

# SANTA MARIA PUBLIC AIRPORT DISTRICT

## Airport Project

# US Customs Upgrades: Security 3335 Corsair Circle

### CONTRACT DOCUMENTS AND CONSTRUCTION SPECIFICATIONS

NOVEMBER 25, 2024

TE Project: 22-69 - Security

---

**Non-Mandatory Pre-Bid Job Walk:**  
10:00 am, December 19, 2024.  
Meet at District office: 3217 Terminal Dr.

**Bid Opening:**  
2:00 pm, January 7, 2025

**Bid Documents:**  
Plans and specifications are available  
electronically on [www.publicpurchase.com](http://www.publicpurchase.com)

**Bid Location:**  
Bids submitted electronically  
on [www.publicpurchase.com](http://www.publicpurchase.com)

---

**Project Architect:**  
Ravatt Albrecht & Associates  
125 Union Ave.  
Orcutt, California 93455  
(805) 786-4391



**Project Engineer:**  
Tartaglia Engineering  
P.O. Box 476  
Pismo Beach, California 93448  
(805) 466-5660

---

This Page intentionally left blank

## TABLE OF CONTENTS

<b>NOTICE INVITING SEALED BIDS</b> .....	<b>3</b>
<b>INSTRUCTIONS TO BIDDERS</b> .....	<b>7</b>
<b>BID PROPOSAL</b> .....	<b>12</b>
BID SCHEDULE .....	13
FIRM/LICENSE INFORMATION .....	15
SUBCONTRACTOR SCHEDULE .....	17
EXHIBIT 15-G CONSTRUCTION CONTRACT DBE COMMITMENT .....	18
EXHIBIT 15-H DBE INFORMATION —GOOD FAITH EFFORTS .....	19
BID SECURITY FORM .....	22
BID BOND .....	23
NONCOLLUSION DECLARATION .....	24
<b>SAMPLE CONTRACT</b> .....	<b>25</b>
CONTRACT DOCUMENTS/INFORMATION .....	25
PERFORMANCE BOND .....	42
PAYMENT BOND .....	44
HAZARDOUS MATERIAL .....	46
<b>TECHNICAL SPECIFICATIONS</b> .....	<b>48</b>
Part 1 – General Contract Provisions .....	49
Section 10 Definition of Terms .....	49
Section 20 Proposal Requirements and Conditions .....	57
Section 30 Award and Execution of Contract .....	60
Section 40 Scope of Work .....	62
Section 50 Control of Work .....	65
Section 60 Control of Materials .....	70
Section 70 Legal Regulations and Responsibility to Public .....	73
Section 80 Execution and Progress .....	79
Section 90 Measurement and Payment .....	85
Part 2 – General, Mobilization, Safety and Security .....	92
Section 10 – General Requirements .....	92
Section 11 – Safety and Security .....	97
Section 12 - Mobilization .....	100
Section 13 – Access Control, Intrusion Detection, Surveillance .....	102
 Appendix A: FAA Advisory Circular: 150/5370-2G Operational Safety on Airports During Construction	
Appendix B: Non-Disclosure Agreement - Department of Homeland Security	
Appendix C: Technical Specifications (to be distributed to Contractors individually after receipt of signed Non-Disclosure Agreement)	

CONTRACT DOCUMENTS

FOR

**US Customs Upgrades: Security  
3335 Corsair Circle**

AT

**SANTA MARIA PUBLIC AIRPORT  
SANTA MARIA, CALIFORNIA**

**SPECIAL NOTICE TO BIDDERS**

**NON-MANDATORY PRE-BID JOB WALK  
10:00 A.M, Thursday, December 19, 2024**

Thank you,

**John Smith**  
Project Engineer

**Jim Albrecht**  
Project Architect

CONTRACT DOCUMENTS

**US Customs Upgrades: Security  
3335 Corsair Circle**

**AT**

**SANTA MARIA PUBLIC AIRPORT**

**SANTA MARIA, CALIFORNIA**

**SANTA MARIA PUBLIC AIRPORT DISTRICT**

**BOARD OF DIRECTORS**

- Nash Moreno..... President
- Chuck Adams ..... Vice-President
- Steve Brown..... Secretary
- Michael B. Clayton..... Vice Secretary
- Tony Guy..... Director
- Martin Pehl..... General Manager
- Joshua M. George..... District Counsel

District Offices:  
3217 Terminal Drive  
Santa Maria, CA. 93455

(805) 922-1726 Phone  
(805) 922-0677 Fax

Plans & Specifications Prepared by:

<p>Tartaglia Engineering 7360 El Camino Real, Suite E Atascadero, CA 93423 (805) 466 5660 John@tartaglia-engineering.com</p>	<p>Ravatt Albrecht &amp; Associates 125 Union Ave. Orcutt, California 93455 (805) 786-4391 jalbrecht@raarchitectsengineers.com</p>
--	--

## NOTICE INVITING SEALED BIDS

FOR

### **US Customs Upgrades: Security 3335 Corsair Circle**

AT

#### **SANTA MARIA PUBLIC AIRPORT**

A-1 NOTICE IS HEREBY GIVEN that sealed bids will be received by the Santa Maria Public Airport District for furnishing all plant, labor, services, materials, tools, items, and facilities necessary therefore, as provided in the contract documents, for a project entitled "US Customs Upgrades: Security, 3335 Corsair Circle" in strict accordance with the contract documents and plans and specifications on file at the office of the General Manager of the District, 3217 Terminal Drive, Santa Maria, California 93455.

A-2 DATE OF BID OPENING - Bids will be received to [www.publicpurchase.com](http://www.publicpurchase.com) on or before **2:00 P.M., Tuesday, January 7, 2025**. There will be no public bid opening. Bids shall be made on forms furnished by the District through Public Purchase. No bid shall be received from a bidder who has not registered as a plan holder on the Public Purchase website.

A-3 DESCRIPTION OF THE WORK/TYPE OF LICENSE - The work comprises of the following:

- Airfield safety and security including management of own crews: badging, access gate management, path of travel management.
- Coordination with the general building contractor.
- Design, construction, and installation of video surveillance, physical access control and intrusion detection systems including but not limited to:
  - Install all conduits, mounting and terminating boxes, panels, brackets, supports, covers, and boards.
  - Install all cabling and splicing, blocks and breakers, power and communications links.
  - Install all physical control and monitoring devices, sensors, readers, key-pads, data generating units, cameras, etc.
- Provide and install uninterrupted power supply (UPS) unit for systems.
- Perform start up initiation and testing efforts to confirm proper functionality of all systems and components, including all power and communications links to panels, and work-stations.
- Provide training to owner and US Customs tenant representatives.
- Provide O&M Manuals for all installed equipment.

At the time of award of contract, the contractor shall possess one of the following:

- Class B (General Building)
- Class C10 (Electrical)
- Combined Class C7 (Low Voltage Systems) with Class C28 (Lock and Security Equipment)

A-4 NON-DISCLOSURE REQUIRED – Due to the sensitive and high security nature of this project, technical specifications including plans of the improvements will be distributed to contractors individually, after receipt of bidding contractor signed Federal, Department of Homeland Security, Non-Disclosure Agreement. Non-Disclosure form is included in the appendix of this specification book.

A-5 QUANTITIES - Quantities given in the Bid Schedule of the proposal are approximate only and are given solely for the basis of comparison of bids. The contractor will be paid for actual work accomplished, including materials and equipment actually installed and accepted, at the unit price bid in the appropriate items of the Bid Schedule.

A-6 CONTRACT TIME- The contract award, if made, will be made within thirty (30) days after opening of bids. No bidder may withdraw his bid within said period. The work shall commence within 10 days after receiving a written notice to proceed and shall be prosecuted diligently. A Notice to Proceed will be issued after receipt of all materials and equipment. The work shall be completed within **45 calendar days**.

An administrative Notice to Proceed will be issued within 10 days after the contractor awarded the contract has properly signed the contract documents and furnished the required bonds and insurance policies and certificates, allowing for ordering and receiving materials.

If the Contractor refuses or fails to complete the work within the time specified, including authorized extensions, there shall be deducted from monies due the Contractor, not as a penalty but as liquidated damages, the sum of **\$500.00** for each calendar day subsequent to the time specified and until the work is completed and accepted up to and including thirty (30) calendar days past the date established for completion. Contractor shall pay to District the sum of **\$ 1,000.00** per calendar day as liquidated damages for each calendar day that Project shall remain incomplete past thirty (30) calendar days after the date established for completion.

A-7 AWARD OF CONTRACT - The District reserves the right, after opening bids, to reject any or all bids, or to make award to the lowest responsible bidder and reject all other bids, and/or to waive any informalities or irregularities in any bid which it may deem necessary in the best interests of the Santa Maria Public Airport District.

A-8 SITE CONDITIONS - Each bidder shall carefully examine the drawings, read the specifications and other contract documents and shall visit the site of the proposed work to become fully informed as to all existing conditions and limitations that may affect the execution of the work under the contract, and the bidder shall include in the prices bid, the cost of all incidentals and appurtenances.

A-9 A **NON-MANDATORY PRE-BID JOB WALK** is scheduled for **10:00 A.M, Thursday, December 19, 2024**. Meet at the Airport District office. The failure or omission of any bidder to receive or examine any form, instrument, addendum, or other document, or its failure to visit and become acquainted with conditions at the site shall in no respect relieve the bidder from any obligation imposed by its proposal or by the contract. The submittal of a proposal shall be taken as prima facie evidence of compliance with all instructions contained herein.

A-10 COMPETENCY OF BIDDERS – Due to the nature of this work, each bidder shall furnish the District with satisfactory evidence of his competency to perform the work proposed. The District reserves the right to reject a bid if the bidder has not submitted a statement of his qualifications prior to or accompanying the bid.

Bidders must submit their qualifications prior to or with submission of the bid. The bidders will be required to furnish a statement covering experience on similar work and a list of machinery, plant and other equipment available for the proposed work.

- **Minimum five years-experience for installation and construction of access control, intrusion detection, and video surveillance systems at an institutional level.**
- **Resume of project superintendent to be assigned to this project, if awarded, showing a similar minimum five-year level of experience.**

- **A minimum of three institutional references, with phone and e-mail contact information.**

**The District reserves the right to make such investigation of the information submitted as is deemed necessary, before a rating is given, and to disqualify any contractor from consideration if deemed in the best interest of the District. Failure to comply with the foregoing requirements will be sufficient reason to reject the bid.**

A-11 SUBSTITUTION OF ELIGIBLE SECURITIES - Substitution of eligible securities, hereinafter defined, for any moneys of the contractor withheld by the District to ensure performance under the contract may be permitted pursuant to and in accordance with Section 22300 of the Public Contract Code. The term "eligible securities", as used herein, means and includes the securities listed in Section 16430 of the Government Code or bank or savings and loan certificates of deposit. At the request and expense of the contractor, eligible securities equivalent to the amount withheld shall be deposited with the District, or with a state or federally-chartered bank as the escrow agent, who shall pay such moneys to the contractor upon satisfactory completion of the contract. The contractor shall be the beneficial owner of any eligible securities substituted for moneys withheld and shall receive any interest thereon.

