

CONSTRUCTION SAFETY AND PHASING PLAN

YUMA COUNTY AIRPORT AUTHORITY
2191 EAST 32ND STREET
YUMA, ARIZONA 85365



YUMA INTERNATIONAL AIRPORT DCC APRON REHABILITATION ADOT NO. E4S1X

September 30, 2015

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TABLE OF CONTENTS

1.0 COORDINATION	1
1. Introduction	1
2. Scope of Work	1
3. Contractor Progress Meetings	1
4. Scope or Schedule Changes	2
5. FAA Air Traffic Organization (ATO) Coordination	2
2.0 PHASING	2
1. Phase Elements	2
2. Construction Safety Drawings	2
3.0 AREAS AND OPERATIONS AFFECTED BY CONSTRUCTION ACTIVITY	2
1. Identification of Affected Areas	2
2. Mitigation of Effects	2
4.0 NAVIGATION AID (NAVAID) PROTECTION	2
5.0 CONTRACTOR ACCESS	2
1. Location of Stockpiled Construction Materials	2
2. Vehicle and Pedestrian Operations	3
6.0 WILDLIFE MANAGEMENT	6
1. Trash	6
2. Standing Water	6
3. Tall Grass and Seeds	6
4. Poorly Maintained Fencing and Gates	6
5. Disruption of Existing Wildlife Habitat	6
7.0 FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT	6
8.0 HAZARDOUS MATERIALS (HAZMAT) MANAGEMENT	6
9.0 NOTIFICATION OF CONSTRUCTION ACTIVITIES	7
1. List of Responsible Representatives	7
2. Notices to Airmen (NOTAMs)	7
3. Emergency Notification Procedures	7
4. Coordination with ARFF	7
5. Notification to the FAA	7
10.0 INSPECTION REQUIREMENTS	7
1. Daily Inspections	7
2. Final Inspections	8
11.0 Underground Utilities	8
12.0 Penalties	8
13.0 Special Conditions	10
14.0 Runway and Taxiway Visual Aids	10
1. General	10
2. Markings	10
3. Lighting and Visual NAVAIDs	10
4. Runway and Taxiway Signs	10
15.0 Marking and Signs for Access Routes	11
16.0 Hazard Marking and Lighting	11
1. Use of Warning Indicators for Construction Areas	11
2. Hazard Marking and Lighting	11
3. Less Obvious Construction Related Hazards	11

4.	Securing of Equipment to Prevent Blow-Down	11
5.	Spacing of Barricades	11
6.	Requirements of Red Lights	11
7.	Low-Profile Barricades and Markers	12
8.	Proper Marking of Barricades	12
9.	Proper Reflectivity and Lighting of Barricades	12
10.	Markings for Temporary Closures	12
11.	Emergency Maintenance of Airport Hazard Lighting and Barricades	12
17.0	Protection of Runway and Taxiway Safety Areas	12
1.	Runway Safety Areas (RSA)	12
2.	Runway Object Free Area (ROFA)	12
3.	Taxiway Safety Area (TSA)	12
4.	Taxiway Object Free Area (TOFA)	12
5.	Obstacle Free Zone (OFZ)	12
6.	Runway Approach/Departure Areas and Clearways	12
18.0	Other Limitations on Construction	12
1.	Prohibitions	12
2.	Restrictions	13

APPENDICES

Appendix A – Sheet G-003 Construction Safety and Phasing Plan

1.0 COORDINATION

1. Introduction

This Construction Safety and Phasing Plan (CSPP) is for the Defense Contractor Complex (DCC) Apron Rehabilitation Project, ADOT No. E4S1X at Yuma International Airport (YIA), a commercial service airport co-located with Marine Corps Air Station Yuma (MCAS Yuma). The airfield provides regularly scheduled commercial airline service, general aviation services and functions as an aviation training facility for the United States Marine Corps. The focus of this project is the DCC area which is an area that provides a full service industrial general aviation center to provide support for large transient aircraft or operational testing of other aviation related products. The proposed project for this plan is an existing apron located south and adjacent to Taxiway F1, referred to locally as the "Jet Blast Apron". This apron is primarily used for engine testing such as those seen on new Boeing aircraft or for transient parking of large business jets.

2. Scope of Work

The scope of work for this project includes the removal of hot mix asphalt (HMA) pavement and miscellaneous concrete foundations, pads, and vaults and construction of a new HMA and Portland cement concrete (PCC) pavement apron. Within the project area, an existing PCC pavement section and blast fence totaling 3,755 square yards (SY) is expected to remain in place. An adjacent service road and retention basin are expected to remain as well and shall not require any improvements. The project site is approximately 5.93 acres.

This CSPP provides specific information to the Contractor selected to carry out the construction contract for the Jet Blast Apron Rehabilitation project. This plan includes the requirements and procedures for accident prevention, safety requirements, and security considerations at the Yuma International Airport and MCAS-Yuma. The safety objective of the Airport and this project is to execute the construction with no accidents and a minimum of disruption to users and tenants. The Contractor must be in full compliance with FAA Advisory Circular (AC) 150/5370-2F, Operational Safety on Airports during Construction, which requires the Contractor to use this document to produce a Safety Plan Compliance Document (SPCD) to provide specific information about his processes for this project.

