RUNWAY 7-25 COMPLEX LIGHTING AND PAVEMENT REHABILITATION

CONTRACT NO. 201737338

CONSTRUCTION SAFETY AND PHASING PLAN

Issued for Bid November 20, 2017

CITY & COUNTY OF DENVER
DEPARTMENT OF AVIATION
CONSTRUCTION SAFETY AND PHASING PLAN (CSPP)

1. COORDINATION

During construction, airport operational safety is of paramount importance. Coordination of project information to all individuals involved with the project is essential for ensuring that safe operations are maintained at all times. In order to minimize potential for incidents during construction, it is imperative that all individuals involved with the project and/or airport users be kept informed of any and all changes to operations. Discussions of operational safety will need to take place throughout the entire life of the project, including design, bidding, pre-construction, and construction. Meetings between the Denver International Airport (DEN) Project Manager, Airport Operations Manager, contractor, sub-contractors, and airport users will be required to discuss specific project related impacts to operations. Denver International Airport is ultimately responsible for the safety at the airport. Notice to users of operational changes due to construction will be issued via NOTAMS by the airport. No closures will be permitted without the pertinent NOTAM in place for each specific closure. Emergency access for both airport (ARFF) and off-airport (Police, Fire, and EMT) based emergency service shall be maintained at all times. Routing for such traffic shall be determined and made known to all supervisor personnel involved in the construction project. Coordination of this access will be proposed by the Contractor and approved by the DEN Project Manager and the Airport Operations Manager.

A pre-construction meeting will be held after the project has been awarded and prior to the contractor beginning work. The Airport staff and the Contractor’s on-site supervisory staff shall be present. Safety and this document will be a significant topic on the agenda. Operational safety during construction will be a main topic of discussion at the pre-construction meeting.

A. CONTRACTOR PROGRESS MEETINGS

The Contractor is required to have weekly construction progress meetings to discuss all relevant construction topics including safety reminders, scheduling, and general construction issues. Operational safety will be a standing agenda item for discussion during these progress meetings. A review of the Contractor’s adherence to the project’s Construction Safety and Phasing Plan (CSPP) will be made at each meeting. Any deficiencies or violations will be identified and remedied. In attendance will be the Contractor, the DEN Project Manager, the DEN Operations Manager, and any other pertinent personnel. The location and time of the weekly meetings will be determined during the pre-construction meeting.

B. SCOPE OR SCHEDULE CHANGES

In the case of a scope or schedule change, the Contractor shall notify the DEN Project Manager or his/her representative immediately. All parties involved will need to evaluate the impact(s) of the change and will determine what measures will need to be taken to maintain a safe construction site. Change in the scope or duration of the project may necessitate revisions to the Construction Safety and Phasing Plan (CSPP).

C. FAA ATO COORDINATION

The FAA ATO will need to be notified immediately of any changes that affect aircraft movement within the airport which include airway facility shutdowns and restarts. The Airport will be in responsible for coordinating any required NOTAMS to the FAA ATCT.

Airfield Lighting within the project area will be disabled for the entire duration of the project. This includes taxiway lighting and signage systems. Coordination between the Contractor, DEN Project Manager, and FAA Facilities will be required to shutdown all equipment during construction. Early
coordination with the FAA ATO and Facilities will be conducted by the Airport to ensure the timely
schedule of shutdowns of equipment and operational areas.

2. PHASING

All work within this project is contained within 3 milestones, which contain all work for Schedules I-IV.
Schedules I and II include the federal portions of airfield lighting rehabilitation and the pavement
rehabilitation. Schedules III and IV are non-federal schedules that include additional lighting
rehabilitation and pavement maintenance, such as spall repairs and joint sealing.

The phasing proposed for this project was developed with help from the Airport and is considered to
be the most effective way of maintaining the required airport personnel / LAR access through the
area, while imposing the least amount of impact on contractor operations, and without sacrificing
safety. In addition, the ability to close Taxiways B4 and G south of Taxiway WA and the entire
Runway 7-25 complex will significantly reduce the proximity of aircraft operations to the construction,
resulting in increased safety. The phasing for this project is presented below, and is visually depicted
in the Construction Safety and Phasing Plan on the plan sheets (G-009, G-040 thru G-045, G-050,
and G-060) attached at the back of this document.

A. PHASE ELEMENTS

1. Milestone 1 - Schedules I-IV

Areas Closed to Aircraft Operations

Construction completed for this milestone consists of installation of new or rehabilitation
of existing airfield signs, lighting, and electrical cable, along with pavement removal and
replacement, painting, spall and joint repair, and other miscellaneous work on the
Runway 7-25 Complex south of the WA Deice Pad ramp on Taxiway B4, and south of
the intersection of Taxiways B4 and G on Taxiway G.

The construction operations will be within the Runway Object Free Area and Taxiway
Safety Area. The runway and all associated taxiways south of the WA Deice Pad ramp
on Taxiway B4, and south of the intersection of Taxiways B4 and G on Taxiway G will
be closed for the duration of the milestone.

The Contractor will be given 90 days to complete the work for Milestone 1. The
Contractor will be allowed to work 7 days a week with 24 hour access to the project site.
During all construction hours, the Contractor will have unlimited access to all project
areas within the boundaries established on the attached construction phasing plan
sheets. Work hours as detailed in this report may be altered at the Airport’s discretion.

Prior to the commencement of construction operations, the Contractor shall coordinate
with DEN Project Manager and Operations to ensure that the runway and all taxiways
within the project area have been NOTAM closed and that all air operations are clear of
the closures. All NOTAMs will be issued by the Airport for all closures of airfield
pavements within the project limits. Upon confirmation of closures, the Contractor will
be required to place all approved runway closure markers, low-profile flasher barricades,
tubular flasher barricades, traffic cones, and traffic guidance signs as detailed on sheet
G-060.

Duration of Closures

All pavements south of the WA Deice Pad ramp on Taxiway B4, and south of the
intersection of Taxiways B4 and G on Taxiway G for the Runway 7-25 Complex will be
closed at all times for the full 90 calendar day duration of the milestone. This includes
Runway 7-25, Taxiways B, B1 through B10, and portions of Taxiways B4 and G. It is anticipated that construction will take place in the late spring of 2018.