A-12 CERTIFIED CHECK OR BONDS - Each proposal must be accompanied by a certified or cashier's check, or by a corporate surety bond on the form furnished by the District, as a guarantee that the bidder will, if award is made to it in accordance with the terms of its proposal, promptly secure worker's compensation insurance and liability insurance, execute an agreement in the required form, and furnish satisfactory bonds for faithful performance of the contract and for payment of claims of material suppliers and laborers hereunder. Said check or bid bond shall be in an amount not less than ten percent (10%) of the amount of the bid. The faithful performance bond shall be not less than one hundred percent (100%) of the contract price, and the payment bond shall be not less than one hundred percent (100%) of the contract price. A faithful performance bond and a payment bond are only required for contracts in excess of \$25,000.

A-13 PREVAILING RATES OF WAGES - The minimum wages to be paid for labor shall be not less than the general prevailing per diem wage and rates for overtime and general holidays as determined by the Director of the Department of Industrial Relations, State of California, pursuant to California Labor Code Sections 1770, 1773, and 1773.1, which wage rates are available for inspection at the District office.

A-14 DBE REQUIREMENTS - This project is funded by the Santa Maria Public Airport District. Bidders shall provide good faith effort documentation of meeting the District DBE participation goal. The DBE goal for this project is 8.75%.

A-15 BID SUBMISSION – Contractors to provide / submit bids electronically on or before the designated date and time for receipt of bids, in accordance with procedures identified on the Public Purchase Website. The selected contractor, prior to issuance of a contract, shall provide to the District a paper copy of the bid submission, including original bid signature page, competency of bidders statements, surety bonds (or other financial instruments) and notarized statements and signature pages. The envelope shall be sealed and addressed to the Santa Maria Public Airport District, Attention: Martin Pehl, General Manager, and delivered or mailed to 3217 Terminal Drive, Santa Maria, California, 93455. The envelope shall be plainly marked in the upper left-hand corner with the name and address of the bidder and shall bear the words: "**US Customs Upgrades: Security**". The certified or cashier's check, money order, or bid bond shall be enclosed in the same envelope with the original bid paperwork. Failure to provide within five (5) working days will preclude forward movement with contract.



By order of the Santa Maria Public Airport District.

SANTA MARIA PUBLIC AIRPORT DISTRICT

Dated: October 24, 2024

By: Martin Pehl, General Manager

Advertise 1: December 8, 2024

Advertise 2: December 15, 2024

Posted on website: On or before December 8, 2024

## INSTRUCTIONS TO BIDDERS

### 1. FORM OF BID AND SIGNATURE.

(a) The proposal shall be submitted on the form attached hereto and shall be enclosed in a sealed envelope marked and addressed as hereinafter directed.

(b) If the proposal is made by an individual, it shall be signed and his full name and address shall be given; if it is made by a firm, it shall be signed with the partnership name by a member of the firm, who shall also sign his own name, and the name and address of each member shall be given; and if it is made by a corporation, the name of the corporation shall be signed by its duly authorized officer or officers attested by the corporate seal, and the names and titles of all officers of the corporation shall be given.

2. INTERPRETATION. Bidders shall promptly notify the Santa Maria Public Airport District ("District") of any doubt as to the true meaning of any requirement of plans or technical specifications, or of any discrepancies in, or omissions from, the plans or technical specifications, or of any ambiguity, inconsistency or error in the bidding and contract documents or of the site and local conditions. Bidders requiring clarification or interpretation of the plans and specifications or of the bidding or contract documents shall submit to the District Manager, at the address given in the bid proposal, a written request for an interpretation or correction thereof. The written request must be received at least seven (7) calendar days prior to the date fixed for opening of bids. The person making the request will be responsible for its prompt delivery.

Any interpretation, change or correction will be made by addendum. Interpretations, changes or corrections made in any other manner will not be binding, and bidders shall not rely upon such interpretations, changes or corrections. Interpretations or corrections will be made only by addenda to technical specifications or by dated revisions of plans with a copy of each addition or change being furnished, through the District, to each prospective bidder. Questions concerning the contract form, bonding requirements, or similar documents shall be directed to the District Manager.

3. ADDENDA. Addenda, if any, will be prepared and posted on the Public Purchase website under the identified project. It is the sole responsibility of the Contractor to frequent the Public Purchase website to remain current regarding bidding documents including the issuance of Addenda. No addenda will be issued later than four (4) days prior to the date of bid opening, except an addendum, if necessary, postponing the date for receipt of bids or withdrawing the request for bids. Each bidder shall ascertain prior to submitting his bid that he has received all addenda issued, and he shall acknowledge their receipt at the appropriate location in the bid documents of his / her bid.

### 4. PREPARATION OF THE PROPOSAL.

(a) Blank spaces in the proposal and bid sheet(s) shall be properly filled. The phraseology of the proposal must not be changed and no additions shall be made to the items mentioned therein. Unauthorized conditions, limitations, or provisions attached to a proposal will render it informal and may cause its rejection. Alterations by erasure or interlineation must be explained or noted in the proposal over the signature of the bidder. Alternative proposals will not be considered unless specifically provided for in the bidding sheet(s).

(b) A bidder may withdraw his proposal before the hour fixed for opening bids, without prejudice to himself, by submitting a written request to the District for its withdrawal, and his proposal will be returned to him unopened when reached in the procedure of opening bids. No proposal may be withdrawn after the hour fixed for opening bids without rendering the accompanying certified or cashier's check or bidder's

bond subject to forfeiture as liquidated damages in like manner as in the case of failure to execute the contract after award, as hereinafter provided.

(c) No proposal received after the time named or at any place other than the place stated in the Notice Inviting Bids will be considered. All proposals will be opened and declared publicly. Bidders, their representatives, and others interested are invited to be present at the opening.

(d) The District reserves the right to waive any informality in any proposal, to reject any or all proposals and to make award to the lowest responsible bidder as the interest of the District may require. Where bonds are required, the bidder shall name in his bid the surety or sureties which have agreed to furnish said bonds.

5. **REGISTRATION OF CONTRACTORS.** Before submitting bids, contractors shall be licensed in accordance with the provisions of Chapter 9, Division 3, of the Business and Professions Code of the State of California. No bid will be accepted from a bidder who does not hold a valid Contractor's license issued by the State of California, and his license number must appear on the proposal.

6. **LIST OF SUBCONTRACTORS FILED WITH BID.** In accordance with the provisions of Sections 4100 through 4113, inclusive, of the Public Contract Code of the State of California, each bidder shall submit with his proposal the name and location of place of business of each proposed subcontractor who will perform work or labor or render service to the principal contractor in an amount in excess of one-half of one percent of the principal contractor's bid, and shall state the portions of the work which will be done by each such subcontractor.

7. **BIDDERS INTERESTED IN MORE THAN ONE BID.** No person, firm, or corporation shall make, file, or be interested in more than one proposal for the same work unless alternative bids are specifically requested. A person, firm, or corporation who has submitted a subproposal to a bidder, or has quoted prices of materials to a bidder, is not hereby disqualified from submitting a subproposal or quoting prices to other bidders.

8. **LOWEST RESPONSIBLE BIDDER.** In selecting the lowest responsible bidder, consideration will be given not only to the financial standing, but also to the general competence of the bidder for the performance of the work covered by the proposal. To receive favorable consideration, a bidder may be required to present evidence that he has successfully performed similar work of comparable magnitude or submit other evidence satisfactory to the District that he or his associates are personally competent to manage the proposed undertaking and to carry it forward to a successful conclusion. Professional integrity and honesty of purpose shall be essential requirements. Each bidder must furnish, if required, a record of past performance and experience and show that his organization, capital and equipment are adequate for the successful prosecution of the required work and its completion within the time specified.

9. **BID BOND OR CHECK.** Each bidder shall submit with his bid an unconditional certified or cashier's check drawn on a solvent state or national bank, or a bidder's bond with a responsible corporate surety, on the form attached hereto, subject to the provisions of Article 12(c), hereof. Unless otherwise stated in the Agreement, said bid security or bidder's bond shall be in a sum not less than ten percent (10%) of the amount of the bid, and shall be made payable to the District as a guarantee that the bidder will, if any award is made to him in accordance with the terms of his proposal, promptly execute a contract in the required form, secure payment of workers' compensation, if required, and furnish satisfactory Performance and Payment Bonds and proof of insurance coverage.

10. LOCAL CONDITIONS.

(a) Bidders shall read the specifications, examine the drawings, and make their own estimates of the existing facilities and the difficulties which will attend the execution of the work called for by the proposed contract, including local conditions, uncertainty of weather, and all other contingencies.

(b) Bidders shall satisfy themselves by personal examination of the location of the proposed work, and by such other means as they may choose as to actual conditions and requirements and as to the accuracy of the quantities stated in the bidding sheet(s). Information derived from maps, plans, specifications, profiles, or drawings, or from the District Manager shall not relieve the bidder of this responsibility, and the interpretation of the data disclosed by borings or other preliminary investigations is not guaranteed by the District. District makes no representations or warranties as to physical conditions on or about the location of the proposed work.

11. EXECUTION OF CONTRACT. A bidder to whom award is made shall execute a written contract with the District on the form of agreement attached hereto, secure the payment of workers' compensation, and furnish good and approved bonds as required in the following paragraph, all in accordance with the provisions hereof within ten (10) days (not including Sundays and holidays) or such additional time as may be allowed by the District Manager from the date of the mailing of a notice from the District to the bidder, to the address given by him, of the acceptance of his proposal. If a bidder to whom award is made fails or refuses to enter into contract as herein provided, or to conform to any of the stipulated requirements in connection therewith, the money represented by his check or bidder's bond shall become the property of the District, the award will be annulled, and, at the discretion of the District, District may award the contract to the next lowest responsible bidder; and such bidder shall fulfill every stipulation embraced herein as if he were the party to whom the first award was made. A corporation to which an award is made may be required, before the contract is finally executed, to furnish evidence of its corporate existence, of its right to do business in California, and of the authority of the officer signing the contract and bonds for the corporation.