3. Contractor Progress Meetings

The project schedule will include several opportunities for the Airport to present the requirements and restrictions for construction on the airfield. The first opportunity will be with the Pre-Bid meeting where the CSPP and the Contractor's SPCD will be discussed. After bids are received, the selected Contractor will be required to prepare the SPCD using the CSPP as a guide. The CSPP and the SPCD will be discussed at the Pre-Construction Conference.

The Pre-Construction Conference will be scheduled prior to the issuance of the Notice to Proceed. Invitees and attendees will include YIA Airport Manager, Airport Operations, Airport maintenance personnel, MCAS-Yuma Operations (if available), the Engineer, the Contractor's Project Superintendent, and representatives from ADOT (in person or by phone). Relevant safety-related issues will be discussed in detail at this meeting.

At the Pre-Construction Conference, topics of discussion will include the FAA Advisory Circular (AC) 150/5370-2F, Operational Safety on Airports during Construction, the project scope, the Resident Engineer's responsibility and authority, identifying the Contractor's Superintendent, NOTAM responsibility, phasing and scheduling of work, Notice to Proceed date, safety during construction, security, badging and escorting requirements, quality control and testing, test reports, maintenance of record drawings, labor requirements; and DBE, MBE, and EEO requirements.

Weekly construction progress meetings will be held at Yuma International Airport where the invitees and attendees will include, at a minimum, YIA personnel, the Project Engineer, the Contractor's Project Superintendent, and the lead personnel of each Subcontractor. In addition to the discussions on the progress of the project, operational safety procedures identified within this Safety Plan will be reviewed and discussed. Additional meetings may be scheduled in between

the weekly construction meetings as deemed necessary by the Project Engineer or YIA personnel.

4. Scope or Schedule Changes

While the Scope of Work is not expected to change, revisions to the CSPP and the Contractor's SPCD will be required if changes occur.

5. FAA Air Traffic Organization (ATO) Coordination

Yuma International Airport staff will be responsible for continually coordinating as required with the FAA/ATO during construction.

2.0 PHASING

1. Phase Elements

The work for the Blast Fence Apron reconstruction will consist of one phase. During construction, Taxiway F1 between Runway 3L-21R and Taxiway H1 will be closed to aircraft traffic. The duration of the closure is expected to be approximately six months.

2. Construction Safety Drawings

See Sheet G-003 in the Appendix for the Construction Safety and Phasing Plan drawing. The drawing includes the location of the Contractor Laydown Area to be used for staging, parking equipment, employee parking and material storage. The drawing also depicts the primary haul route using the DCC Gate and the secondary route using the AIC gate.

3.0 AREAS AND OPERATIONS AFFECTED BY CONSTRUCTION ACTIVITY

1. Identification of Affected Areas

Areas affected by the construction are shown on Sheet G-003 in the Appendix.

2. Mitigation of Effects

The work for the Blast Fence Apron reconstruction will consist of one phase. During construction, Taxiway F1 between Runway 3L-21R and Taxiway H1 will be closed to aircraft traffic. Temporary access to the hangar apron north of Taxiway F1 may be provided if approved by Operations. In this situation, aircraft smaller than Group V must be towed to either the Joe Foss Hangar or the Customs and Border Protection Facility.

ARFF access routes will not be affected by this construction project.

4.0 NAVIGATION AID (NAVAID) PROTECTION

No work will take place on or near NAVAID facilities as part of this project. Contractor shall protect NAVAID facilities in place.

5.0 CONTRACTOR ACCESS

1. Location of Stockpiled Construction Materials

All Contractor materials, equipment and supplies shall be staged within the designated Contractor Laydown area. The Contractor shall keep the staging area neat and clean of debris.

For equipment that must remain in the work area, the following criteria must be met:

- Equipment must be located outside of the active runway/taxiway safety and object free areas.
- Equipment must be marked with lighted barricades around the equipment perimeter with a spacing of no more than 10 feet.

- Equipment to be staged must be coordinated at least 48 hours in advance with the Engineer.
- The highest point of the equipment must be marked and lit with a red flashing/steady burning omni-directional obstruction light

Stockpiling of materials is permitted, as long as the following criteria is met:

- Material may be stockpiled within the closed and barricaded portions of the project. When possible, stockpiled material should be placed in the apron area and must be at least 300' from active taxiways/runways.
- The Contractor may also use the Contractor's Staging area to stockpile material.

Construction activity shall be prohibited when equipment penetrates the imaginary surface described in Title 14 CFR Part 77 and any restricted area as defined in AC 150/5300-13A Airport Design, current edition, unless a favorable airspace finding has been made by the FAA and the YIA, and approved by Operations. Equipment that penetrates the Part 77 imaginary surface must display an orange and white checkered flag during daytime operations and red obstruction light during nighttime use.

2. Vehicle and Pedestrian Operations

a. Construction Site Parking

Construction Site Parking will be permitted within the Contractor's Staging Area. Personal vehicles will not be allowed onto the airfield.

b. Construction Equipment Parking

Construction equipment will be parked within the Contractor's Staging Area when not in use. At the end of each working day, the Contractor will be responsible for making sure all equipment is removed from all Object Free Areas.

c. Access and Haul Roads

The primary site access will be through the existing DCC gate from 4th Avenue, near the site of the Contractor Laydown Area. The haul route will use an existing roadway that intersects Taxiway H1, crosses Taxiway H1 to the existing vehicle service road (VSR) that parallels Runway 3L-21R and continues to the site. The alternate site access will be through the AIC gate from 40th Street. The alternate haul route will use an existing roadway that goes past the fuel farm, crosses the closed portion of Taxiway F1 to the site.

d. Marking and Lighting of Vehicles

All Contractor and subcontractor vehicles must be properly marked with the company name at least four (4) inches in height on both sides of the vehicle. All vehicles must have a 3' x 3' orange and white checkered flag or a flashing amber beacon at the tallest point on the vehicle for daytime construction activities, and a flashing amber or yellow beacon, mounted at the highest point, for nighttime construction activities.