Taxi Routes
During the milestone duration Taxiway B4 will be barricaded off to taxiing traffic south of the WA Deice Pad ramp just north of the 84th Avenue crossing. Taxiway G will be barricaded off to taxiing traffic south of the intersection of Taxiways B4 and G. The barricades will be placed outside of the Object Free Area of the WA Deice Pad on Taxiway B4, and south of the Taxiways B4 and G intersection on Taxiway G to allow aircraft to access the WA Deice pad from Taxiway B4 to accommodate phases on the Taxiway F & G Pavement, Lighting, and Safety Areas Rehabilitation project that will be constructed concurrently with this project.

ARFF Access Routes
In the event of an emergency, ARFF access to the project will be via Taxiway B4 or G. Barricades placed at the entrance of the work area will be spaced to allow for the passage of ARFF equipment. If any pavement areas are under construction, they will be delineated by barricades or cones to identify hazard areas for vehicular and ARFF access.

Construction Staging
The Contractor’s staging area will be located as shown on the construction drawings. The Contractor’s staging area will not impact any airfield operations or cause potential obstructions to DEN airspace, approaches, or Part 77 surfaces.

Sufficient area will be made available to the Contractor for the storage of all material. All contractor equipment and material will be required to be stored at the staging area during idle periods of contractor operations. All employees will be required to park offsite except for those employees that have driving privileges on the airfield.

Construction Access and Haul Routes
The construction access and haul route to and from the contractor staging area to the project site will be on a pre-determined route shown on the attached project plan sheet G-009.

Section 5 of this document describes in detail how the Contractor will access the project work area.

Impacts to NAVAIDS
Airfield lighting will be disabled within the Milestone 1 limits for the entire duration of the project. This includes runway and taxiway lighting and signage systems within the Milestone 1 limits. In addition, all Precision Approach Path Indicators (PAPI), Runway End Identifier Lights (REIL) and Instrument Landing System (ILS) equipment, including approach lighting, localizer antennas, and glide slope antennas associated with Runway 7-25 will be shut down for the duration of the project. Coordination between the Contractor, DEN Project Manager, and FAA Facilities will be required to shutdown all equipment during construction. Early coordination with the FAA ATO and Facilities will be conducted by the Airport to ensure the timely schedule of shutdowns of equipment and operational areas.

Prior to opening the Runway 7-25 Complex at the completion of the project, coordination between the Contractor, DEN Project Manager, and FAA Facilities will again be required for restoring the runway and taxiway lighting and signage systems, PAPI’s, REIL’s and
all ILS equipment to ensure all systems are operational prior to opening Runway 7-25 and associated taxiways.

**Lighting and Marking Changes**
With the closure of the Runway 7-25 and associated taxiways, no temporary lighting adjustments or markings will be required. All impacted lighting/sign circuits for the project area will be shutdown or covered during the project duration.

**Available Runway Length**
This section is not applicable for this project.

**Declared Distances**
This section is not applicable for this project.

**Required Hazard marking and Lighting**
Both low profile lighted barricades and tubular flasher barricades will be used to delineate closed AOA pavements and limits of construction or hazardous areas. All barricades will be placed outside of active taxiway safety areas and will be spaced according to AC 150/5370-2F to prevent unauthorized access.

Contractor shall use traffic cones to delineate individual areas of construction within the project site. This will notify vehicles and persons of hazards areas on the runway and taxiways.

**Lead Times for Required Notifications**
Coordination between the Contractor and DEN Project Manager must be maintained to ensure for the timely notifications for all construction activities, runway/taxiway closures, and NAVAID / equipment shutdowns. Notifications shall be a regular discussion item for all preconstruction and construction meetings.

2. **Milestone 2 - Schedules I-IV**

**Areas Closed to Aircraft Operations**
Work completed for this milestone consists of installation of new or rehabilitation of existing airfield signs, lighting, and electrical cable, along with pavement removal and replacement, painting, spall and joint repair, grading, and other miscellaneous work on Taxiway B4 north of the 84th Avenue crossing and adjacent to the WA Deice Pad and the intersection of Taxiways B4 and G south of Taxiways WA and AA.

The construction operations will be within the Taxiway Safety Area. The intersection of Taxiways B4, G south of Taxiways AA and WA will be closed to aircraft for the duration of the milestone. During all construction hours, the Contractor will have unlimited access to all project areas within the boundaries established on the attached construction phasing plan sheets. Work hours as detailed in this report may be altered at the Airport’s discretion.

The Contractor will be given 12 days to complete the work for Milestone 2. Milestone 2 will be constructed concurrently with Milestone 1. The Contractor will be allowed to work 7 days a week with 24 hour access to the project site. During all construction hours, the Contractor will have unlimited access to all project areas within the boundaries established on the attached construction phasing plan sheets. Work hours as detailed in this report may be altered at the Airport’s discretion.
Prior to the commencement of construction operations, the Contractor shall coordinate with DEN Project Manager and Operations to ensure that all taxiways within the project area have been NOTAM closed and that all air operations are clear of the closures. All NOTAMs will be issued by the Airport for all closures of airfield pavements within the project limits. In addition, all work within this area must be coordinated with the Taxiways F & G Pavement, Lighting, & Safety Areas Rehabilitation project. Upon confirmation of closures, the Contractor will be required to place all approved low-profile flasher barricades, tubular flasher barricades, traffic cones, and traffic guidance signs as detailed on sheet G-060.

Prior to opening the area up to aircraft traffic, the contractor shall remove the barricades and perform a visual inspection of the project area with DEN Operations to ensure no safety issues will arise as a result of the construction activities. If any potential safety concerns are identified, the contractor shall immediately work to resolve these concerns to the satisfaction of DEN Operations. The area of closure will be opened for aircraft traffic following the completion of construction activities after the approval of DEN Operations.

Duration of Closures
The impacted pavement area Taxiway B4 at and north of the ramp for the WA Deice Pad and the intersection of Taxiways B4 and G south of Taxiways WA and AA will be closed at all times for the full 12 calendar day duration of the milestone. It is anticipated that construction will take place in the spring of 2018.

Taxi Routes
During the closure for construction of this milestone, the intersection of Taxiways B4, G south of Taxiways WA and AA, and the ramp to the WA Deice Pad on Taxiway B4 will be barricaded off to taxiing traffic. Barricades around the closed area will notify aircraft that this area is closed to aircraft operations. Taxiways WA and AA will remain open for use by aircraft.

The Taxiway F & G Pavement, Lighting, & Safety Areas Rehabilitation project will be constructed at the same time as the Runway 7-25 Complex Lighting and Pavement Rehabilitation project. These two projects will overlap at the intersection of Taxiway WA and Taxiway G. Also, two of the milestones of the Taxiway F & G Pavement, Lighting, & Safety Areas Rehabilitation project requires aircraft routing through the WA Deice pad via Taxiway B4. These two projects will require approval of the sequence of work from the Den Project Manager and DEN Operations to ensure the construction is properly completed on time without sacrificing safety.