12. BONDS.

(a) Except as otherwise provided in the Notice Inviting Bids, a bidder to whom the contract is awarded shall, within the time mentioned in the preceding paragraph, furnish a bond with a responsible corporate surety or corporate sureties conditioned upon the faithful performance of the said bidder of all covenants and stipulations in the contract. Said bond, hereinafter referred to as the "Faithful Performance Bond", shall be in the form approved by the District and in the amount stipulated in the agreement or, if no amount is therein specified, then in an amount not less than 100 percent (100%) of the total amount payable under the contract.

(b) Within the time mentioned in the preceding paragraph, the bidder to whom the contract is awarded shall also furnish a Payment Bond, approved by the District, in accordance with the provisions of Civil Code Sections 3225-3226, inclusive, and Sections 3247-3252, inclusive. Unless otherwise specified in the agreement, said Payment Bond shall be in a sum not less than 100 (100%) percent of the total amount payable by the terms of this contract, but not less than the sum prescribed by Section 3248 of the Civil Code, in any case.

(c) The surety or sureties on all bonds furnished must be satisfactory to the District. The party required to furnish bonds pursuant to these instructions shall furnish such bonds at his own cost and expense. The District reserves the right to reject any bond which is not in the form included in the contract documents or in another form substantially as prescribed by law.

13. **INSURANCE POLICIES AND BONDS.** Attention is invited to the provisions of the Insurance Code of the State of California with reference to the writing of insurance policies and bonds covering risks located in this state and the premiums and commissions thereon. A bidder to whom the contract is awarded shall furnish, at the time his bond or bonds are submitted for approval, satisfactory evidence that the requirements of said code have been observed.

14. **LIABILITY INSURANCE.** Before the contract is executed on behalf of the District, a bidder to whom the contract has been awarded shall furnish to the District a policy or certificate of protective liability insurance in which the District shall be named as an additional insured with the bidder. The policy shall insure the District, its officers and its employees; the bidder, his employees and his subcontractors and their employees, and their heirs, agents, and employees; while acting within the scope of their duties, against all claims arising out of or in connection with the work to be performed and shall remain in full force and effect until the work is accepted by the District. The policy shall provide for the limits stated in the agreement with the District.

15. **ASSIGNMENT OF CONTRACT.** No assignment by the Contractor of any contract to be entered into in accordance with the Notice Inviting Bids and these Instructions to Bidders, or any part thereof, or of funds to be received thereunder, will be recognized by the awarding authority unless such assignment has had the prior approval of the awarding authority and the surety has had notice of such assignment in writing and has given his written consent thereto.

16. **CANCELLATION OF AWARD.** At any time prior to execution of a contract agreement, the Owner reserves the right to cancel the award for any reason without liability to the Bidder, with the exception of the return of the bid guaranty, at any time prior to execution of the contract.

17. **DBE REQUIREMENTS.** This project is subject to Title 49 CFR 26. The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate. Take necessary and reasonable steps to ensure that DBEs have opportunity to participate in the contract (49 CFR 26).

The DBE participation goal for this project is **8.75%**. The contractor must meet this goal or demonstrate that you made adequate good faith efforts to meet this goal.

**DBE forms to submit:**

1. Submit DBE EXHIBIT 15-G CONSTRUCTION CONTRACT DBE COMMITMENT. This form is included in the Proposal Forms.

If the DBE Commitment form is not submitted with the bid, the apparent low bidder, the 2nd low bidder, and the 3rd low bidder must complete and submit the DBE Commitment form to the District. DBE Commitment form must be received by the District no later than 4:00 p.m. on the 3<sup>rd</sup> business day after bid opening.

Other bidders do not need to submit the DBE Commitment form unless the District requests it. If the District requests you to submit a DBE Commitment form, submit the completed form within 3 business days of the request.

If you do not submit the DBE Commitment form with the Proposal, the District finds your bid nonresponsive.

2. If you have not met the DBE goal, complete and submit EXHIBIT 15-H DBE INFORMATION —GOOD FAITH EFFORTS. This form is included in the Proposal Forms.

If the good faith effort form is not submitted with the bid, the apparent low bidder, the 2nd low bidder, and the 3rd low bidder must complete and submit the good faith effort form to the District. Good faith effort form must be received by the District no later than 4:00 p.m. on the 3<sup>rd</sup> business day after bid opening.

If the contractor documents that he has met the goal on EXHIBIT 15-G CONSTRUCTION CONTRACT DBE COMMITMENT, but the District finds an error, and questions that the contractor has met the goal, the District may request form EXHIBIT 15-H DBE INFORMATION —GOOD FAITH EFFORTS, and the contractor must submit the completed form within 3 business days of the request.

**BID PROPOSAL**

FOR

**US Customs Upgrades: Security  
3335 Corsair Circle**

To the Honorable Board of Directors  
Santa Maria Public Airport  
3217 Terminal Drive  
Santa Maria, California 93455

---

**Name of Contractor Submitting Bid**

---

**State D.I.R. Registration Number**

Ladies and Gentlemen:

The undersigned, as bidder, hereby declares that he has carefully examined the site of the herein proposed work, the Notice Inviting Sealed Bids, the proposed form of Contract and all documents referred to therein as Contract Documents, including the plans and specifications, the bid security form for check or bond, and form of the performance bond and payment bond; that the only persons or parties interest in this proposal as principals are those named herein, and he proposes and agrees that if this proposal is accepted, that he will contract with the Santa Maria Public Airport District, in the form of the contract, within 10 days of the date of mailing of the award of the contract and the contract for execution, to provide all necessary labor, machinery, tools, apparatus, and other means of construction, and to do, perform and complete all the work and furnish and install all equipment, supplies and materials specified in the contract and plans and specifications, in the manner and time therein prescribed, and according to the requirements of the Engineer and the Board of Directors of the Santa Maria Public Airport District as therein set forth, all within **45 Calendar days** after receipt of Notice to Proceed, and that he will take in full payment therefore the unit prices set forth in the following Bid Schedule, commencing on the next page:

(At a minimum, bidder to submit pages 13 – 25, complete,  
along with Bid Bond and Competency of Bidders documents)

**BID SCHEDULE**  
**US Customs Upgrades: Security**

ITEM #	QTY	UNIT	ITEM DESCRIPTION	SPEC #	Unit Price (IN FIGURES)	TOTAL (IN FIGURES)
1	1.0	LS	Mobilization, Airfield Safety & Security	10, 11, 12	\$	\$
2	1.0	LS	Design and Installation of Video Surveillance, Access Control, and Intrusion Detection Systems	13	\$	\$
3	1.0	LS	Training	13	\$	\$
TOTAL BID AMOUNT			<hr/> <hr/> <hr/> <p style="text-align: center;">(Written in Words)</p>		<hr/> <hr/> <hr/> <p style="text-align: center;">\$ (Written in Figures)</p>	

LS = Lump Sum      EA = Each      SF = Square Foot      LF = Lineal Feet  
 SY = Square Yard      CY = Cubic Yard      TON = Ton      T&M = Time and Materials

Total Bid Amount (written in figures): \$ \_\_\_\_\_.

Total Bid Amount (written in words), is \_\_\_\_\_ Dollars, and \_\_\_\_\_ Cents. In the event of discrepancy between unit pricing and total pricing, unit pricing shall prevail. In the event of discrepancy between words and figures, the words shall prevail.

**LOWEST RESPONSIBLE BIDDER.** In selecting the lowest responsible bidder, consideration will be given not only to the financial standing, but also to the general competence of the bidder for the performance of the work covered by the proposal. To receive favorable consideration, a bidder may be required to present evidence that he has successfully performed similar work of comparable magnitude or submit other evidence satisfactory to the District that he or his associates are personally competent to manage the proposed undertaking and to carry it forward to a successful conclusion. Professional integrity and honesty of purpose shall be essential requirements. Each bidder must furnish, if required, a record of past performance and experience and show that his organization, capital and equipment are adequate for the successful prosecution of the required work and its completion within the time specified.

All blank spaces in this Bid Proposal form must be fully and correctly filled in where indicated for each and every item. Bidder must state prices (written in ink, both in words and figures) for each item in the above Bid Schedule. In case of a discrepancy between the words and figures, the words (unless obviously incorrect) shall prevail. The undersigned bidder has checked carefully all words and figures on the above Bid Schedule and understands that the District will not be responsible for any errors or omissions on the part of the bidder in making up his bid.



ESTIMATED QUANTITIES. The undersigned understands that the quantities given are approximate only, being given as a basis for the comparison of bids, and the Santa Maria Public Airport District does not, expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any portion of the work, or to omit portions of the work, as may be deemed necessary or advisable by the Engineer without claim for damage or loss of anticipated profit and that the payment will be made only on the basis of the actual quantities or work performed.

ADDENDA: Addenda No.(s) \_\_\_\_\_ issued by the District amending, modifying, or supplementing the specifications, special provisions, or contract documents were taken into consideration in making this bid. The undersigned bidder has ascertained from District just prior to submitting this bid that he has received all addenda issued, if any.

INTERESTED PRINCIPALS: The names of all persons interested in the foregoing proposal as principals are as follows:

---

---

---

If the bidder or other interested persons is a corporation, state legal name of corporation and state of incorporation, also names, titles, and business address of president and manager thereof; if partnership, state full firm name and name and post office address of each partner; if individual, state first, middle, and last name in full and post office address. (If space is insufficient, use reverse side.)

---

---

---

BID SECURITY FORM: A  cashier's check  certified check  bid bond properly made payable to Santa Maria Public Airport District, for the sum of \_\_\_\_\_

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_), which amount is not less than ten percent (10%) of the total amount of this bid, is attached hereto and is given as a guarantee that the undersigned will execute the agreement and furnish the required bonds if awarded the contract and, in case of failure to do so within the time provided, the  proceeds of said check shall be forfeited to the District,  surety's liability to the District for forfeiture of the face amount of the bond shall be considered as established.

ACCEPTANCE: It is understood and agreed that this bid may be accepted by the District at any time within thirty (30) calendar days after the bid opening date. Airport District reserves the right to reject any or all bids or to waive any informalities in the bidding. The basis of selection will be the lowest responsible bid when comparing the total bid amount of each bidding contractor.

SUBCONTRACTOR SCHEDULE: A completed and signed subcontractor schedule required by the California Subletting and Subcontracting Fair Practices Act is attached hereto and made a part hereof.

**FIRM/LICENSE INFORMATION**

LICENSE: The undersigned is licensed in accordance with the laws of the State of California providing for the registration of contractors.