All vehicle marking and lighting must comply with the most recent version of Advisory Circular 150/5210-5, Painting, Marking and Lighting of Vehicles Used on an Airport.

e. Description of Proper Vehicle Operations

No vehicle shall operate within the Air Operations Area (AOA):

- Unless operated by an individual in possession of a valid Airport Identification Badge with a drivers endorsement or, under the direct escort of someone who is.
- In a careless or negligent manner.
- With disregard of the rights and safety of others.

- At a speed or in a way which endangers persons or property.
- While the driver is under the influence of drugs or alcohol.
- If such vehicle is loaded or maintained as to endanger persons or property.

f. Required Escorts

The job superintendent and assistant superintendent, will be responsible for escorting their non-badged employees, visitors, vendors, subcontractors and material suppliers while on the job site, assuring that no breeches of the Airport security program occur.

g. Training Requirements for Drivers

All construction personnel assigned to the project, except for escorted in-transit material suppliers, shall make application for and wear airport ID badges. The prime Contractor and the subcontractors can make application for these items by contacting YIA Operations Office at (928) 941-2396 to make arrangements and by visiting the YIA website at www.yumairport.com. All individuals requiring airport ID badges are required to fill out and submit an online application, complete an online video course for drivers training and successfully pass an online test. Airport ID badges must be surrendered upon termination of the employee or contract. The Contractor's employees, the subcontractor's employees and others should anticipate that the duration to process an application may take more than one (1) day per person, not counting the time waiting for background checks.

h. 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 the movement/position of all escorted vehicles at any given time.

i. Two-way Radio Communication Procedures

For normal operations, it is not expected that any of the Contractor's personnel will be required to communicate with the Air Traffic Control Tower (ATCT). Should any Contractor employee need to communicate via radio with Airport Operations and/or the ATCT, the following procedure will be used:

- All flaggers, spotters and observers controlling equipment crossing active aircraft areas will receive training from YIA operations and are required to have a fully operational YIA-approved radio to contact the Air Traffic Control Tower to report any problems that may affect aircraft operations. Contractor must provide a YIA-approved radio. They shall be familiar with radio call signs, channels and phone numbers. All observers and flaggers shall immediately contact Operations if any equipment or vehicle becomes disabled or is unable to yield to aircraft for any reason.
- Use primary radio or back-up telephone equipment to contact Airport Operations and the Contractor Foreman of any security violation or threat to airport safety. Report any failure of radio or back-up equipment immediately.
- Assure that all authorized contractor employees or suppliers use designated haul route and staging areas.

This procedure will also be discussed at length during the Pre-Construction Meeting for this project, and will be part of the vehicle driver training.

j. Maintenance of the Secured Area of the Airport

The Contractor and his personnel must take care to maintain security during construction when access points are used to permit the passage of construction vehicles or personnel. Gates should be equipped so they can be securely closed and locked to prevent access by animals and unauthorized people. Procedures should be in place to ensure that only authorized persons and vehicles have access to the AOA and to prohibit "piggybacking" behind another person or vehicle.

The project will require that the Contractor and any employees, subcontractors and delivery staff, working on the airfield undergo the security badging process, and will be responsible for being vigilant in helping to maintain security of the airfield. The Contractor will be responsible for posting employees/gate guards at Contractor access points into the secured area of the airfield, and locking each access gate when leaving the project each day.

The airport is operated in strict compliance with Transportation Security Administration (TSA) and Federal Aviation Regulations (FAR), which prohibit unauthorized persons or vehicles in the Air Operations Area (AOA). Equipment and workmen will be restricted to the work area defined on the plans. Any violation by Contractor's personnel or subcontractors will subject the contractor to penalties imposed by the TSA, FAA or YIA.

The Contractor will assume all fines against YIA assessed to them by the FAA/TSA for the Contractor's security violations. Typical fines are ten thousand dollars (\$10,000.00) or more per incident.

The Contractor shall be responsible for the protection of the construction site, and all work, materials, equipment, and existing facilities thereon, against vandals and other unauthorized persons.

Security measures shall include such additional security fencing, barricades, lighting, and other measures as the Contractor may deem necessary to protect the site.

The Contractor's responsibilities for work areas are as follows:

1. The Contractor shall be held responsible for controlling his employees, subcontractors, and their employees with regard to traffic movement.
2. The Contractor shall rebuild, repair, restore, and make good at his own expense all injuries or damages to any portion of the work occasioned by his use of these facilities before completion and acceptance of his work.
3. The Contractor shall submit to the Engineer in writing a detailed work plan for each construction phase. The work plan shall include, but not be limited to, temporary electrical facilities, installation sequence of underground electrical and storm sewer systems, paving sequence, installation sequence of electrical items, maintenance of airfield electrical and NAVAID power and control circuits. This plan shall be submitted 14 calendar days prior to the start of each construction phase. No work within the construction phase may commence until the phase work plan is approved.
4. The Contractor shall submit to the Engineer in writing a plan, by construction phase, for controlling construction equipment and vehicular movements in the Air Operations Area (AOA). This plan shall be submitted at the Pre-Construction Meeting. No work may commence until this plan is approved. The Plan must include material haul roads.
5. The Contractor shall provide a responsible Traffic Manager whose duty shall be to direct all traffic on or near active runways, taxiways, haul roads, and highways. Paved surfaces shall be kept clear at all times and specifically must be kept free from all debris which might damage aircraft.