ARFF Access Routes
In the event of an emergency, ARFF access to the project will be via Taxiways G or AA. Barricades placed at the entrance of the work area will be spaced to allow for the passage of ARFF equipment. Any hazard areas will be delineated for vehicular and ARFF access.

Construction Staging
The Contractor’s staging area will be located as shown on the construction drawings. The Contractor’s staging area will not impact any airfield operations or cause potential obstructions to DEN airspace, approaches, or Part 77 surfaces.

Sufficient area will be made available to the Contractor for the storage of all material. All contractor equipment and material will be required to be stored at the staging area
during idle periods of contractor operations. All employees will be required to park offsite except for those employees that have driving privileges on the airfield.

**Construction Access and Haul Routes**
The construction access and haul route to and from the contractor staging area to the project site will be on a pre-determined route shown on the attached project plan sheet G-009.

Section 5 of this document describes in detail how the Contractor will access the project work area.

**Impacts to NAVAIDS**
Impacted airfield lighting and signage within this milestone will be temporarily shut down or covered during nighttime construction hours to avoid leading aircraft into the closed area. Coordination between the Contractor, DEN Project Manager, and FAA Facilities will be required to shutdown all equipment during construction. Early coordination with the FAA ATO and Facilities will be conducted by the Airport to ensure the timely schedule of shutdowns of equipment and operational areas.

Prior to opening the closed area to aircraft following completion of construction activities, the contractor will coordinate with the DEN Project Manager and DEN Operations to restore all impacted lighting and signage systems for normal operations. All lighting and signage systems must be operational and approved by DEN Operations prior to opening the area to aircraft traffic following each shift.

**Lighting and Marking Changes**
With the closure of the intersection of Taxiways B4, G south of Taxiways WA and AA no temporary lighting adjustments or markings will be required. All lighting/sign circuits for the project area will be shutdown or covered during construction hours.

**Available Runway Length**
This section is not applicable for this project.

**Declared Distances**
This section is not applicable for this project.

**Required Hazard marking and Lighting**
Both low profile lighted barricades and tubular flasher barricades will be used to delineate closed AOA pavements and limits of construction or hazardous areas. All barricades will be placed outside of active taxiway safety areas and will be spaced according to AC 150/5370-2F to prevent unauthorized access.

Contractor shall use traffic cones to delineate individual areas of construction within the project site. This will notify vehicles and persons of hazards areas on the runway and taxiways.

**Lead Times for Required Notifications**
Coordination between the Contractor and DEN Project Manager must be maintained to ensure for the timely notifications for all construction activities, runway/taxiway closures, and NAVAID / equipment shutdowns. Notifications shall be a regular discussion item for all preconstruction and construction meetings.
3. **Milestone 3 - Schedules I and III**

**Areas Closed to Aircraft Operations**

Work completed for this milestone of the project consists of rehabilitation of airfield lighting and installation of new electrical cable at the intersection of Taxiways B4, G, AA, and WA.

The construction operations will be within the Taxiway Safety Area. The intersection of Taxiways B4, G, AA, and WA will be closed to aircraft at night for the duration of the milestone. The hours of nighttime closures within this milestone will be coordinated with the DEN Project Manager prior to commencement of construction activities.

The Contractor will be given 4 days to complete the work for Milestone 3. The work will be conducted at night and opened during the day for aircraft operations. The Contractor will be allowed to work 7 days a week during nighttime hours. This work will be accomplished concurrently with Milestone 1 work. In addition, all work within this area must be coordinated with the Taxiways F & G Pavement, Lighting, & Safety Areas Rehabilitation project. During nighttime construction hours, the Contractor will have unlimited access to all project areas within the boundaries established on the attached construction phasing plan sheets. Work hours as detailed in this report may be altered at the Airport's discretion.

Prior to the commencement of construction operations, the Contractor shall coordinate with DEN Project Manager and Operations to ensure that all taxiways within the project area have been NOTAM closed and that all air operations are clear of the closures. All NOTAMs will be issued by the Airport for all closures of airfield pavements within the project limits. Upon confirmation of closures, the Contractor will be required to place all approved low-profile flasher barricades, tubular flasher barricades, traffic cones, and traffic guidance signs as detailed on sheet G-060.

At the end of each shift, prior to opening the area up to aircraft traffic during the daytime hours, the contractor shall remove the barricades and perform a visual inspection of the project area with DEN Operations to ensure no safety issues will arise as a result of the construction activities. If any potential safety concerns are identified, the contractor shall immediately work to resolve these concerns to the satisfaction of DEN Operations. The area of closure will be opened for aircraft traffic following each shift after the approval of DEN Operations.

**Duration of Closures**

The impacted pavement area at the intersection of Taxiways B4, G, AA and WA will be closed during the nighttime construction hours for the full 4 calendar day duration of the milestone. It is anticipated that construction will take place in the spring of 2018.

**Taxi Routes**

During the nighttime closures for construction of this milestone, the intersection of Taxiways B4, G, WA, and AA will be barricaded off to taxiing traffic. Barricades around the closed area will notify aircraft that this area is closed to aircraft operations. During daytime hours, the area for Milestone 3 work will be opened for normal aircraft taxiing.

The Taxiway F & G Pavement, Lighting, & Safety Areas Rehabilitation project will be constructed at the same time as the Runway 7-25 Complex Lighting and Pavement Rehabilitation project. These two projects will overlap at the intersection of Taxiway WA and Taxiway G. Also, one of the milestones of the Taxiway F & G Pavement, Lighting, & Safety Areas Rehabilitation project requires aircraft routing through the WA Deice pad...
via Taxiway B4. These two projects will require approval of the sequence of work from
the Den Project Manager and DEN Operations to ensure the construction is properly
completed on time without sacrificing safety.

**ARFF Access Routes**
In the event of an emergency, ARFF access to the project will be via Taxiways G or AA.
Barricades placed at the entrance of the work area will be spaced to allow for the
passage of ARFF equipment. Any hazard areas will be delineated for vehicular and
ARFF access.

**Construction Staging**
The Contractor’s staging area will be located as shown on the construction drawings.
The Contractor’s staging area will not impact any airfield operations or cause potential
obstructions to DEN airspace, approaches, or Part 77 surfaces.

Sufficient area will be made available to the Contractor for the storage of all material. All
contractor equipment and material will be required to be stored at the staging area
during idle periods of contractor operations. All employees will be required to park
offsite except for those employees that have driving privileges on the airfield.