Contractor's License No: \_\_\_\_\_ Type of License: \_\_\_\_\_

If sole proprietorship, name of individual contractor: \_\_\_\_\_  
(print or type)

Signature of owner: \_\_\_\_\_

Business address: \_\_\_\_\_

or

If partnership, name of firm: \_\_\_\_\_

Business address: \_\_\_\_\_

Signature, title, and address of members signing on behalf of the partnership:

Name: \_\_\_\_\_ Title \_\_\_\_\_

Address: \_\_\_\_\_

Name: \_\_\_\_\_ Title \_\_\_\_\_

Address: \_\_\_\_\_

Name: \_\_\_\_\_ Title \_\_\_\_\_

Address: \_\_\_\_\_

or

If corporation, name of corporation: \_\_\_\_\_

Business address: \_\_\_\_\_

Corporation organized under the laws of the State of: \_\_\_\_\_

Signature of corporate officer or authorized individual: \_\_\_\_\_

Signature of corporate officer or authorized individual: \_\_\_\_\_

The undersigned hereby certifies that this proposal is genuine and not sham or collusive or made in the interest or in behalf of any person not herein named, and the undersigned has not directly or indirectly induced or solicited any other bidder to put in a sham bid, or any other person, firm, or corporation to refrain from bidding; the undersigned has not in any manner sought by collusion to secure for himself an advantage over any other bidder.

In conformance with current statutory requirements of Section 1860, et seq. of the California Labor Code, the undersigned confirms the following as his certification:

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions before commencing the performance of the work of this contract.

NOW, in compliance with the Notice Inviting Bids and all the provisions herein before stipulated, the undersigned, with full cognizance thereof, hereby proposes to perform the entire work for the prices set forth in the Bid Schedule upon which award of contract is made.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Type or print legal name: \_\_\_\_\_

Authorized signature: \_\_\_\_\_

Title: \_\_\_\_\_

Authorized signature: \_\_\_\_\_

Title: \_\_\_\_\_

Address of bidder for notices: \_\_\_\_\_

\_\_\_\_\_

Telephone: \_\_\_\_\_





**EXHIBIT 15-H DBE INFORMATION —GOOD FAITH EFFORTS**

DBE Information - Good Faith Efforts

(Exhibit H, Page 1 of 3)

Federal-aid Project No. N/A

Bid Opening Date \_\_\_\_\_

The District established a Disadvantaged Business Enterprise (DBE) goal of 8.75% for this project. The information provided herein shows that a good faith effort was made.

Lowest, second lowest and third lowest bidders shall submit the following information to document adequate good faith efforts. Bidders should submit the following information even if the “Local Agency Bidder DBE Commitment” form indicates that the bidder has met the DBE goal. This will protect the bidder’s eligibility for award of the contract if the administering agency determines that the bidder failed to meet the goal for various reasons, e.g., a DBE firm was not certified at bid opening, or the bidder made a mathematical error.

Submittal of only the “Local Agency Bidder DBE Commitment” form may not provide sufficient documentation to demonstrate that adequate good faith efforts were made.

The following items are listed in the Section entitled “Submission of DBE Commitment” of the Special Provisions:

- A. The names and dates of each publication in which a request for DBE participation for this project was placed by the bidder (please attach copies of advertisements or proofs of publication):

<u>Publications</u>	<u>Dates of Advertisement</u>
_____	_____
_____	_____
_____	_____

- B. The names and dates of written notices sent to certified DBEs soliciting bids for this project and the dates and methods used for following up initial solicitations to determine with certainty whether the DBEs were interested (please attach copies of solicitations, telephone records, fax confirmations, etc.):

<u>Names of DBEs Solicited</u>	<u>Date of Initial Solicitation</u>	<u>Follow Up Methods and Dates</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

(Exhibit H, Page 2 of 3)

- C. The items of work which the bidder made available to DBE firms including, where appropriate, any breaking down of the contract work items (including those items normally performed by the bidder with its own forces) into economically feasible units to facilitate DBE participation. It is the bidder's responsibility to demonstrate that sufficient work to facilitate DBE participation was made available to DBE firms.

Items of Work	Bidder Normally Performs Item (Y/N)	Breakdown of Items	Amount (\$)	Percentage Of Contract

- D. The names, addresses and phone numbers of rejected DBE firms, the reasons for the bidder's rejection of the DBEs, the firms selected for that work (please attach copies of quotes from the firms involved), and the price difference for each DBE if the selected firm is not a DBE:

Names, addresses and phone numbers of rejected DBEs and the reasons for the bidder's rejection of the DBEs:

---

---

---

---

Names, addresses and phone numbers of firms selected for the work above:

---

---

---

---

- E. Efforts made to assist interested DBEs in obtaining bonding, lines of credit or insurance, and any technical assistance or information related to the plans, specifications and requirements for the work which was provided to DBEs:

---

---

---

---

(Exhibit H, Page 3 of 3)

F. Efforts made to assist interested DBEs in obtaining necessary equipment, supplies, materials or related assistance or services, excluding supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate:

---

---

---

---

---

---

---

---

G. The names of agencies, organizations or groups contacted to provide assistance in contacting, recruiting and using DBE firms (please attach copies of requests to agencies and any responses received, i.e., lists, Internet page download, etc.):

Name of Agency/Organization	Method/Date of Contact	Results

H. Any additional data to support a demonstration of good faith efforts (use additional sheets if necessary):

---

---

---

---

**NOTE: USE ADDITIONAL SHEETS OF PAPER IF NECESSARY.**

**To be submitted with the bid, or no later than 4 pm the 3<sup>rd</sup> business day following the bid opening.**



**BID SECURITY FORM**

(Check To Accompany Bid)

(Note: The following form shall be used in case check accompanies bid:)

Accompanying this proposal is a \*Certified Cashier's check payable to the order of SANTA MARIA PUBLIC AIRPORT DISTRICT, hereinafter referred to as "Owner", for \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), this amount being ten percent (10%) of the total amount of the bid. The proceeds of this check shall become the property of said Owner, provided this proposal shall be accepted by the said Owner through action of its legally constituted contracting authorities and the undersigned shall fail to execute a contract and furnish the required Performance and Payment Bonds and proof of insurance coverage within the stipulated time; otherwise, the check shall be returned to the undersigned. The proceeds of this check shall also become the property of the Owner if the undersigned shall withdraw his bid within the period of 45 days after the date set for the opening thereof, unless otherwise required by law, and notwithstanding the award of the contract to another bidder.

\_\_\_\_\_  
\_\_\_\_\_  
Bidder

\*Delete the inapplicable word

(Note: If the bidder desires to use a bond instead of check, the Bid Bond form on the following pages shall be executed--the sum of this bond shall be not less than ten percent (10%) of the total amount of the bid.)

**BID BOND**

KNOW ALL MEN BY THESE PRESENTS:

That we, \_\_\_\_\_ as principal and \_\_\_\_\_ surety, are held and firmly bound unto SANTA MARIA PUBLIC AIRPORT DISTRICT, hereinafter referred to as "Owner", in the sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), to be paid to the said Owner, its successors, and assigns; for which payment, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH,

That if the certain proposal of the above bounden \_\_\_\_\_ for construction \_\_\_\_\_ as specifically set forth in documents entitled \_\_\_\_\_ all in accordance with the specifications and drawings on file in the offices of \_\_\_\_\_ is not withdrawn within the period of forty-five (45) days after the date set for the opening of bids, unless otherwise required by law, and notwithstanding the award of the contract to another bidder, and that if said proposal is accepted by the Owner through action of its legally constituted contracting authorities and if the above bound \_\_\_\_\_ his heirs, executors, administrators, successors and assigns, shall duly enter into and execute a contract for such construction and shall execute and deliver the required Performance and Payment Bonds and proof of insurance coverage within ten (10) days (not including Sundays and holidays) after the date of notification by and from the said Owner that the said contract is ready for execution, then this obligation shall become null and void; otherwise it shall be and remain in full force and virtue.

IN WITNESS WHEREOF, we hereunto set our hands and seals this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(NOTE: The standard printed bond form of any bonding company acceptable to the owner may be used in lieu of the foregoing approved sample bond form provided the security stipulations protecting the owner are not in any way reduced by use of the surety company's printed standard form.)

**NONCOLLUSION DECLARATION**

I, \_\_\_\_\_, declare that I am of \_\_\_\_\_,  
(name)

the party making the foregoing bid, that the bid is not made in interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

I declare under penalty of perjury that the foregoing is true and correct and that this declaration is executed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, at \_\_\_\_\_, California.

Signature: \_\_\_\_\_

Typed name: \_\_\_\_\_

## SAMPLE CONTRACT

### CONTRACT DOCUMENTS/INFORMATION

THIS AGREEMENT, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 202\_ by and between the SANTA MARIA PUBLIC AIRPORT DISTRICT, hereinafter referred to as "District", and \_\_\_\_\_, a California Corporation, hereinafter referred to as "Contractor".

WHEREAS, District has accepted the Bid Proposal of Contractor for the work and services to be performed for a project identified as "**US Customs Upgrades: Security**" (herein called the "Project").

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

**1. For and in consideration** of the payments and agreements hereinafter mentioned, Contractor agrees to complete the Project within **Forty Five (45) calendar days** after receipt of notice to proceed, in a good, workmanlike manner, to the satisfaction of District, and in accordance with the terms, conditions, agreements and provisions of the Contract Documents, and to do all the work and furnish all the labor, materials, supplies, equipment, utility and transportation services, and other items necessary to complete the Project as aforesaid. Contractor agrees to receive and accept the prices set forth in the following schedule for full compensation for doing and completing all the work and furnishing all labor, materials, and other items contemplated and embraced in this Agreement, as well as for all loss or damage arising out of the nature of the work or from the action of the elements or from any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the work until its acceptance by District, and for all risks of every description connected with the work, and for all expenses incurred by or in consequence of the suspension or discontinuance of work, to wit: (Schedule of prices referred to above commences on next page).