All construction personnel assigned to the project, except for escorted in-transit material suppliers, shall make application for and wear airport ID badges. The prime Contractor and the subcontractor can make application for these items by contacting YIA Operations

Office at (928) 941-2396 to make arrangements and by visiting the YIA website at www.yumairport.com. All individuals requiring airport ID badges are required to fill out and submit an online application, complete an online video course for drivers training and successfully pass an online test. Airport ID badges must be surrendered upon termination of the employee or contract. The Contractor's employees, the subcontractor's employees and others should anticipate that the duration to process an application may take more than one (1) day per person, not counting the time waiting for background checks.

The Contractor shall immediately notify Airport Operations/Badging Office of any Contractor personnel whose employment status has changed. The Contractor shall be responsible for retrieving all security badges and keys and return them to the Badging Office. A fee will be charged for each badge that is damaged, lost or not returned.

6.0 WILDLIFE MANAGEMENT

1. Trash

Perform daily inspections of the work areas (including the Contractor's Staging Area) to remove any trash, debris and food scraps and place these items in an appropriate trash receptacles.

2. Standing Water

Standing water shall not be allowed to remain on the site for more than 3 days. The Contractor shall provide temporary drainage structures to allow the site to drain freely.

3. Tall Grass and Seeds

The Contractor shall inspect areas of the site and his laydown area and remove any tall grass that may be an attractant for birds and other wildlife.

4. Poorly Maintained Fencing and Gates

See Section 5.0-2.j.

5. Disruption of Existing Wildlife Habitat

Report any significant wildlife sightings within the AOA to the nearest Airport employee.

7.0 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. Construction contractors must not leave or place FOD on or near active aircraft movement areas. Materials capable of creating FOD must be continuously removed during the construction project. Fencing (other than security fencing) may be necessary to contain material that can be carried by wind into areas where aircraft operate.

The Contractor will be required to maintain a fully-operational sweeper vehicle on-site and perform routine sweepings over the construction area to minimize FOD. Since this project will require the haul road to cross active Taxiway H1, the Contractor will perform additional more frequent sweepings on Taxiway H1 as necessary to maintain a clean aircraft usable pavement section.

The Contractor will be required to keep water on construction areas to minimize the possibility of FOD generated by wind. The Contractor will be required to conduct FOD checks at the end of each working shift/day to remove any FOD that has made its way onto the airfield pavements from the Contractor's construction activities. Airport Operations and Construction Administration personnel will be present for these FOD checks to insure compliance.

8.0 HAZARDOUS MATERIALS (HAZMAT) MANAGEMENT

Contractors operating construction vehicles and equipment on the airport must be prepared to expeditiously contain and clean-up spills resulting from fuel or hydraulic fluid leaks. Any

hazardous or regulated waste material produced by the Contractor shall be properly disposed of at the Contractor's expense pursuant to all local, state and federal regulations. The Contractor may be required to provide test results to confirm that a contaminated area has been properly remediated.

Any hazardous materials situation that poses a threat to safety or property shall be immediately reported emergency personnel by dialing 911 and to the nearest Airport employee.

9.0 NOTIFICATION OF CONSTRUCTION ACTIVITIES

1. List of Responsible Representatives

A full list of Points of Contact will be developed prior to the Pre-Construction meeting. The Engineer will generally be the central point of contact with all communications relating to construction being filtered through him. Matters relating to Airport Operations will be handled by YIA, with assistance from the Engineer and/or Contractor as needed.

Emergency		911
YIA Project Manager	Mark Workman	928-919-2388
YIA Operations		928-941-2396
YIA Administration Office		928-726-5882
ARFF Dispatcher		928-269-2385
MCAS Yuma Airfield Operations		928-269-3230
Engineer	Drew Seybold	602-952-9123

2. Notices to Airmen (NOTAMs)

Airport staff will be responsible for filing construction NOTAMs approximately three (3) days prior to construction beginning in the area which the NOTAM references, or prior to any change in airfield conditions that may affect operations or safety.

3. Emergency Notification Procedures

If a serious injury requiring medical attention occurs, call 911 immediately. If call is made from a cellular phone, instruct the emergency operator to connect to the City of Yuma Emergency Dispatch, otherwise the call may be routed elsewhere, resulting in a delayed emergency response. Immediately following a 911 call, notify YIA Airport Operations.

4. Coordination with ARFF

For non-emergency issues that need to be coordinated with the Airport's ARFF, the Contractor may notify any Airport Operations employee.

5. Notification to the FAA

No coordination with the FAA or notifications are required.

10.0 INSPECTION REQUIREMENTS

1. Daily Inspections

Daily inspections will be required for areas requiring haul routes over active airfield pavements to insure that FOD is minimized. In addition, daily inspections of Contractor access areas will be performed to help insure safety onto the airfield. Daily inspections will be conducted by an Airport Operations employee, a Contractor representative, and a Construction Administration field representative.

All discrepancies noted in the inspection must be corrected to the satisfaction of the Engineer prior to the Contractor leaving the worksite.