**Construction Access and Haul Routes**
The construction access and haul route to and from the contractor staging area to the
project site will be on a pre-determined route shown on the attached project plan sheet
G-009.

Section 5 of this document describes in detail how the Contractor will access the project
work area.

**Impacts to NAVAIDS**
Impacted airfield lighting and signage within this milestone will be temporarily shut down
or covered during nighttime construction hours to avoid leading aircraft into the closed
area. Coordination between the Contractor, DEN Project Manager, and FAA Facilities
will be required to shutdown all equipment during construction. Early coordination with
the FAA ATO and Facilities will be conducted by the Airport to ensure the timely
schedule of shutdowns of equipment and operational areas.

Prior to opening the closed area to aircraft following a nighttime shift, the contractor will
coordinate with the DEN Project Manager and DEN Operations to restore all impacted
lighting and signage systems for normal operations. All lighting and signage systems
must be operational and approved by DEN Operations prior to opening the area to
aircraft traffic following each shift.

**Lighting and Marking Changes**
With the closure of the intersection of Taxiways B4, G, AA, and WA, no temporary
lighting adjustments or markings will be required. All lighting/sign circuits for the project
area will be shutdown or covered during construction hours.

**Available Runway Length**
This section is not applicable for this project.

**Declared Distances**
This section is not applicable for this project.
Required Hazard marking and Lighting

Both low profile lighted barricades and tubular flasher barricades will be used to delineate closed AOA pavements and limits of construction or hazardous areas. All barricades will be placed outside of active taxiway safety areas and will be spaced according to AC 150/5370-2F to prevent unauthorized access.

Contractor shall use traffic cones to delineate individual areas of construction within the project site. This will notify vehicles and persons of hazards areas on the runway and taxiways.

Lead Times for Required Notifications

Coordination between the Contractor and DEN Project Manager must be maintained to ensure for the timely notifications for all construction activities, runway/taxiway closures, and NAVAID / equipment shutdowns. Notifications shall be a regular discussion item for all preconstruction and construction meetings.

B. CONSTRUCTION SAFETY DRAWINGS

Sheets G009, G-040 thru G-045, G-050, and G-060 are attached at the back of this document show schedule limits and durations, barricade placement, haul routes and contractor access locations, and other pertinent information to assist with a safety plan for this project. Construction Safety Drawings will also be included in the construction plans.

3. AREAS AND OPERATIONS AFFECTED BY THE CONSTRUCTION ACTIVITY

All work within the Airport Operations Area shall be accomplished in conformance to Advisory Circular 150/5370-2F, Operational Safety on Airports During Construction. The contract drawings include information regarding requirements for operational safety on the airport during construction. The Contractor shall prepare a detailed Safety Plan Compliance Document (SPDC) as stated in the Advisory Circular 150-5370-2F prior to construction. The Contractor’s SPDC shall identify specific methods, sequencing, phasing that he/she intends to use in order to meet the safety requirements detailed in this Construction Safety and Phasing Plan (CSPP) and those required per AC 150/5370-2F. The final SPCD shall be the result of a coordinated effort between the Owner/Sponsor, the Engineer and the Contractor.

The Contractor shall adhere to the approved CSPP and SPCD as agreed upon by the DEN Project Manager, Airport Operations Manager, and Contractor. Modifications or deviations from the approved safety plan shall be submitted to the Airport for review and approval prior to implementation.

A. IDENTIFICATION OF AFFECTED AREAS

Taxiways B, B4, and a portion of G will be closed for the entire duration of the Milestone 1. This includes all AOA pavements south of the WA Deice Pad ramp on Taxiway B4, and south of the intersection of Taxiways B4 and G and the entire Runway 7-25 complex. It is anticipated that construction will take place in the spring of 2018.

All work will be completed in three milestones. The Contractor will have access to the entire milestone area during approved construction hours for each milestone and seven days per week. Milestone 3 will be performed completely during nighttime hours.
Since the runway complex is somewhat remote from the rest of the airport, this project will have little impact to daily airport operations. The closest aircraft will come to construction is when taxiing from Taxiway AA to Taxiway WA during Milestone 2. Barricades will be placed in these areas to identify the limits of construction. Low profile barricades will be placed across the intersection of Taxiways B4, G, WA, and AA, outside of the Object Free Areas for Taxiways WA and AA. Low profile barricades will also be placed across the WA Deice Pad at the entrance to Taxiway B4. The low profile barricades will be situated to allow ARFF access.

During Milestone 3, the intersection of Taxiways B4, G, WA, and AA will be closed for nighttime construction. Low profile barricades will be placed across Taxiways B4 and G on the south. Tubular barricades will be placed across Taxiway F and G on the north, across Taxiway WA on the west, and Taxiway AA on the East. All barricades will be placed at the Milestone 3 project limits, outside of any active Taxiway Safety Areas.

At the end of Milestone 1, the runway and taxiways will be opened back up for aircraft use. The runway and taxiways will be cleaned of all FOD to the satisfaction of the DEN Project Manager. Once the runway and taxiways are inspected and clear of all FOD, the contractor will remove all barricades and store them in the staging area. Once the DEN Project Manager deems the area clear of all FOD, barricades, construction equipment and materials, and all airfield lighting and signage systems, including PAPI’s, REIL’s, and ILS equipment are operational, the runway and taxiways will be opened back up for aircraft use.

During Milestones 1 and 2, Contractor access to the project site and haul routes will not require any crossings of active operational aircraft pavements. However, during Milestone 3, the contractor will be working in an area that is closed during nighttime hours, but opened for aircraft operations following each shift. This will require a thorough inspection of the Milestone 3 work area each morning prior to opening the area to aircraft traffic. All barricades will be removed, airfield lighting and signage systems restored and FOD removed prior to opening the area each morning. Any safety issues identified within the Milestone 3 area must be resolved by the contractor and approval of DEN Operations will be required prior to opening the closed area to aircraft traffic each morning.

No utilities will be affected by this project. A portion of the ground will be re-graded around the proposed signs and other structures to convey water away from the proposed signs and other utilities and maintain proper slopes. This grading will not impact existing utilities unless otherwise noted in the construction drawings.

B. MITIGATION OF EFFECTS

While the complete closure of the all pavements south of the WA Deice Pad ramp on Taxiway B4, and south of the intersection of Taxiways B4 and G during Milestone 1 duration will help alleviate the potential affects construction will have on airport operations, measures will be put in place with the intent to help mitigate potential hazardous conditions.