2. **Contract Documents.** This Agreement and the following provisions or documents, each of which is annexed hereto or is on file at the office of the General Manager of the Santa Maria Public Airport District, are hereby incorporated herein and made a part hereof as though set forth in length herein:

- (a) Project Plans: No plans. Details included in this specification / contract book.
- (b) This Agreement
- (c) Notice Inviting Sealed Bids, including Addenda No.(s) none
- (d) Instructions to Bidders
- (e) Technical Specifications
- (f) FAA Technical Specifications (NOT THIS PROJECT)
- (g) Contractor's Bid Proposal dated \_\_\_\_\_
- (h) Bid Security Form (for Check or Bond)
- (i) Performance Bond
- (j) Payment Bond
- (k) General Prevailing Wage Rates for the Santa Maria locality, incorporated herein, as determined by the Director of the Department of Industrial Relations, State of California, pursuant to California Labor Code Sections 1770, 1773, and 1773.1, copies of which are available at the District office.
- (l) Appendices:
  - Appendix A: FAA AC 150-5370-2G, Operational Safety on Airports During Construction.
  - Appendix B: Federal Homeland Security Non-Disclosure Agreement
  - Appendix C: Technical Specifications and Plans (forwarded to individual contractors after receipt of signed Federal No-Disclosure Agreement)

This Agreement and the foregoing described provisions and documents are together hereinafter referred to as the "Contract Documents" or "Contract" which are intended to be complementary so that any work or obligation called for in one, and not mentioned in the other, or vice versa, is to be performed the same as if mentioned in all said provisions and documents.

3. **Definition of Terms.** Whenever the following words, terms or abbreviations are used in any of the Contract Documents, the intent and meaning shall be interpreted as follows:

Airport - Santa Maria Public Airport.

City - City of Santa Maria.

Completions - Work shall be deemed complete only after acceptance by District.

District - Santa Maria Public Airport District.

District Inspector or Inspector - A duly authorized representative of District assigned by District to make inspections of the work performed by Contractor.

District Manager - General Manager of the Santa Maria Public Airport District or his duly authorized representative.

Owner - Santa Maria Public Airport District.

Proposal - The bid proposal of Contractor for the work submitted to District.

Work - The Project covered by this Agreement.

**4. Equipment - Performance of Work.** Contractor shall furnish all tools, equipment, apparatus, facilities, labor and material necessary to perform and complete in a good and workmanlike manner the work called for, and in the manner designated in and in strict conformity with the provisions and conditions of the Contract Documents.

The equipment, apparatus, facilities, labor and materials shall be furnished and said work performed and completed as required by the Contract Documents.

**5. Change Orders.** District reserves the right to make alterations, deviations, additions to or omissions from the work. Any such changes will be set forth in a written change order specifying the changes, adjustments of contract time, if any, and compensation for any work ordered. A change order will not be effective unless signed by Contractor and District.

a) Changes in Work.

(1) Changes Requested by Contractor.

a) General. Changes in specific methods of construction may be made at Contractor's request when approved in writing by the District's General Manager.

Changes in the plans and specifications, requested in writing by Contractor, which do not materially affect the Project and which are not detrimental to the Project or to the interests of District, may be granted to facilitate the Project, when approved in writing by the General Manager. The form of approval will be by change order.

b) Payment for Changes Requested by the Contractor. If such changes are granted, they shall be made at a reduction in cost or at no additional cost to the District. Nothing herein shall be construed as granting a right to Contractor to demand acceptance of such changes.

(2) Changes Initiated by the District:

a) General. District may, by change order, change the plans, specifications, character of the work, or quantity of work, provided the total arithmetic dollar value of all such changes, both additive and deductive, does not exceed ten percent (10%) of the Contract Price. Should it become necessary to exceed this limitation, the change shall be by written supplemental agreement between Contractor and District.

b) Payment:

1) Contract Unit Prices. If a change is ordered in an item of work covered by a unit price, and such change does not involve a substantial change in the character of the work from that shown on the plans or included in the specifications, then an adjustment in payment will be made based upon the increase or decrease in quantity and the unit price.

If a change is ordered in an item of work covered by a unit price, and such change involves a substantial change in the character of the work from that shown on the plans or included in the specifications, an adjustment in payment will be made in accordance with subparagraph 2) of this paragraph.

Should any contract item be deleted in its entirety, payment will be made only for actual costs incurred prior to notification of such deletion.

2) Agreed Prices. Adjustments in payments for changes other than those set forth in Section (1)(b) of this paragraph will be determined by agreement between Contractor and District. If the parties are unable to reach agreement, District may direct Contractor to proceed on the basis of extra work in accordance with paragraph 18, subparagraph (f).

**6. Option of District to Terminate Agreement in Event of Failure to Complete Work.** If Contractor shall have refused or failed to prosecute the work, or any severable part thereof, with such diligence as will ensure its completion within the time specified, or any extensions thereof, or shall have failed to complete said work within such time, or if Contractor should be adjudged a bankrupt, or if Contractor should make a general assignment for the benefit of Contractor's.

Creditors, or if a receiver should be appointed in the event of Contractor's insolvency, or if Contractor or any subcontractor should violate any of the provisions of this Agreement, District may give written notice to Contractor and Contractor's sureties of the intention to terminate this Agreement and, unless within five working days after the serving of such notice such violation shall cease and satisfactory arrangements for the corrections thereof be made, this Agreement may, at the option of the District upon the expiration of said time, cease and terminate.

**7. Time for Completion; Liquidated Damages.** An administrative Notice to Proceed will be issued to the Contractor to allow for submittals, and ordering and receiving materials and components.

The Contractor shall commence work hereunder on the site within ten (10) working days after receiving a written notice to proceed from District and shall diligently prosecute the work so as to have the Project completed within **Forty-Five (45) calendar days** after receipt of said notice to proceed. A reasonable allowance for the time during which Contractor is delayed in said work by the acts or neglect of District or its employees or those under District by contract or otherwise, or by acts of God which Contractor could not have reasonably foreseen and provided against, or by storm and inclement weather which delay the work, or by any strikes, boycotts, or like obstructive action by employee or labor organizations or any general strike, or by organization of employees, shall be added to the aforesaid time for completion. In view of the difficulty to ascertain the amount of damages required to properly compensate District for failure of Contractor to complete the Project within the time fixed by this Agreement, Contractor shall pay to District the sum of \$500.00 per calendar day as liquidated damages for each calendar day that Project shall remain incomplete past the date herein established for completion up to and including thirty (30) calendar days past the date established for completion. Contractor shall pay to District the sum of \$1000.00 per calendar as liquidated damages for each calendar day that Project shall remain incomplete past thirty (30) days after the date established for completion.

**8. Performance by Sureties.** In the event of any termination as herein before provided, District shall immediately give written notice thereof to Contractor and Contractor's sureties, and the sureties shall have the right to take over and perform the Agreement; provided, however, that if the sureties, within five (5) working days after District gives them said notice of termination, do not give District written notice of their intentions to take over the performance of the Agreement and do not commence performance thereof within five (5) working days after notice to District of such election, District may take over the work and prosecute the same to completion, by contract or by any other method it may deem advisable, for the account and at the expense of Contractor, and the sureties shall be liable to District for any cost over and above the sum herein provided for the complete work or damages; and in such event District may, without liability for so doing, take possession of and utilize in completing the work such materials, appliances, plant and other property belonging to Contractor as may be on the site of the work and necessary therefor.

**9. Substitution of Eligible Securities.** Substitution of eligible securities, hereinafter defined, for any moneys of Contractor withheld by District to ensure performance under the Contract may be permitted pursuant to and in accordance with Section 22300 of the Public Contract Code. The term "eligible securities", as used herein, means and includes the securities listed in Section 16430 of the Government Code or bank or savings and loan certificates of deposit. At the request and expense of Contractor, eligible securities equivalent to the amount withheld shall be deposited with District, or with a state or federally-chartered bank as the escrow agent, who shall pay such moneys to Contractor upon satisfactory completion of the Contract. Contractor shall be the beneficial owner of any eligible securities substituted for moneys withheld and shall receive any interest thereon.

**10. Permits; Compliance with Law.** Contractor shall, at Contractor's expense, obtain all necessary permits and licenses required by law and by the Contract Documents.

**11. Control of Work.**

(a) Authority of District Manager. The District Manager shall have the authority to make final decisions concerning the quality and acceptability of the work performed, the rate of progress, interpretation of the Contract Documents, fulfillment of the Contract by Contractor, and all questions concerning compensation.

Should the District Manager question the compliance with the Contract Documents or the orders of the District Manager by Contractor, District Manager shall have the authority to stop all work immediately. Contractor, upon receipt of a written order, shall immediately suspend work wholly or in part. The work shall be resumed when ordered in writing by District Manager.

District Manager shall have the authority to stop the work at any time for any reason he deems justifiable and appropriate. If the reason for such an order to stop work is not the fault of Contractor, in the discretion of District Manager, then District Manager shall have authority to compensate Contractor for such loss of time by approving in writing an extension of time for completion and the amount of compensation to Contractor for such loss of time.

(b) Interpretation of Contract Documents. Should it appear that any work is not sufficiently detailed or explained in the Contract Documents, Contractor shall apply to the District Manager for further explanation. Should a question arise with respect to the true meaning of the Contract Documents, District Manager's decision shall be final. If a discrepancy between a drawing and a figure written thereon should occur, the figure shall be taken as correct.

(c) Defective Work. Any work that is not in accordance with the Contract Documents shall be corrected by Contractor at his expense.



12. **Superintendence by Contractor.** Contractor shall give personal superintendence to the work or have a competent foreman or superintendent satisfactory to District Manager on the work at all times during progress of the work with authority to act for him.

13. **Inspection by District and City.** Contractor shall at all times maintain proper facilities and provide safe access for inspection by District or City to all parts of the work.

14. **Permits and Care of the Work.** Except as otherwise specifically provided in paragraph 28, it shall be the responsibility of Contractor to examine the site of the work and be familiar with its condition, facilities or obstructions, and other physical factors and limitations affecting the performance of this Agreement. Indication in the Contract Documents of the existence of any such items shall in no way be construed as a warranty on the part of the District as to their precise location or that these are the only such items located or affecting the work or the site thereof. District in preparing the Contract Documents has made reasonable efforts to locate and identify any and all such items, but it is understood and agreed that District accepts no responsibility or liability for their location, character or existence. Should any facility be damaged, Contractor shall repair or replace it at his expense immediately.

15. **Other Agency Involvement.** Contractor is hereby advised that other governmental agencies as set forth below are involved in some manner with the administrative aspects of the improvements provided by this Contract. Contractor shall cooperate with representatives of the various agencies in the exercise of their duties. However, District shall administer the Contract, and Contractor shall look to District for direction regarding satisfactory completion of the Contract.

- (a) City of Santa Maria
- (b) FAA and NOAA

16. **Relationships and Responsibilities.**

(a) **Laws to be Observed.** Contractor shall keep himself fully informed of all state and federal laws and city or county ordinances where applicable and shall fully comply with the provision of such laws and ordinances.

(b) **Patents.** Contractor shall assume all costs, expenses and liabilities arising from the use of patented materials, equipment, devices or processes.