Should any inspection reveal any FOD concerns, the Contractor shall have a crew ready to remove any FOD prior to reopening the pavements. Should any inspection reveal work that does not meet Contract requirements or that is deficient in any way, the Contractor shall mobilize a crew as soon as possible to remedy the deficient areas so as to avoid prolonging the continued closure of the areas.

2. Final Inspections

Inspections will be required at the Substantial Completion and Final Completion phases of the project. These inspections will be attended by the Contractor, Airport Manager, FAA Representatives, an ADOT Grant Manager, the Engineer, and Construction Administration representatives. A punch list will be developed at the Substantial Completion inspection, and any items placed on the punch list will be required to be completed within 30 days, in time for the Final Inspection.

11.0 Underground Utilities

The best information available indicates that utilities at the site have been abandoned. However, the Contractor is required to Blue Stake and pothole (if necessary) all existing utilities within the project area prior to the beginning of any construction activities on the airfield. Protection of utilities may include, but are not limited to, flagging utilities, marking lines on pavement, and placement of barricades along utility lines and at manholes.

12.0 Penalties

Due to both the safety and security precautions necessary at Yuma International Airport / MCAS – Yuma, failure of the Contractor to adhere to the prescribed requirements/regulations has consequences that may jeopardize the health, welfare and lives of the customers and employees at the Airport, as well as the Contractor’s own employees. Therefore, if the Contractor is found to be in non-compliance with the security, airfield badging/licensing and airfield safety requirements by either the TSA, FAA or Airside Operation’s Personnel or the Engineer or his representatives, the Operations Department will issue Notice of Violations (NOV). The Contractor may appeal the NOV, however appeals must be made in writing, and within four (4) calendar days of the offending incident, to the YIA Project Manager. The appeal would need to state, in sufficient detail, why the NOV/circumstances is unwarranted. A final and binding decision on the appeal will be made by the YIA’s Project Management Team within ten (10) working days of receipt of the appeal. The Contractor will then be notified of this decision in writing. No further appeals to the specific NOV will be considered/accepted. Subsequent non-compliance assessments and/or requirements, if any, will be applied in accordance with Table 1, Schedule of Contract Non-Compliance Assessment listed below and the applicable amount will be withheld from the Contractor’s next monthly payment application following the date of the violation. The Prime Contractor will be held financially responsible for all NOV’s issued to their subcontractors or material suppliers associated with this Contract.

TABLE 1 – Schedule of Contract Non-Compliance Assessment for Notice of Violation.

Description of Assessment	First Offense	Second Offense	Third Offense
Not having proper and current Airport Security Badge or not properly displaying Airport Security Badge.	\$1,000.00	\$5,000.00	\$15,000.00
Lost or unreturned Airport Security Badge.	\$300.00	\$450.00	\$600.00

Description of Assessment	First Offense	Second Offense	Third Offense
Un-authorized access to AOA by construction personnel or access through construction gate by un-authorized personnel.	\$1,000.00	\$5,000.00	\$15,000.00
Failure to Escort / be Escorted.	\$1,000.00	\$5,000.00	\$15,000.00
Operating a vehicle or mobile construction equipment without a current Ramp Driver's permit.	\$1,000.00	\$5,000.00	\$15,000.00
Failure to stop at a designated Stop, or exceeding the maximum speed limit, or deviating from designated service roadway or haul routes.	\$1,000.00	\$5,000.00	\$15,000.00
Failure to yield to airside personnel or vehicles.	\$1,000.00	\$5,000.00	\$15,000.00
No logo on vehicle or logo is not Correct in name and dimension.	\$1,000.00	\$5,000.00	\$15,000.00
Active runway incursion.	\$15,000.00	\$20,000.00	\$25,000.00
Active taxiway, taxilane or apron incursion.	\$10,000.00	\$15,000.00	\$20,000.00
Active runway or taxiway object free area incursion.	\$5,000.00	\$10,000.00	\$15,000.00
Safety violation, such as insufficient barricades, or no flags or amber beacons on vehicle or equipment. Or no red obstruction lighting on cement silo, batch plants, cranes or other equipment with significant height.	\$5,000.00	\$10,000.00	\$15,000.00
Non-compliance with City's lock- Out tag-out procedures.	\$5,000.00	\$10,000.00	\$15,000.00
Failure to backfill open trenches within time specified.	\$5,000.00	\$10,000.00	\$15,000.00
Failure to provide lighted barricades.	\$5,000.00	\$10,000.00	\$15,000.00
Failure to provide functional temporary edge lighting	\$5,000.00	\$10,000.00	\$15,000.00
All other NOV not listed above.	\$1,000.00	\$5,000.00	\$15,000.00

YIA Operations has the option to issue warnings on the first offense if the incident justifies it. Individuals involved in a non-compliance violation may be required to surrender their security badge and airfield driver's license pending investigations of the matter and the outcome of the possible appeal.

Incursions are defined as any entrance onto an active runway, taxiway, taxilane, aircraft movement area or apron that may or may not subject any aircraft or ARFF vehicle to yield, stop or change direction to avoid the sudden entrance.

For the fourth and each subsequent offense for any of the NOV listed above, the contract non-compliance assessment shall remain at the same amount shown for the third offense. Advancing from the first offense to the second offense, or from the second offense to the third offense, etc., shall be considered whether the individual is employed with the prime Contractor or any subcontractor or material supplier.