Mitigation efforts will include, but not limited to, the following:

Limiting the amount of vehicles and equipment within the AOA to only essential equipment and vehicles required for contractor operations. Contractor’s equipment not scheduled to be used within seven days will be required to be stored at the Contractor staging area and all employee parking will be outside of the AOA.

All essential equipment and material shall be placed in a designated location outside of all runway and taxiway object free areas when the Contractor is not working.
All contractor employees shall be informed of all safety requirements and project limits.

Airport personnel, Contractor personnel, and Development personnel shall discuss construction safety during the required weekly construction progress meetings as mentioned in Section 1 of this document.

During Milestone 3, each of the items listed above for Milestone 1 will apply with the addition of the following:

Prior to opening the closed areas of Milestones 2 and 3 to aircraft following each nighttime shift, all barricades will be removed, airfield lighting and signage systems restored and FOD removed prior to opening the area each morning. Any safety issues identified within the Milestones 2 or 3 areas must be resolved by the contractor and approval of DEN Operations will be required prior to opening the closed area to aircraft traffic each morning.

4. PROTECTION OF NAVIGATION AIDS (NAVAIDS)

There will be several NAVAIDS that will be shut down for the duration Milestone 1. These will include PAPI’s and REIL’s on Runway 7-25 as well as all ILS equipment, including approach lighting systems, localizer antennas, and glide slope antennas associated with Runway 7-25. The shutdown of this equipment will be coordinated with the DEN Project Manager and FAA Facilities prior to construction operations for Milestone 1. Restoration of this equipment will also be coordinated with the DEN Project Manager and FAA Facilities prior to opening Runway 7-25 at the end of the project to ensure all systems are operational.

During Milestone 1 work, it is not anticipated that any of the NAVAIDS listed above will be near the construction activities. However, if at any time construction activities are planned near any of this equipment, barricades will be placed around the facilities to prevent the contractor from getting to close or damaging the NAVAIDS with any construction equipment or operations.

5. CONTRACTOR ACCESS

All individuals employed at the Airport, or working on DEN property, must obtain an Airport Identification (ID) Badge. Airport ID Badges will be issued by Airport Security and remain the property of the Airport. The Airport ID Badge must be surrendered on demand to Airport Operations and/or a Contract Security Guard. An individual employed by more than one company, or changing employers, must obtain an Airport ID Badge for each company. Badge Color indicates general areas of authorization in relationship with direct support of an individual’s job function. The respective classes of Airport ID Badges, indicated by badge color and associated driving privilege icon, describe driving privileges in direct correlation with their job function.

The individual must complete a Denver International Airport Fingerprinting and Badge Application, on a form prepared and currently approved by Airport Security. Two valid forms of identification must be presented with the application, one of which must be government issued photo identification. The second form of identification must verify proof of citizenship (i.e., birth certificate or legal residency with work authorization). All information regarding the individual’s name, age, gender, and other vital statistics on both forms of identification must be consistent and verifiable.

A Denver International Airport Fingerprinting and Badge Application, Security Threat Assessment (STA) and Criminal History Record Check (CHRC) must be completed for each individual requesting
an Airport Identification Badge. Denver International Airport Fingerprinting and Badge Application are available from the Airport Security Offices.

The individual must view a training video on Denver Municipal Airport System Rules and Regulations, as they pertain to overall security, and pass a corresponding test to assure understanding of the Rules and Regulations.

**A. LOCATION OF STOCKPILED CONSTRUCTION MATERIALS**

The location of the Contractor’s stockpile for construction materials will be at the designated staging area or at an on-site location approved by the DEN Project Manager as discussed in the pre-construction meeting.

**B. VEHICLE AND PEDESTRIAN OPERATIONS**

1. **Construction Site Parking**

   Construction site parking will be outside of the AOA at DEN and will be at the approved locations as discussed in the pre-construction meeting. Only essential vehicles will be allowed onto the airfield.

2. **Construction Equipment Parking**

   Construction equipment parking will be allowed at the approved locations as discussed in the pre-construction meeting. If the equipment must be parked in an Airport Operations Area (AOA), the equipment must be lighted with a beacon per AC 150/5370-2F. No equipment or material shall be parked or stored in any runway or taxiway safety area or object free area.

3. **Access and Haul Roads**

   The Contractor shall obtain approval from the Airport Operations Manager and DEN Project Manager prior to utilizing any haul roads within the airport property. The haul roads shall be utilized for all equipment traffic, and the equipment shall not be allowed to stray or wander away from the established routes. The haul roads shall be the responsibility of the Contractor and shall be maintained and kept in good order at all times. Since construction operations will be within active airport operation areas, the airport will require additional dust control measures be used on haul roads and the work area in order not to interfere with airport operations. The Contractor must use a vacuum truck that does not create airborne dust to clean paved surfaces. Haul roads that cross any active taxiway or movement areas shall be kept clean and in good order at all times. The Contractor shall be prepared at all times to repair any damage caused by the movement of equipment on any of the haul roads at the direction of the Airport Operations Manager or DEN Project Manager, whether in designated or undesignated areas. Establishment of haul roads off Airport property shall be the sole responsibility of the Contractor.

   Contractor movement shall be restricted to one pre-determined access routes as described below:

   From the Contractor’s Staging Area, the route heads west to Powhaton Rd. then south on Powhaton Rd. to 71st Ave. The route turns west on 71st Ave. which will turn into Jackson Gap Street. Once on Jackson Gap Street, continue north to 78th Ave. At 78th Ave. the route heads east and continues around a curve that will direct the route north where the road
becomes Newcastle Street. Turn west off of Newcastle Street and continue north to Gate P11, which will serve as the Contractor’s Access Gate to the project site. Once inside the AOA, past Gate P11, the route will continue north on Newburn St. to 84th Ave. The route then heads west on 84th Ave. to Taxiway G and B4 to access the project site.

84th Ave between Newburn St. and Taxiway B4 will be used both by the contractor as a haul route and by airport personnel. The contractor will be required to submit a traffic control plan to address how the interaction of airport personnel traffic and contractor traffic can be accommodated within this area.

4. Marking and Lighting of Vehicles

All vehicles operating within the AOA and in the movement areas must clearly identify themselves for control purposes. The identification symbols should be a minimum 8-inch block-type characters of a contrasting color and easy to read. They may be applied either by using type or a water-soluble paint to facilitate removal. Magnetic signs are also acceptable. To operate in those areas during daylight hours, the vehicle must have a flag (day only) or beacon (day or night) attached to it. Any vehicle operation on the movement areas during hours of darkness or reduced visibility must be equipped with a flashing dome-type light. Marking and lighting shall be in conformance with FAA Advisory Circular 150/5210-5D, Painting, Marking, and Lighting of Vehicles Used on an Airport.