(c) **Inconvenience.** Contractor shall so conduct his operations as to offer the least possible obstruction and inconvenience to public traffic and rights of owners and users of adjacent property and he shall have under construction no greater length or amount of work than he can prosecute properly with due regard to such rights.

Convenient access to driveways and buildings along the line of work shall be maintained, and temporary approaches to crossings or intersecting roads or taxiways shall be provided and kept in good condition. To effect the above requirements, District Manager may order Contractor to provide necessary crossings or approaches and may limit the area in which Contractor may work at any one time. No extra payments shall be allowed Contractor for any such work so ordered by District Manager to maintain access for abutting owners or businesses.

(d) **Safety.** Contractor shall furnish, erect and maintain such fences, barriers, lights and signs as are necessary to give adequate warning at all times that the work is under construction and of any dangerous conditions to be encountered as a result thereof. Warning signs, lights and other safety devices

shall conform to and follow the requirements of the Vehicle Code and of any sign manual issued by the Division of Highways of the State of California and any regulations adopted by the City of Santa Maria in effect at the time of construction. All such devices shall be furnished, erected and maintained subject to the approval of District Manager. At the end of each day's work and at other times when construction operations are suspended for any reason, Contractor shall remove all equipment and other obstructions from the portion of any roadway open for use by public traffic.

(e) No Personal Liability. Neither District Manager nor any District director, officer, employee, or authorized representative of the District shall be personally responsible for any liability arising under the Contract.

(f) Guarantees and Correction of Work. With respect to the Project, Contractor shall comply with District's Contract Documents' "Technical Specifications", "Quality Assurance", "Field Quality Control" and "References", as applicable, and comply with manufacturer's recommended installation practices. Where these may be in conflict, the more stringent requirements govern. Contractor shall provide District a copy of the warranty contract between Contractor and manufacturer at the preconstruction conference. Contractor shall, without expense to District, promptly repair, replace, restore or rebuild, as District may determine, any work in which defects of materials or workmanship appear or is found not to conform to the Contract Documents within one (1) year following District's issuance of a Notice of Acceptance, together with any other work which may be displaced, marred, or damaged because of such defects or correction.

(g) Subcontracting. Contractor shall give his personal attention to the fulfillment of the Contract and shall keep the work under his control. Before any work is started on a subcontract, Contractor shall file with District Manager a written statement of the work to be subcontracted, giving the names of the subcontractors and a description of the work to be done by each subcontractor. If a subcontractor is not doing satisfactory work, District Manager may request that he be replaced. The subcontractor shall be removed immediately and shall not go on the job site again.

(h) Limit of Persons on Job Site. District Manager may at any time by written direction, if good cause is shown, in his sole discretion require that any employee of Contractor be replaced. He may also require that Contractor limit access to the work site of any persons not employed by Contractor or an authorized subcontractor or who are not authorized representatives of District or the City.

(i) Assignment. The performance of the Contract may not be assigned except upon the written consent of District expressed by its governing body. Consent will not be given to an assignment which would relieve Contractor of his responsibility under the Contract.

(j) Use of Completed Portions. District shall have the right to take possession of and use any completed or partially completed portions of the work, notwithstanding the time for completing the entire work on such portions may not have expired, but such taking of possession and use shall not be deemed an acceptance of any work not completed in accordance with the Contract Documents.

**17. Other Contracts.** District may award other contracts for additional work, and Contractor shall fully cooperate with such other contractors and carefully fit Contractor's own work to that provided under other contracts as may be directed by District Manager. Contractor shall not commit or permit any act which will interfere with the performance of work by any other contractor.

**18. Method of Payment.**

(a) Progress Estimates. On the last day of each calendar month, Contractor shall submit to District Manager a written request for progress payment based on the amount and value of work done by Contractor up to that time in the performance of the Contract. Contractor shall submit to District Manager for approval a breakdown of his bid showing the amount included therein for each principal category of work; provided, that in case the costs or prices submitted in said breakdown do not in the opinion of District Manager truly represent the actual relative costs of the different parts of the work, District Manager shall prepare a schedule of estimated costs which shall be used in estimating the value of the work performed.

To the figure thus arrived at shall be added any amounts due Contractor for extra work. A deduction of five percent (5%) shall be made from the total thus computed, and from the remainder there shall be further deducted any amounts due District from Contractor for supplies or materials furnished or services rendered and any other amounts that may be due District under the terms of the Contract. Any amount in dispute between District and Contractor shall also be deducted. From the balance thus determined shall be deducted the amount of all previous payments and the remainder shall constitute the Progress Estimate for that month.

(b) Progress Payments. Upon each Progress Estimate being made in writing, District (unless payment be withheld as provided in subparagraph (c) hereof) within fifteen (30) working days after the date of such estimate, except as stipulated hereinafter, shall pay to Contractor the amount stated in such estimate to be due Contractor; provided, however, that District may at all times reserve and retain from such partial payments, or any other amount, in addition to the retained percentage and other estimates, any sum or sums which by the terms hereof, of any law of the State of California, it is or may be authorized or required to reserve or retain; and provided, further, that no such progress estimate or payment shall constitute an acceptance of the work or any portion thereof. The percentage deducted as above set forth shall become due and payable with and as a part of the final payment to be made as hereinafter provided.

In the event work under the Contract or any part thereof shall be discontinued as provided in the Contract, the said retained percentage shall become and be the property of District to the extent necessary to repay to District any excess in the cost of the work above the Contract Price; and, after issuance of notice to discontinue work as therein provided, no payments upon progress estimates or otherwise shall thereafter be made to Contractor for the work covered by said notice until completion of the work and final settlement.

(c) Suspension of Payments. If, after written notice to Contractor of any deficiencies in his work because of failure to comply with the Contract provisions, construction schedule, or of a failure to revise and keep current with his construction schedule, District Manager recommends that all payments due or to become due under the Contract should be suspended until Contractor corrects any such deficiency, District may suspend all payments due or to become due until such deficiencies as remain uncorrected are correct.

In addition to the amount which District may retain as provided hereinabove, District may withhold a sufficient amount or amounts of any payment or payments otherwise due Contractor as in its judgment may be necessary to cover:

- (1) Payments which may be past due and payable for just claims against Contractor or any subcontractor for labor or materials furnished in or about the performance of the work on the Project under this Contract.
- (2) For defective work not remedied.
- (3) For failure of Contractor to make proper payments to any of his subcontractors, suppliers, material, men or equipment renters.
- (4) Reasonable doubt that the Contract can be completed for the balance then unpaid.

District may apply such withheld amounts to the payment of such claims in its discretion. In so doing, District shall be deemed the agent of Contractor and any payment so made by District shall be considered as a payment made under this contract by District to Contractor, and District shall not be liable to Contractor for such payment made in good faith. Such payment may be made without prior judicial determination of the claim or claims. District will render to Contractor a proper accounting of such funds disbursed on behalf of Contractor.

(d) Undisputed Payments. Pursuant to Public Contract Code Section 20104.50, if applicable, if District fails to make any progress payment within thirty (30) days after receipt of an undisputed and properly submitted payment request from Contractor, District shall pay interest to Contractor at the legal rate set forth in Code of Civil Procedure Section 685.010(a). Upon receipt of a payment request, District shall promptly review the request. District shall return to Contractor any payment request which District determines is not proper no later than seven (7) days after receipt, together with a document setting forth in writing the reasons why the payment request is not proper. The period within which District may make a payment without incurring interest shall be reduced by the number of days by which the District exceeds the seven (7) day return requirement.

(e) Final Estimate and Payment.

(1) Notice of Completion. Upon receipt by him of a written notice from Contractor that the Project is ready for final inspection, District Manager shall promptly inspect the Project and, if he finds it has been fully completed in accordance with the Contract Documents, he shall certify that the Project has been fully completed in accordance with the Contract Documents and has been accepted by him. Within ten working days after receipt of such certificate from District Manager, District shall execute, verify, and record a Notice of Completion of the Project.

(2) Final Payment. Notwithstanding any other provisions of the Contract Documents, the final remaining unpaid balance due Contractor under this contract and work done and materials furnished hereunder shall be paid to Contractor by District on the 35<sup>th</sup> day following recording of the Notice of Acceptance or within sixty (60) days of “completion” as defined in Labor Code Section 7107, whichever first occurs, provided there are no stop notices filed pursuant to Chapter 4 of Title XV, Part 4, Division 3 of the California Civil Code or a public works preliminary bond notice as provided in Section 3091 of the Civil Code by subcontractors, material men or others for labor performed, work done or materials furnished in or for performance of the Contract. Except as otherwise specifically provided by law, in the event of a dispute between District and Contractor, the District may withhold from the final payment an amount not to exceed 150 percent (150%) of the disputed amount.

(3) Final Payment as Waiver. Neither recordation of a notice of completion of the Project by District, payment to Contractor by District of the full Contract Price, or occupation of the Project by District shall relieve Contractor of liability for defective materials or workmanship used in the construction of the Project or for failure to construct the Project according to the requirements of the Contract Documents. Acceptance by Contractor of any payment provided for in the Contract Documents shall be a representation by Contractor to District that all work on the Project required by the Contract Documents to be performed before such payment becomes due has been completed by Contractor in accordance with the Contract Documents. Except as provided in any special guarantees contained in the Contract Documents, but notwithstanding any guarantees by the manufacturers of any materials used in the construction of the Project, Contractor shall remedy any defects due to faulty materials or workmanship and pay for any damage to other work resulting therefrom which shall appear within a period of one (1) year from the date of receipt by him of final payment of the Contract Price, the date substantial occupancy of the Project was taken by District, or the date of recordation of a notice of acceptance of the Project by

District, whichever is earliest. District shall deliver notices of all observed defects to Contractor with reasonable promptness.

The making and acceptance of the final payment of the Contract Price shall constitute a waiver by Contractor of all claims, except those previously made and still unsettled.

(f) Extra Work. There will be no payment for extra work by Contractor or subcontractors unless it is expressly authorized in writing by District prior to the extra work being done. Reference is made to other provisions of the Contract regarding change orders for extra work and those provisions shall be strictly complied with. See paragraph 5 of this Contract.

(1) General. New or unforeseen work will be classified as "extra work" when the District Manager determines that it is not covered by the plans and specifications as they reflect the scope of work.

(2) Payment:

a) General. When the price for the extra work cannot be agreed upon, District will pay for the extra work based on the accumulation of costs as provided herein.

b) Basis for Establishing Costs:

1) Labor. The costs of labor will be the actual cost for wages of workers performing the extra work at the time the extra work is done, plus employer payments of payroll taxes, workers' compensation insurance, liability insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from federal, state or local laws, as well as assessments or benefits required by lawful collective bargaining agreements. The use of a labor classification which would increase the extra work cost will not be permitted unless Contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental. The labor cost for foremen shall be proportioned to all of their assigned work and only that applicable to extra work shall be paid.