13.0 Special Conditions

Special unforeseen conditions or circumstances may require the activation of special procedures by the Airport. In cases involving aircraft emergencies or distressed aircraft, the Contractor may be required to temporarily halt construction activities and immediately vacate the area in which he is working. The nearest Airport Operations employee will be expected to notify all Contractor personnel in the vicinity, and promote safe and orderly removal of all Contractor personnel and equipment to an area that is no longer in conflict with the emergency at hand. The Contractor will be expected to immediately comply with all Airport personnel directions, and may not return to the subject work area until given the all clear to do so.

In the event of low-visibility conditions, or other conditions which may signal the need for additional unimpeded space next to runways or taxiways, the Contractor may be required to move to another work area of the project or temporarily stop work. The Contractor will be made aware of the possibility of these situations during the Pre-Construction Conference.

14.0 Runway and Taxiway Visual Aids

1. General.

Airport markings, lighting, signs, and visual NAVAIDs must be clearly visible to pilots, not misleading, confusing, or deceptive. All must be secured in place to prevent movement by prop wash, jet blast, wing vortices, or other wind currents, and constructed of materials that would minimize damage to an aircraft in the event of inadvertent contact.

Markings must be in compliance with the standards of AC 150/5340-1, Standards for Airport Markings. Runways and runway exit taxiways closed to aircraft operations are marked with a yellow X. The preferred visual aid to depict temporary runway closure is the lighted X signal placed on or near the runway designation numbers.

2. Markings.

Markings must be in compliance with the standards of AC 150/5340-1, Standards for Airport Markings. For temporarily closed taxiways, place barricades outside the safety area of intersecting taxiways. For runway/taxiway intersections, place an X at the entrance to the closed taxiway from the runway. If the taxiway will be closed for an extended period, obliterate taxiway centerline markings, including runway leadoff lines, leading to the closed section. If the centerline markings will be reused upon reopening the taxiway, it is preferable to paint over the marking. This will result in less damage to the pavement when the upper layer of paint is ultimately removed.

3. Lighting and Visual NAVAIDs

This project does not affect any existing lighting or Visual NAVAIDs.

4. Runway and Taxiway Signs

Taxiway signs for Taxiway F1 must be covered during the time when the taxiway is closed for construction. Signs that must be covered are along Runway 3L-21R and along Taxiway H1.

15.0 Marking and Signs for Access Routes

Temporary signing used for Contractor access/haul routes, open trenching or other hazards shall be clear, concise, reflective, and large enough so as to minimize safety-related issues. All temporary signing shall meet the requirements of the most current version of the Manual of Uniform Traffic Control Devices (MUTCD), and shall be frangible.

16.0 Hazard Marking and Lighting

1. Use of Warning Indicators for Construction Areas

Within aircraft movement areas, construction areas will be barricaded off by low-profile or vertical panel barricades with red flashing or steady burn lights, as shown on Sheet G-003, Construction Safety and Phasing Plan. For construction not located within aircraft movement areas, vertical panel barricades with red flashing or steady burn lights may be used to prohibit vehicle or pedestrian traffic from crossing into construction areas.

2. Hazard Marking and Lighting

All potential hazards, including but not limited to, open trenches, manholes, and steep embankments shall be barricaded and lighted with caution tape or orange fabric construction fencing to prohibit accidental falls. The Contractor's site-specific and company safety plan/guidelines shall address the protection of these areas and the protection of the employees against these hazards in the SPCD. The Contractor shall also assign a Project Safety Officer for the project to monitor and enforce the Contractor's safety guidelines and the provisions of this Construction Safety Plan.

When areas on the Airport are closed or present hazards due to construction activities, they should be marked and lighted according to AC 150/5340-1K, Standards for Airport Markings, current edition. Marking and lighting must be approved by Operations.

3. Less Obvious Construction Related Hazards

It is the Contractor's responsibility to be aware of and look out for less obvious construction related hazards. Such hazards may include, but are not limited to:

- Loose debris, trash, etc. in the work areas;
- Loose debris, trash, etc. on or in the bed of vehicles;
- Jet blast; and
- Jet engine run-up noise

The Contractor shall be vigilant in keeping the work areas in a safe and trash-free condition, as much as possible, so as to prevent debris from making its way onto active airfield pavements. The Contractor shall also exercise due care when working in the vicinity of active aircraft. This can include the use of hearing protection and the securing of clothing and hardhats while working.

4. Securing of Equipment to Prevent Blow-Down

Barricading and lighting equipment shall be secured to prevent blow-down. This may include the use of water-filled items, the use of sandbags, and/or flat heavy footings. Temporary lighting may be secured to the pavement with nails or screws.

5. Spacing of Barricades

See Sheet G-003, Construction Safety and Phasing Plan for barricade location and placement requirements.

6. Requirements of Red Lights

Red lights on low-profile and vertical barricades shall be of the flashing or steady-burn type. The rate of flash and illumination, as well as barricade reflectivity, shall meet the requirements of the latest edition of the MUTCD.

7. Low-Profile Barricades and Markers

Low-profile barricades shall be used on airfield pavements within or on Taxiway Safety Areas. Low-profile barricades shall be reflective, have a steady-burning or flashing red light, and shall be properly secured.

8. Proper Marking of Barricades

Barricades shall be properly colored and marked with reflective material according to the plan details for this project and the latest edition of the MUTCD.

9. Proper Reflectivity and Lighting of Barricades

Barricades shall be properly colored and marked with reflective material according to the plan details for this project and the latest edition of the MUTCD.