5. Description of Proper Vehicle Operations

Proper vehicle operations is described as confirming to all rules and regulation for driving as directed by the Denver International Airport.

6. Required Escorts

When any vehicle, other than one that has prior approval from the airport operator, must travel over any portion of an aircraft movement area or limited access routes, the vehicle will be escorted and properly identified. To operate in those area during daylight hours, the vehicle must have a flag (day only) or beacon (day or night) attached to it. Any vehicle operation on the movement areas during hours of darkness or reduced visibility must be equipped with a flashing dome-type light.

It is not anticipated that this project will require traveling on active taxiways and/or runways.

7. Training Requirements of Vehicle Drivers

If an individual requests Driver Authorization, a valid driver’s license must be presented and the individual must view a training video on Denver Municipal Airport System Rules and Regulations, as they pertain to overall Movement of Vehicles in the Restricted Area, and pass a corresponding test to assure understanding of the Rules and Regulations.

8. Situational Awareness

Vehicle drivers must confirm by personal observation that no aircraft is approaching their position (either in the air or on the ground) when given clearance to cross a runway, taxiway, or any other area open to airport operations. In addition, it is the responsibility of the escort vehicle driver to verify movement/position of all escorted vehicles at any given time.

9. Maintenance of the Secured Area of the Airport
Airport operators and contractors must take care to maintain security during construction when access points are created in the security fencing to permit the passage of construction vehicles or personnel.

In addition, all personnel must either be badged or escorted while working in the AOA. Badgeholders are responsible for escorted personnel at all times to ensure that security of the airport is maintained.

Because the Airport is subject to 49 CFR Part 1542, Airport Security, even during construction, the Airport must meet standards for access control, movement of ground vehicles, and identification of construction contractor and tenant personnel.

6. WILDLIFE MANAGEMENT

All wildlife management within the Airport Operations Area shall be accomplished in conformance to Advisory Circular 150/5200-33B, Hazardous Wildlife Attractants On or Near Airports, and Certalert 98-05, Grasses Attractive to Hazardous Wildlife. In general, the Contractor must carefully control and continuously remove waste or loose material that might attract wildlife.

A. TRASH

The Contractor is responsible to complete a daily inspection of the construction site for any trash or objects that might attract wildlife.

B. STANDING WATER

Because standing water can attract wildlife, the Contractor is responsible to complete a daily inspection of the construction site for any standing water. With the discretion of the Airport Operations Manager and DEN Project Manager, the Contractor shall remove this hazard.

C. TALL GRASS AND SEEDS

The Contractor will install seeding and hydromulch as specified in the T-901 Seeding and T-908 Mulching specifications for this project or as directed by the Airport Operations Manager and DEN Project Manager.

D. POORLY MAINTAINED FENCING AND GATES

The Contractor shall be required to maintain all fences and gates throughout the duration of the project, to the satisfaction of the Airport.

E. DISRUPTION OF EXISTING WILDLIFE HABITAT

The Contractor shall contact Airport Emergency Dispatch at 303-342-4211 when a wildlife sighting has occurred on the project site to mitigate any disruption to the existing wildlife habitat.

7. FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT

The presence of FOD on the apron, taxiways, and runway is a significant safety concern, as debris can be ingested into an aircraft’s engine causing extensive damage, or can be launched across the area by jet blast, potentially causing bodily injury or damaging other aircraft. Materials capable of creating FOD must be continuously removed during the construction project. The Contractor is
required to keep all taxiways and aprons outside of the project area, open to aircraft and free from FOD at all times. The Contractor is required to maintain FOD several times a day and to the satisfaction of the DEN Project Manager. Prior to opening any pavement to aircraft, the contractor shall conduct a sweep of the pavement to verify that it is FOD free. During Milestone 3 nighttime construction, a FOD sweep will be required prior to opening the area to aircraft operations each morning. DEN Airport Operations will inspect the Milestone 2 and 3 areas prior to opening to aircraft and the contractor will be required to immediately address any areas of concern or FOD identified by DEN Operations.

8. HAZARDOUS MATERIAL (HAZMAT) MANAGEMENT

Although hazardous material is not anticipated to be present on this project, if hazardous material is encountered, the Contractor shall inform the DEN Project Manager immediately.

9. NOTIFICATION OF CONSTRUCTION ACTIVITIES

A. MAINTENANCE OF A LIST OF RESPONSIBLE REPRESENTATIVES/POINTS OF CONTACT

<table>
<thead>
<tr>
<th>Agency Name</th>
<th>Telephone No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire, Rescue, Operations</td>
<td>(303) 342-4200</td>
</tr>
<tr>
<td>Denver Police Department</td>
<td>(303) 342-4211</td>
</tr>
<tr>
<td>Project Manager</td>
<td>To Be Determined</td>
</tr>
<tr>
<td>ID Badging</td>
<td>(303) 342-4300</td>
</tr>
<tr>
<td>Airport Security</td>
<td>(303) 342-4307</td>
</tr>
<tr>
<td>Vehicle Permits</td>
<td>(303) 342-4308</td>
</tr>
<tr>
<td>Driver Qualification</td>
<td>(303) 342-4310</td>
</tr>
</tbody>
</table>

B. NOTICES TO AIRMEN (NOTAM)

Only the Airport Operations Manager may initiate or cancel NOTAMs on airport conditions, and is the only entity that can close or open a runway. The Airport Operations Manager must coordinate the issuance, maintenance, and cancellation of NOTAMs about airport conditions resulting from construction activities and must provide information on closed or hazardous conditions on airport movement areas to the FAA Flight Service Station (FSS) so it can issue a NOTAM. The Contractor must notify the Airport Operations Manager and DEN Project Manager when scheduling/scoping for the project has changed that would require a modification the NOTAMs.

C. EMERGENCY NOTIFICATION PROCEDURES

In an event of an emergency, the Contractor shall notify the Airport Operations Manager and DEN Project Manager. If necessary, the Contractor shall contact Airport Emergency at 303-342-4211.

D. COORDINATION WITH ARFF PERSONNEL

In an event that the Contractor must coordinate construction activities with ARFF Personnel, the Contractor will notify the Airport Operations Manager or DEN Project Manager. The Airport Operations Manager or DEN Project Manager will be responsible to notify the event to ARFF Personnel.