Nondirect labor costs including superintendence shall be considered part of the markup of subparagraph (c) of this paragraph.

2) Materials. The cost of materials reported shall be at invoice or lowest current price at which such materials are locally available and delivered to the job site in the quantities involved, plus sales tax, freight and delivery.

District reserves the right to approve materials and sources of supply, or to supply materials to Contractor if necessary for the progress of the Project. No markup shall be applied to any material provided by District.

3) Tool and Equipment Rental. No payment will be made for the use of tools which have a replacement value of \$200 or less.

Regardless of ownership, the rates to be used in determining equipment rental costs shall not exceed listed rates prevailing locally at equipment rental agencies, or distributors, at the time the work is performed.

The rental rates paid shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals.

Necessary loading and transportation costs for equipment used on the extra work shall be included. If equipment is used intermittently and, when not in use, could be returned to its rental source at less expense to District than holding at the Project site, it shall be returned, unless Contractor elects to keep it at the Project site at no expense to District. All equipment shall be acceptable to District Manager, in good working condition, and suitable for the purpose for which it is to be used. Manufacturer's ratings and manufacturer's approved modifications shall be used to classify equipment, and it shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

The reported rental time for equipment already at the Project site shall be the duration of its use on the extra work, commencing at the time it is first put into actual operation on the extra work, plus the time required to move it from its previous site and back or to a closer site.

4) Other Items. District may authorize other items which may be required on the extra work. Such items include labor, services, material and equipment which are different in their nature from those required for the Project and which are of a type not ordinarily available from Contractor or any of the subcontractors.

Invoices covering all such items in detail shall be submitted with the request for payment.

5) Invoices. Vendors' invoices for material, equipment rental, and other expenditures, shall be submitted with the request for payment. If the request for payment is not substantiated by invoices or other documentation, District may establish the cost of the item involved at the lowest price which was current at the time of the report.

c) Markup:

1) Work by Contractor. The following percentage shall be added to Contractor's costs and shall constitute the markup for all overhead and profits:

Labor	10%
Materials	10%
Equipment Rental	10%
Other Items and Expenditures	10%

To the sum of the costs and markups provided for in this subsection, one percent (1%) shall be added as compensation for bonding, if additional bonding is actually secured.

2) Work by Subcontractor. When all or any part of the extra work is performed by a Subcontractor, the markup established in subparagraph (c) of this paragraph shall be applied to the subcontractor's actual cost of such work, to which a markup of 10 percent (10%) on the first \$2,000 of the subcontracted portion of the extra work and a markup of 5 percent (5%) on work added in excess of \$2,000 of the subcontracted portion of the extra work may be added by Contractor.

(3) Daily Reports by Contractor. When the price for the extra work cannot be agreed upon, Contractor shall submit a daily report to District Manager on forms approved by District, together with applicable delivery tickets, listing all labor, materials, and equipment involved for that day, and for other services and expenditures when authorized. Failure to submit the daily report by the close of the next working day may waive any rights for that day. A good faith effort shall be made to reconcile the report daily, and it shall be signed by District Manager and Contractor. In the event of disagreement, pertinent notes shall be entered by each party to explain points which cannot be resolved immediately. Each

party shall retain a signed copy of the report. Reports by subcontractors or others shall be submitted through Contractor.

The report shall:

- a) Show names of workers, classifications, rates of pay including benefits, and hours worked.
- b) Describe and list quantities of materials used together with unit prices.
- c) Show type of equipment, size, identification number, and hours of operation, including loading and transportation, if applicable.
- d) Describe other services and expenditures in such detail as District may require.

(g) Changed Conditions. Contractor shall notify the District Manager in writing of the following Project site conditions, hereinafter called changed conditions, promptly upon their discovery and before they are disturbed:

- (1) Subsurface or latent physical conditions differing materially from those represented in the plans and specifications;
- (2) Unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in work of the character being performed; and
- (3) Material differing from that represented in the Contract which Contractor believes may be hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II or Class III disposal site in accordance with provisions of existing law.

District Manager will promptly investigate conditions which appear to be changed conditions. If District Manager determines that the conditions are changed conditions and that they will materially increase or decrease the costs of any portion of the Project, a change order will be issued adjusting the compensation for such portion of the Project in accordance with paragraph 5. If District Manager determines that conditions are changed conditions and that they will materially affect the performance time, Contractor, upon submitting a written request, will be granted an extension of time subject to the provisions of paragraph 7.

If District Manager determines that the conditions of which it has been notified by Contractor do not justify an adjustment in compensation, Contractor will be so notified in writing. This notice will also advise Contractor of his obligation to notify District Manager, in writing, if Contractor disagrees.

Should Contractor disagree with such determination, he may submit a written notice of potential claim to District Manager before commencing the disputed work. In the event of such a disagreement, Contractor shall not be excused on account of that disagreement from any scheduled completion date provided for by the Contract, but shall proceed with all work to be performed under the Contract. However, Contractor shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the contracting parties.

Contractor's failure to give notice of changed conditions promptly upon their discovery and before they are disturbed shall constitute a waiver of all claims in connection therewith.

**19. Contract Security.** Concurrently with the execution hereof, Contractor shall furnish a bond with a responsible corporate surety or corporate sureties conditioned upon the faithful performance of said Contractor of all covenants and stipulations of the Contract. Said bond, hereinafter referred to as the Faithful Performance Bond, shall be in the form approved by District and in the amount not less than 100 percent (100%) of the total amount payable under the Contract and shall be attached as Attachment 1. Contractor shall also furnish a Payment Bond, approved by District, in accordance with the provisions of Civil Code Sections 3225-3228, inclusive, and Sections 3247-3252, inclusive. Said Payment Bond shall be in a sum not less than 100 percent (100%) of the total amount payable by the terms of this Contract, but not less than the sum prescribed in Section 3248 of the Civil Code, in any case, and shall be attached as Attachment 2.

**20. Indemnification.** Contractor shall indemnify, defend (with counsel acceptable to District) and hold harmless District, its directors, officers, employees, agents and representatives ("District, etc.") at all times from and against any and all suits, proceedings, liens, actions, penalties, liabilities, losses, expenses, claims or demands of any nature, including costs and expenses for legal services and causes of action of whatever character which District may incur, sustain or be subjected to ("suits, etc.") on account of loss or damage to property and loss of use thereof and for bodily injury to or death of any persons (including but not limited to property, employees, subcontractors, agents and invitees of each party hereto) arising out of or in any way connected with the services or work to be performed by Contractor or Contractor's agents, employees, invitees or subcontractors, or Contractor's operations or presence on the Airport. The foregoing indemnification excludes only liability or loss caused by the sole active negligence of District or its willful misconduct. Tenant shall also indemnify and hold "District, etc." harmless from and against any "suits, etc." including third party claims, environmental requirements and environmental damages (as defined in Attachment 3), costs of investigation and cleanup penalties, fines, and losses (including, without limitation, diminution in property value of the Airport or the improvements thereon) of whatever kind or nature which result from or are in any way connected with the release, receipt, handling, use, storage, accumulation, transportation, generation, discharge, or disposal ("release, etc.") of any toxic or hazardous materials (defined in Attachment 3) which occurs in, on or about the Airport or elsewhere as the result of any of Contractor's or Contractor's agents, employees, invitees or subcontractors' activities pursuant to this agreement. Contractor shall notify District immediately of any "release, etc." of any toxic or hazardous material on the Airport.

**21. Public Liability and Property Damage Insurance; Protection and Restoration of Property.** Contractor shall, at his expense, take out and maintain during the life of the Contract such public liability and property damage insurance as shall protect him and District and any subcontractor performing work covered by this Contract from claims for personal injury or death or property damage which may arise because of the nature of the work or from operations under this Contract, whether such operations be by himself or by any subcontractor, or anyone directly or indirectly employed by either of them, even though such damages be not caused by the negligence of Contractor or any subcontractor, or anyone employed by either of them. Any insurance shall be primary, not excess, insurance. The amounts of such insurance shall be as follows:

(a) Contractor's general liability insurance, including Owner's and Contractor's protective liability and contractual coverage, providing bodily injury or death liability limits of not less than \$1,000,000 for each accident or occurrence, and property damage liability with a single limit liability of not less than \$1,000,000 for each accident or occurrence.

(b) Automobile liability insurance covering all vehicles used in the performance of the Contract providing bodily injury or death liability limits of not less than \$300,000 for each person and \$500,000 for each occurrence, and property damage liability with a single limit liability of not less than \$300,000 for each accident or occurrence.



Before or concurrently with the execution of the Contract, Contractor shall file with District a certificate or certificates of insurance, issued by the insurance carrier, covering the specified insurance and a complete copy of each insurance policy. Each such certificate and policy shall bear an endorsement precluding the cancellation, or reduction in coverage, of any policy before the expiration of thirty (30) days after District shall have received notification by registered mail from the insurance carrier.

Nothing herein contained shall be construed as limiting the liability of Contractor. District shall be named as an additional insured in the policies.

**22. Protection of Property.** Contractor shall use suitable precautions to prevent damage to any public or private property and shall not remove any monuments or property markers until directed to do so. Contractor shall take every necessary precaution against injury or damage to any part of the work or Project by action of the elements or from any other cause whatsoever.

Contractor shall rebuild, repair, restore and make good, at his expense, all injuries or damages to any portion of the work occasioned by any of the above caused before completion and acceptance of the Project as provided in this Agreement.

**23. Nonpayment of Wages.** If Contractor or any subcontractor fails to pay any laborer or mechanic employed or working on the Project any of the wages required by this Contract, District may, after written notice to Contractor, take such action as may be necessary to cause the suspension of any further payment or advance of funds until the violations cease.

**24. Worker's Compensation.** Pursuant to the requirements of Section 1860 of the Labor Code of the State of California, Contractor will be required to secure the payment of compensation to his employees in accordance with the provisions of Section 3700 of the Labor Code of the State of California. By execution of this Agreement, Contractor does hereby certify as follows: "I am aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions before commencing the performance of the work of this Contract".

