway, apron and taxiway markings shall be placed as shown on sheets A8-A9. Hazard area barriers shall be of the low style as described on sheet A10 of the Plans, and shall not be placed within an active TSA or RSA.

(16) HAZARD MARKING AND LIGHTING

(a) Purpose

The purpose of hazard markings and lighting is to delineate the construction area from the AOA's. It also serves as a visual warning to pilots, and airport ground traffic, that to proceed past the markers could jeopardize safety of persons or equipment, including damage to aircraft or loss of life. Hazard marking and lighting must not itself become a hazard to the safe operation of aircraft. Hazard markings and lighting must be separated from active surfaces by a suitable distance usually defined by the OFA or OFZ, but depending on work location, type of aircraft expected to be operating, and other factors.

Hazard marking and lighting must also identify open manholes, small areas under repair, stockpiled material, waste areas, and areas subject to jet blast. Consider less obvious construction-related hazards and include markings to identify FAA, airport, and national weather service facilities cables and power lines, airport surfaces, such as RSA, OFA, and OFZ; and other sensitive areas for contractor personnel to avoid these areas.

Anticipated locations of hazard marking and lighting including yellow X's and temporary striping for each stage are shown on sheets A8-A9 of the Plans. Include in the SPCD the contact information of at least one person available 24 hours a day for emergency maintenance of hazard lighting.

(b) Equipment

Proposed locations of hazard markings and lighting are shown on the construction safety drawings included in this CSPP and the planset. Other locations or equipment may be proposed by the Contractor or required by the Department, depending on the Contractor's proposed schedule and sequencing of work within each specified Phase or the Contractor's proposed means and methods. The Contractor shall include proposed equipment, including signs, markings, and lighting in the SPCD submittal.

(c) Spacing of Barricades

The spacing of barricades must be such that a breach is physically prevented, barring a deliberate act. For example, if barricades are intended to exclude vehicles, gaps between barricades must be smaller than the width of the excluded vehicles, generally 4 feet. Provision must be made for local emergency personnel access if necessary. If barricades are intended to exclude pedestrians, they must be continuously linked. Continuous linking may be accomplished through the use of ropes, securely attached to prevent FOD.

(d) Maintenance

Maintain temporary markings and hazardous area barriers throughout each specified Phase. Lighting shall be checked to ensure it is operating correctly at least once per day. Repair damaged or non-functioning markings, barriers, and flashers immediately upon discovery or notification.

(17) PROTECTION OF RUNWAY AND TAXIWAY SAFETY AREAS, OBJECT FREE AREAS, OBSTACLE FREE ZONES, AND APPROACH/DEPARTURE SURFACES

See the construction safety drawings included in this CSPP and the planset for locations and limits of the following areas / zones.

Before beginning construction, coordinate with the Engineer to identify the RSA, OFZ, and the OFA for the active runway. The Engineer may require surveyed location of the RSA, OFZ, or OFA by the Contractor, as part of the construction surveying requirement. This will define a boundary for use of construction equipment during aircraft operations.

(a) Runway Safety Area (RSA)

The RSA width for the Runway 5/23 is 400-ft and extends 200-ft beyond each runway end. Runway Safety Area dimensions will change for each phase; see the phasing drawings included in this CSPP and the planset for each phase's dimensions. No equipment, vehicles or personnel will be allowed within an RSA when the runway is open to aircraft operations. All equipment, vehicles and personnel must vacate the RSA prior to opening the runway to aircraft operations. No material stockpiles will be allowed at any time within an active RSA.

Grades steeper than 5% or surface variations greater than three inches cannot be permitted in the RSA at any time while the runway is open to aircraft. Grades steeper than 2% cannot be permitted on the end RSA of the Runway 13 while the reduced temporary threshold is in place.

(b) Runway Object Free Area (ROFA)

The ROFA width for the Runway 5/23 is 650-ft and extends 200-ft beyond each runway end.

Equipment and materials shall be stored outside of the ROFA and outside the transition areas as depicted in paragraph 2.05 B.

The Contractor may have open trenches that are marked off with barricades in the ROFA.