E. NOTIFICATION TO THE FAA

Any person proposing construction or alteration of objects that affect navigable airspace, as defined in Part 77, must notify the FAA through DEN Airport Planning. This includes construction equipment and proposed parking areas for this equipment.
In regards to NAVAIDS damage, the Airport shall contact 1-866-432-2622.

10. INSPECTION REQUIREMENTS

A. DAILY (OR MORE FREQUENT) INSPECTIONS

Inspections shall be conducted daily and more frequently if necessary to ensure conformance with this document. The checklist provided in the Advisory Circular 150/5370-2F Appendix 3, Safety and Phasing Plan Checklist, shall be used and completed by the Contractor.

B. FINAL INSPECTIONS

Final inspections shall be conducted after every construction milestone is complete as detailed in Section 2 of this document. The checklist provided in the Advisory Circular 150/5370-2F Appendix 3, Safety and Phasing Plan Checklist, shall be completed by the Contractor to the Airport’s satisfaction.

11. UNDERGROUND UTILITIES

The Contractor shall attempt to locate all underground cables and other sub-surface utilities prior to construction. Coordination among the Contractor, DEN Project Manager, Airport Operations Manager, FAA, National Weather Service, utility companies, and any other appropriate entity or organization must be complete prior to construction. NAVAIDS, Weather Service facilities, electric cables, and other utilities must be fully protected during the entire construction time.

Power, communication and control cables leading to and from any FAA NAVAIDS, Weather Service, and other facilities will be marked in the field by the appropriate individuals as identified in Section 011810 – Utilities Interface of the contract documents for the information of the Contractor before any work in their general vicinity is started. Thereafter, through the entire duration of construction, they shall be protected from any possible damage, including crossing with unauthorized equipment.

Damage to the underground cables, whether FAA’s or Sponsor’s, through negligence on the part of the Contractor will require replacement by the Contractor at no cost to the Sponsor. Any splicing or replacing of damaged cable shall meet current FAA specifications. Damage to other underground utilities through Contractor’s negligence shall be repaired according to the relevant utility’s standards and at no cost to the Sponsor.

12. PENALTIES

Any employer not regulated under 49 C.F.R. Part 1544, Aircraft Operator, will be responsible for payment or reimbursement to the City & County of Denver of any Civil Penalties imposed by the Transportation Security Administration (TSA) for individual security violations by their employees for violations under 49 C.F.R. Part 1542.

An employee may be personally subject to Civil Penalties imposed by the Transportation Security Administration (TSA) for individual security violations they commit under 49 C.F.R Part 1542. Each individual who is issued an Airport ID Badge shall comply with all Security Directives, Denver Municipal Airport System Rules and Regulations, and DEN Standard Policies and Procedures regarding Airport Safety, Security, and Operations. The failure of any individual to comply with such Security Directives and/or rules and regulations will result in the issuance of a Violation Notice and may result in the assessment of a Federal Civil Penalty and/or the denial, suspension, or revocation of Airport ID Badges.
No individual to whom an Airport ID Badge or Security Key(s) (including Intellikey(s)) has been issued shall intentionally perform any of the following acts as described in Denver Municipal Airport System Rules and Regulations Part 20.04-10 and 20.04-12. The intentional commission of any such acts, due to their critical negative effect on the safety and security of Airport employees and the traveling public, is reason for immediate confiscation and suspension (and possible permanent revocation) of the Airport ID Badge, issuance of a Violation Notice, and a Violation Notice Hearing in accordance with Section 20.04-8.

13. SPECIAL CONDITIONS

This is not applicable to this project.

14. RUNWAY AND TAXIWAY VISUAL AIDS

A. EQUIPMENT AND METHODS FOR COVERING SIGNAGE AND AIRFIELD LIGHTS

Since this project will close the portion of Taxiways G and B4, various guidance signs and lights will be required to be covered so not to confuse taxiing pilots. Signs and sign panels that provide guidance to closed pavements will be covered as directed by the Airport. Taxiway lights on closed taxiways that cannot be turned off because it shares common circuits with lights to remain operational shall be covered and secured per direction of the Airport. All coverings shall be properly installed to protect against jet blast or high winds.

During Milestone 3, impacted airfield lighting and signage within this milestone will be temporarily shut down or covered during nighttime construction hours to avoid leading aircraft into the closed area. Prior to opening the closed area of Milestone 3 to aircraft following each nighttime shift, all airfield lighting and signage systems shall be restored and operational.

B. EQUIPMENT AND METHODS FOR TEMPORARY RUNWAY AND TAXIWAY CLOSURE MARKINGS (PAINT, FABRIC, OTHER)

Temporary Closed Runway

Two Lighted Runway Closure X’s shall be used for the duration of the runway closure for the project. The Lighted Runway Closure X’s will be placed on the Runway 7-25 designation numbers according to AC 150/5370-2F to prevent accidental unauthorized arrivals.

Locations of the lighted X’s are shown in the Construction Safety Drawings attached to the end of this document.

Signs and sign panels that provide guidance to closed pavements will be covered as directed by the Airport to prevent misdirecting pilots to closed taxiways.

Temporary Closed Taxiways

Both low profile lighted barricades and tubular flasher barricades will be used to delineate closed AOA pavements and limits of construction or hazardous areas. All barricades will be placed outside of active taxiway safety areas and will be spaced according to AC 150/5370-2F to prevent unauthorized access.

Locations of planned barricades are as shown in the Construction Safety Drawings attached to the end of this document.
Signs and sign panels that provide guidance to closed pavements will be covered as directed by the Airport to prevent misdirecting pilots to closed taxiways.

15. MARKING AND SIGNS FOR ACCESS ROUTES

All required signs and markings shall conform to either Advisory Circular 150/5340-18F, Standard for Airport Sign Systems, CDOT S-627-1 Pavement Markings or the Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCD). Signs adjacent to areas used by aircraft must comply with the frangible requirements as stated in Advisory Circular 150/5220-23 Frangible Connections. These signs will be directed by the Airport and provided by the Contractor.

16. HAZARD MARKINGS AND LIGHTINGS

A. PURPOSE

The hazard marking and lighting prevent pilots from entering areas closed to aircraft, and prevents construction personnel from entering areas open to aircraft. Prior to construction on or adjacent to any taxiway, the Contractor shall, upon approval by the Airport, close the taxiway and begin work. The Contractor shall be responsible for clearly marking and defining the closed taxiways by use of warning lights, barricades, flags and closed taxiway or runway markings in conformance with Advisory Circular 150/5370-2F. The Contractor shall be responsible for maintaining these barricades and keeping them clearly visible at all times as detailed on the construction sheets.