10. Markings for Temporary Closures

Temporarily closed taxiways shall be barricaded to alert air traffic.

11. Emergency Maintenance of Airport Hazard Lighting and Barricades

The Contractor shall designate an employee (or subcontractor) to be responsible for the regular maintenance of barricades and lighting. In addition, the Contractor shall provide an emergency contact number for the responsible individual to perform any emergency maintenance on any barricades or lighting, and insure functional operation of all hazard lighting and barricades 24 hours per day, 7 days per week. The designated person or sub-contractor shall be able to respond to the Airport within one (1) hour of notification of a non-functioning barricade.

17.0 Protection of Runway and Taxiway Safety Areas

1. Runway Safety Areas (RSA)

No work on this project will take place in the RSA of Runway 3L-21R.

2. Runway Object Free Area (ROFA)

No work on this project will take place in the ROFA of Runway 3L-21R.

3. Taxiway Safety Area (TSA)

No construction work can occur in the taxiway safety area while the taxiway is open.

4. Taxiway Object Free Area (TOFA)

No construction work can occur in the TOFA while the taxiway is open. The TOFA shown on Sheet G-003 is for a Group V aircraft at 160 feet from centerline of taxiway.

5. Obstacle Free Zone (OFZ)

The OFZ will not be affected as part of this project.

6. Runway Approach/Departure Areas and Clearways

The Approach/Departure Surfaces and Clearways will not be affected as part of this project.

18.0 Other Limitations on Construction

1. Prohibitions

- a. The Airport has submitted Form 7460-1 to the Obstruction Evaluation/Airport Airspace Analysis group with the FAA using an equipment height of 30 feet for the project area shown in Appendix A. Equipment higher than 30 feet about the ground line shall not be used without advanced approval from the Engineer and the Airport Manager.

- b. Open flame welding or torch cutting operations are prohibited unless adequate fire and safety precautions are provided and have been approved for use by the Engineer. Under no circumstances should flare pots be used.
- c. The use of electrical blasting caps is not permitted within 1,000-feet of the Airport property.