(c) Runway Obstacle Free Zone (ROFZ)

The ROFZ width for the runway is 400-ft and extends 900-ft beyond each runway end. No personnel, equipment, or vehicles may occupy the ROFZ when an aircraft is operating on the runway. Work may resume after the aircraft has departed. No stockpiles will be allowed within the ROFZ at any time.

Never park unattended or idling vehicles within the ROFZ.

The same requirements for open trenches in the RSA apply to open trenches in the ROFZ.

(d) Taxiway Safety Area (TSA) and Taxiway Object Free Area (TOFA)

The TSA is 171' wide for Taxiway 'A'. No work will be allowed within a TSA when the taxiway is open to aircraft operations. Taxiways closed for construction will not be subject to TSA standards.

The TOFA is 259' wide for Taxiway 'A'. No work will be allowed within a TOFA when the taxiway is open to aircraft operations. No equipment or vehicles are to be parked or left unattended in the active TOFA at any time.

The Contractor shall not have open trenches or barricades in the TSA of an active Taxiway. Trenches marked off with barricades are allowed in the TOFA of an active Taxiway.

(e) Runway Approach/Departure Surfaces

All personnel, materials, and/or equipment must remain clear of the applicable threshold siting surfaces (see AC 150/5300-13). Objects that do not penetrate these surfaces may still be obstructions to air navigation and may affect standard instrument approach procedures. Coordinate with the FAA Airport Regional or District Office through the Engineer.

Obstruction removal work, construction equipment or disposal of material may penetrate the 20:1 surfaces defined in AC 150/5300-13. Any activity that would penetrate these surfaces shall be restricted to nighttime closures of the airport, unless otherwise coordinated with and approved by the FAA through the Engineer.

(18) OTHER LIMITATIONS ON CONSTRUCTION

(a) Prohibitions

(i) Airport Closures

If closures are needed, contact the Adak Airport Manager, Innocent Dushkin at 907-592-8026.

(ii) No Crossing of Active Runway

No crossing of active runways will be permitted during the Project.

(iii) Airport Marking System

Use of light colored sand bags, or other materials that interfere with the airport marking system will not be allowed. If sand bags are used they cannot be taller than 3-inches and must be the same color as the item they are holding down.

(iv) Flare Pots

The use of flare pots on airport property is prohibited at any time.

(b) Restrictions

(i) Use of Tall Equipment

Use of tall equipment that must routinely operate more than 16 feet above ground level requires prior authorization of the Airport Manager and inclusion on form 7460-1 as specified under 14 CFR part 77 (See

section 9e above). Use of tall equipment such as cranes, drill rigs, or similar will require obstruction lighting and use of orange and white flagging. See advisory circular (AC) 70/7460–1 *Obstruction Marking and Lighting*, paragraph 42g and subsequent guidance. Equipment must be lowered to be as close to ground level as practical when not actively employed, even when parked off airport property.

(ii) Use of Tools with Open Flames

Open-flame welding or torch cutting operations are permitted only with the approval of the Airport Manager and only when adequate fire safety precautions are in place.

(iii) Open Trenches, Excavations, and Stockpiles

Prominently mark open trenches, excavations, and stockpiled materials at the construction site and light these obstacles during hours of restricted visibility and darkness. No open trenches are allowed in the RSA, TSA or TOFA when the runway or taxiway is open. Trenches must be covered with approved material or backfilled. No material stockpiles are allowed in the RSA, TSA or TOFA when the runway or taxiway is open or within the ASOS critical areas. Constrain stockpiled material to prevent its movement as a result of the forecast wind conditions.

(iv) Vehicle Use

No distracted driving is permitted on the Project whether on Airport Property or on public roads. Failure to abide by this prohibition may result in confiscation of the PIB by the Airport Manager and removal from the airport as well as the imposition of civil penalties.

(v) Stockpiles

No material stockpiles are allowed in the RSA, ROFA, TSA or TOFA of an open and active runway or taxiway.

Construction Safety and Phasing Plan

Appendix D.1 – Construction Safety and Phasing Drawing