B. EQUIPMENT

Approved low-profile barricades are to identify and define the limits of construction and hazardous areas on airports as detail on the attached sheets G-040 through G-043 and G-060. Barricade spacing will be per Advisory Circular 150/5370-2F and as such that all aircraft are physically prevented from taxiing through the gaps in the barricades. The barricades must be weighted down per the manufacturer’s recommendations to prevent the barricades from moving due to wind or jet blast.

The flashing lights on the approved barricades must meet the luminance requirement of the CDOT. The flashing lights must be red or an approved equal.

The Contractor may also utilize approved tubular flasher barricades as approved by the Airport. The location of the tubular flasher barricades is specified on the Construction Safety Drawings.

All barricades will be placed outside of all active taxiway safety areas.

17. PROTECTION OF RUNWAY AND TAXIWAY AREAS

A. RUNWAY SAFETY AREA (RSA)

The limits of this project will be inside the runway safety area of Runway 7/25. Then runway will be closed for the duration of the project, therefore, no runway safety areas will require protection.

B. RUNWAY OBJECT FREE AREA (ROFA)

The limits of this project will be inside the runway object free area of Runway 7/25. The runway will be closed for the duration of the project, therefore, no runway object free areas will require protection.
C. TAXIWAY SAFETY AREA (TSA)

Taxiway B, and a portion of Taxiways B4 and G will be closed during construction hours for this project. The entire area will be closed to aircraft for the duration of the Milestone 1, therefore, no active taxiway object free areas will require protection.

For Milestone 2 construction, Taxiway B4 at and north of the ramp for the WA Deice Pad and the intersection of Taxiways B4 and G south of Taxiways WA and AA will be closed at all times. However, adjacent taxiways will still be operational during this milestone. Therefore, all men and equipment will be restricted from entering the TSA of any active taxiways outside of the Milestone 2 project limits.

For Milestone 3 construction, the intersection of Taxiways B4, G, WA and AA will be closed during nighttime hours. However, adjacent taxiways will still be operational during this milestone at night. Therefore, all men and equipment will be restricted from entering the TSA of any active taxiways outside of the Milestone 3 project limits.

D. TAXIWAY OBJECT FREE AREA (TOFA)

Taxiway B, and a portion of Taxiways B4 and G will be closed during construction hours for this project. The entire area will be closed to aircraft for the duration of the Milestone 1, therefore, no active taxiway object free areas will require protection.

For Milestone 2 construction, Taxiway B4 at and north of the ramp for the WA Deice Pad and the intersection of Taxiways B4 and G south of Taxiways WA and AA will be closed during all times. However, adjacent taxiways will still be operational during this milestone. Therefore, all men and equipment will be restricted from entering the TOFA of any active taxiways outside of the Milestone 2 project limits unless the restrictions for construction within an active TOFA as described in FAA AC 150/5370-2F, Chapter 2, Paragraph 221 d.(3) are adhered to. At no times may any stockpile of material be placed within the TOFA of an active taxiway.

For Milestone 3 construction, the intersection of Taxiways B4, G, WA and AA will be closed during nighttime hours. However, adjacent taxiways will still be operational during this milestone at night. Therefore, all men and equipment will be restricted from entering the TOFA of any active taxiways outside of the Milestone 3 project limits unless the restrictions for construction within an active TOFA as described in FAA AC 150/5370-2F, Chapter 2, Paragraph 221 d.(3) are adhered to. At no times may any stockpile of material be placed within the TOFA of an active taxiway.

E. OBSTACLE FREE ZONE (OFZ)

The limits of this project will be within the obstacle free zone of Runway 7/25. The runway will be closed for the duration of the project, therefore, no obstacle free zone protections will be required.

F. RUNWAY APPROACH/DEPARTURE SURFACES

The limits of this project will have work within the approach and departure surfaces of Runway 7/25. The runway will be closed for the duration of the project, therefore, no work restrictions will be required.

18. OTHER LIMITATIONS ON CONSTRUCTION

This is not applicable to this project.
NOTE:
1. FOR ORIGINAL DRAWING, SEE SHEET B (SIDE B).
2. THE DRAWING IS COMPLETE AND MEETS ALL REQUIREMENTS.
3. THE DRAWING IS ACCURATE AND MEETS ALL REQUIREMENTS.
4. THE DRAWING IS ACCURATE AND MEETS ALL REQUIREMENTS.
5. THE DRAWING IS ACCURATE AND MEETS ALL REQUIREMENTS.
6. THE DRAWING IS ACCURATE AND MEETS ALL REQUIREMENTS.
7. THE DRAWING IS ACCURATE AND MEETS ALL REQUIREMENTS.
NO CONTRACTOR ACCESS BEYOND THIS POINT
RUNWAY 7/25 COMPLEX LIGHTING AND PAVEMENT REHABILITATION

SAFETY NOTES:
1. CUT OFF ELECTRICAL POWER TO THE SIGNALS AND FIXED OBJECTS BEFORE BEGINNING WORK.
2. THE WORK ZONE WILL BE TRAFFIC CONTROLLED THE ENTIRE TIME.
3. THE INDICATOR LAMPS WILL BE TURNED OFF DURING WORK HOURS.
4. THE WORK ZONE WILL BE TRAFFIC CONTROLLED THE ENTIRE TIME.
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9. THE INDICATOR LAMPS WILL BE TURNED OFF DURING WORK HOURS.
10. THE WORK ZONE WILL BE TRAFFIC CONTROLLED THE ENTIRE TIME.

LIGHTED RUNWAY CLOSURE MARKER (RCM) NOTES:
1. INSTALLATION OF LIT MARKERS IS TO COMPLY WITH FAA REQUIREMENTS.
2. INSTALLATION OF LIT MARKERS IS TO COMPLY WITH FAA REQUIREMENTS.
3. INSTALLATION OF LIT MARKERS IS TO COMPLY WITH FAA REQUIREMENTS.
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9. INSTALLATION OF LIT MARKERS IS TO COMPLY WITH FAA REQUIREMENTS.
10. INSTALLATION OF LIT MARKERS IS TO COMPLY WITH FAA REQUIREMENTS.

LOW PROFILE FLASHING BARRIERS DETAIL:
1. INSTALLATION OF LOW PROFILE FLASHING BARRIERS IS TO COMPLY WITH FAA REQUIREMENTS.
2. INSTALLATION OF LOW PROFILE FLASHING BARRIERS IS TO COMPLY WITH FAA REQUIREMENTS.
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