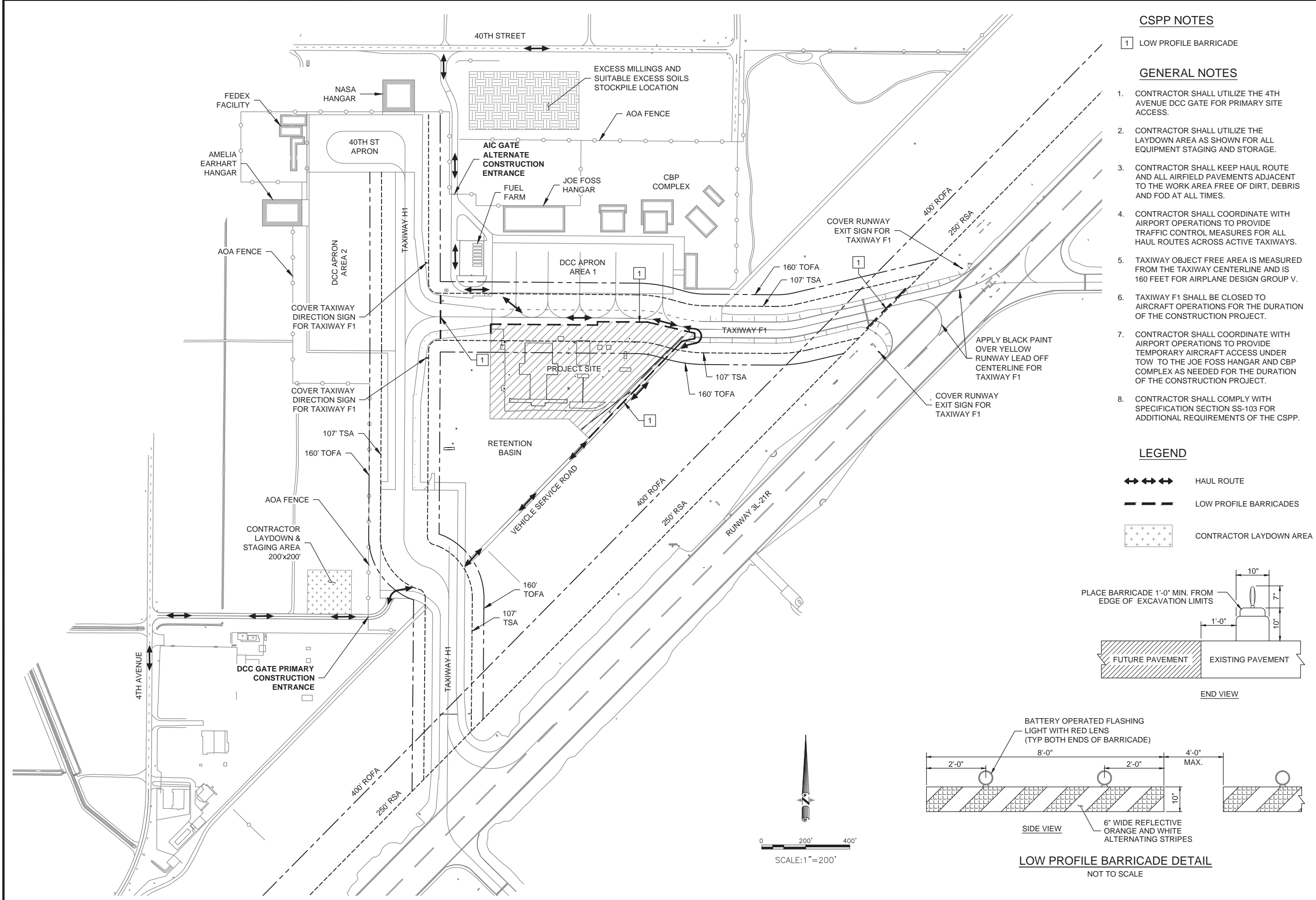
2. Restrictions

Yuma International Airport is a joint use airport with the Marines Corps Air Station – Yuma. As such, the YIA may be subject to restrictions on construction and access to the AOA during training exercises on the Base. Weapons and Tactics Instruction (WTI) exercises are typically conducted in the spring and the fall. The current scheduled dates are:

Fall 2015	WTI 1-16	09-17-15 to 10-31-15
Spring 2016	WTI 2-16	03-18-16 to 04-29-16
Fall 2016	WTI 1-17	09-18-16 to 10-31-16
Spring 2017	WTI 2-17	03-24-17 to 05-03-17

APPENDIX A

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CSPP NOTES

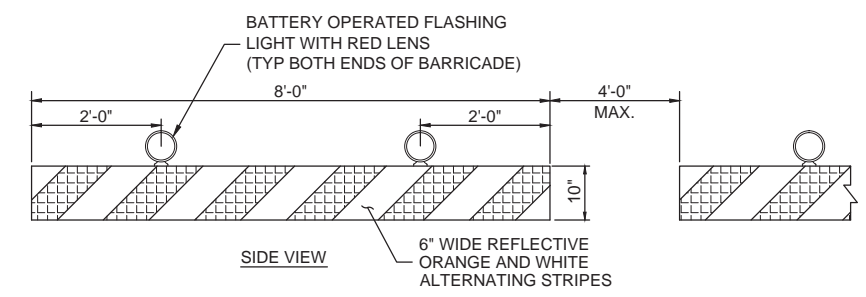
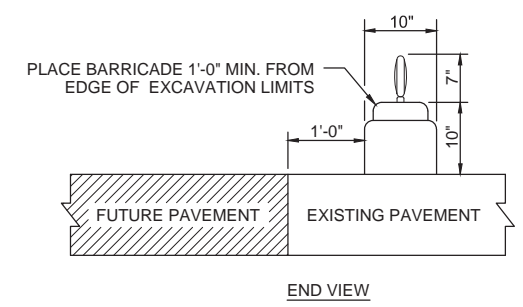
- 1 LOW PROFILE BARRICADE

GENERAL NOTES

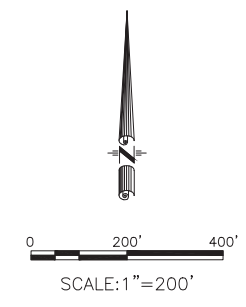
1. CONTRACTOR SHALL UTILIZE THE 4TH AVENUE DCC GATE FOR PRIMARY SITE ACCESS.
2. CONTRACTOR SHALL UTILIZE THE LAYDOWN AREA AS SHOWN FOR ALL EQUIPMENT STAGING AND STORAGE.
3. CONTRACTOR SHALL KEEP HAUL ROUTE AND ALL AIRFIELD PAVEMENTS ADJACENT TO THE WORK AREA FREE OF DIRT, DEBRIS AND FOD AT ALL TIMES.
4. CONTRACTOR SHALL COORDINATE WITH AIRPORT OPERATIONS TO PROVIDE TRAFFIC CONTROL MEASURES FOR ALL HAUL ROUTES ACROSS ACTIVE TAXIWAYS.
5. TAXIWAY OBJECT FREE AREA IS MEASURED FROM THE TAXIWAY CENTERLINE AND IS 160 FEET FOR AIRPLANE DESIGN GROUP V.
6. TAXIWAY F1 SHALL BE CLOSED TO AIRCRAFT OPERATIONS FOR THE DURATION OF THE CONSTRUCTION PROJECT.
7. CONTRACTOR SHALL COORDINATE WITH AIRPORT OPERATIONS TO PROVIDE TEMPORARY AIRCRAFT ACCESS UNDER TOW TO THE JOE FOSS HANGAR AND CBP COMPLEX AS NEEDED FOR THE DURATION OF THE CONSTRUCTION PROJECT.
8. CONTRACTOR SHALL COMPLY WITH SPECIFICATION SECTION SS-103 FOR ADDITIONAL REQUIREMENTS OF THE CSPP.

LEGEND

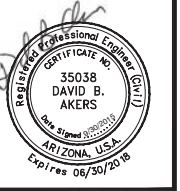
- HAUL ROUTE
- LOW PROFILE BARRICADES
- CONTRACTOR LAYDOWN AREA



LOW PROFILE BARRICADE DETAIL
NOT TO SCALE



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SYMBOL	DATE



YUMA INTERNATIONAL AIRPORT
DCC APRON REHABILITATION
ADOT NO. E4S1X
CONSTRUCTION SAFETY
AND PHASING PLAN

PROJECT TITLE: YUMA INTERNATIONAL AIRPORT
 SUBMITTAL: BID SET
 ISSUE DATE: 09/30/2015
 DESIGNED BY: DPS
 DRAWN BY: DPS
 CHECKED BY: DBA
 SHEET IDENTIFICATION: **G-003**
 SHEET 3 OF 16