**25. Wage Rates: Penalty.** Not less than the general prevailing per diem wage rates and rates for overtime and holidays for the Santa Maria locality as determined by the Director of Industrial Relations, State of California, pursuant to California Labor Code Sections, 1770, 1773, and 1773.1, shall be paid to workmen employed on the Project under the Contract. Contractor is subject to and shall comply with the provisions of Section 1775 of the Labor Code of the State of California. Contractor shall forfeit to District not more than Fifty Dollars (\$50.00)(as determined by the Labor Commission) for each calendar day or portion thereof for each worker paid less than the said prevailing rates for such work or craft in which such worker is employed or for work done under the contract or by any subcontractor. The difference between such prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate shall be paid to each worker by Contractor. Contractor is responsible for ascertaining and complying with all changes in rates subsequent to the submission of the bid proposal of Contractor to District.

**26. Employment of Apprentices.** Contractor's attention is directed to the provisions of Sections 1777.5 and 1777.6 of the Labor Code of the State of California concerning the employment of apprentices by Contractor or any subcontractor under him on public works projects.

Contractor and any subcontractor under him shall comply with the requirements of Sections 1777.5 and 1777.6 in the employment of apprentices. Information relative to apprenticeship standards, wage

schedules, and other requirements may be obtained from the Director of Industrial Relations, ex officio the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

**27. Hours of Labor.** In accordance with the provisions of Articles 1 and 3 of Chapter 1, Part 7, Division 2 of the Labor Code of the State of California, eight (8) hours labor shall constitute a legal day's work, and no worker in the employ of Contractor or any subcontractor doing or contracting to do any part of the work contemplated by this Contract shall be required or permitted to work more than eight (8) hours in any one calendar day, and forty (40) hours during any one calendar week, except as provided in Section 1815 of the Labor Code. Contractor and each subcontractor shall keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed on work contemplated by this Contract, and Contractor shall forfeit, as a penalty to District, the sum of Twenty-five Dollars (\$25.00) for each worker employed in execution of this Contract by him or by any subcontractor for each calendar day during which said worker is required or permitted to labor more than eight (8) hours in any one calendar day and forty (40) hours in any one calendar week in violation of provisions of said Article 3, Chapter 1, Part 7, Division 2 (Section 1810 et seq.) of the Labor Code.

**28. Existing Utility Facilities (Government Code Section 4215).** As between Contractor and District only, District assumes the responsibility for the removal, relocation or protection of existing main or trunkline utility facilities located on the site of the work, if such utilities are not identified in the plans or specifications made a part of the invitation for bids.

Contractor shall not be assessed liquidated damages for delay in completion of the work when such delay is caused by failure of District or a utility owner to provide for removal or relocation of such existing utility facilities; provided, however, that if facilities are encountered but are not identified by District in the Contract plans or specifications, he shall immediately notify District in writing. If Contractor shall fail to so notify District, he may be assessed liquidated damages as set forth in the Contract Documents for any delay in completion of the work caused by such utility facilities on the basis of one (1) day for each day Contractor shall permit to elapse between discovery of such utility facilities and such written notification to District thereof.

Nothing herein shall require District to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the site of the construction project can be inferred from the presence of other visible facilities, such as buildings, meter and junction boxes on or adjacent to the site of the construction project.

Should any utility facility identified in the plans or specifications, or otherwise described in the immediately preceding paragraph, be damaged by Contractor, Contractor shall promptly restore the damaged utility to its original condition at his expense.

**29. General.** Time is of the essence of this Contract. This Agreement and the Contract Documents contain all of the agreements and conditions made between the parties, and may not be modified orally or in any other manner than by an agreement in writing signed by the parties hereto. If any provision of this Agreement shall be held by a court of competent jurisdiction to be invalid, the remaining provisions shall continue in full force and effect and shall in no way be invalidated thereby.

Captions herein are for convenience of reference only and shall not govern the construction of this Agreement. Contractor shall comply with all applicable federal, state and local laws, regulations, ordinances and orders, including without limitation the rules and regulations of the Santa Maria Public Airport District governing the use and occupancy of the Santa Maria Public Airport.

**30. Payroll Records.** Contractor and each subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him in connection with the public work. The payroll records shall be certified and shall be available for inspection at all reasonable hours at the principal office of Contractor in the manner provided in Labor Code Section 1776. In the event of noncompliance with the requirements of this section, Contractor shall have ten (10) calendar days to comply subsequent to receipt of written notice specifying in what respects Contractor must comply with this Section. Should noncompliance still be evident after such 10-day period, Contractor shall, as a penalty to District, forfeit the sum of Twenty-five Dollars (\$25.00) for each calendar day or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, such penalties shall be withheld from progress payments then due. The responsibility for compliance with this section is with Contractor. District may withhold other amounts due at the request of the Division of Labor Standards or other agency having jurisdiction.

**31. Labor Discrimination.** No discrimination shall be made in the employment of persons on the work by Contractor or by any subcontractor because of race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, or sex except as provided by Section 12940 of the Government Code.

**32. Attorneys' Fees.** In the event that any action or arbitration is brought by either party against the other party for the enforcement or declaration of any right or remedies in or under this Agreement or for the breach of any covenant or condition of this Agreement, the prevailing party shall be entitled to recover, and the other party agrees to pay all fees and costs to be fixed by the court or arbitrator therein including, but not limited to, attorneys' fees.

**33. Notice to Proceed.** No work, services, material, or equipment shall be performed or furnished under this Agreement unless and until a written notice to proceed has been given Contractor by District.

**34. Claims.** Contractor shall not make or have any claim for damages or anticipated profits or loss of profits or otherwise because of any difference between the quantities of work actually done and material furnished and those stated in any unit price items of the bidding sheet(s).

**35. Hazardous Materials.** Contractor specifically agrees that all materials used by Contractor for which a Material Safety Data Sheet is required, or otherwise referenced or listed on Attachment 3, will be stored, used and disposed of, together with any contaminated by-products of such use, in strict compliance with the applicable Material Safety Data Sheet or the requirements of the governmental agency with authority to regulate such storage, use and disposal. Contractor further agrees to maintain adequate storage and disposal facilities and will maintain for inspection at any reasonable time adequate records of material stored, used or disposed of, including but not limited to Material Safety Data Sheets and Uniform Hazardous Waste Manifests.

**36. Contractors Including Digging Trenches or other Excavations (Public Contract Code§7104).** The contractor shall promptly, and before the following conditions are disturbed, notify the District, in writing, of any: (1) Material that the contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law. (2) Subsurface or latent physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract.

The District shall promptly investigate the conditions, and if it finds that the conditions do materially differ, or do involve hazardous waste, and cause a decrease or increase in the contractor's cost of or the time required for, performance of any part of the work shall issue a change order under the procedures described in the contract.

In the event that a dispute arises between the District and the contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the contractor's cost of, or time required for, performance of any part of the work, the contractor shall not be excused from any scheduled completion date performed under the contract. The contractor shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the contracting parties.

**37. Assignment by Contractor to District of Rights Under Federal Law Arising from Purchases Under Public Works Contracts (public Contract Code 7103.5).** In entering into a public works contract or subcontract to supply goods, services or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act, (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the contractor, without further acknowledgment by the parties.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the date and year first above written.

Approved as to content                      SANTA MARIA PUBLIC AIRPORT DISTRICT

for District:

\_\_\_\_\_ By \_\_\_\_\_  
General Manager                      Nash Moreno, President

Approved as to form                      By \_\_\_\_\_  
for District:                                      Steve Brown, Secretary

\_\_\_\_\_ District Counsel

(District Seal)

Contractor

By \_\_\_\_\_ (Title)

(Corporate Seal if a corporation)

By \_\_\_\_\_ (Title)

Bond No. \_\_\_\_\_

**PERFORMANCE BOND**

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS, SANTA MARIA PUBLIC AIRPORT DISTRICT, hereinafter referred to as "District", has awarded to \_\_\_\_\_

\_\_\_\_\_ hereinafter referred to as "Contractor", a contract for the following described work or construction at the Santa Maria Public Airport in the City of Santa Maria, California: \_\_\_\_\_

WHEREAS, Contractor is required to furnish a bond in connection with said contract guaranteeing the faithful performance thereof;

NOW, THEREFORE, we, the undersigned Contractor, as principal, and \_\_\_\_\_ (hereinafter referred to as "Surety"), as surety, are held and firmly bound unto District in the sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), to be paid to District for which payment well and truly to be made we bind ourselves, our heirs, executors, and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if Contractor, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well, truly and faithfully keep and perform all undertakings, covenants, terms, conditions and agreements in the said contract and any alterations or modifications thereof on Contractor's part to be kept and performed at the time and in the manner therein specified, and shall fully indemnify and save harmless District from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay District all outlay and expense which District may incur in making good any default, and shall indemnify and save harmless District, its officers and agents, as provided in said contract, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

In the event District prevails in an action brought by District upon this bond, Surety will pay a reasonable attorney's fee to be fixed by the court.

PROVIDED, undersigned Surety, for value received, hereby stipulates and agrees that no changes, extensions of time, alterations, change orders, or additions to the terms of the contract or to the work to be performed thereunder or the specifications referred to therein shall in any wise affect its obligations on this bond, and it does hereby waive notice of any such changes, extensions of time, alterations, change orders, or additions to the terms of the contract or to the work or the specifications.

IN WITNESS WHEREOF, we have duly executed this bond this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_.

SURETY

PRINCIPAL

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

By \_\_\_\_\_

\_\_\_\_\_

Its Attorney in Fact

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Address of Surety

Address of Principal

Signatures of Principal and Surety must be acknowledged by a Notary Public.

Bond No. \_\_\_\_\_

**PAYMENT BOND**

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS, SANTA MARIA PUBLIC AIRPORT DISTRICT, hereinafter referred to as "District", has awarded to \_\_\_\_\_

\_\_\_\_\_ hereinafter referred to as "Contractor", a contract for the following described work or construction at the Santa Maria Public Airport in the City of Santa Maria, California: \_\_\_\_\_

WHEREAS, Contractor is required to furnish a bond in connection with said contract to secure the payment of claims of laborers, mechanics, material, men, and other persons, as provided by law;

NOW, THEREFORE, we, the undersigned Contractor, as principal, and \_\_\_\_\_ hereinafter referred to as "Surety", as surety, are held and firmly bound unto District in the sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_ ), for which payment well and truly to be made we bind ourselves, our heirs, executors, and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if Contractor, his or its heirs, executors, administrators, successors or assigns, or subcontractors, shall fail to pay any of the persons named in Section 3181 of the California Civil Code, or amounts due under the California Unemployment Insurance Code with respect to work or labor performed under the contract, or any amounts required to be deducted, withheld, and paid over to the California Employment Development Department from the wages of employees of Contractor and his subcontractors pursuant to Section 13020 of the California Unemployment Insurance Code with respect to such work and labor, that the surety herein will pay for the same in an amount not exceeding the sum specified in this bond, otherwise the above obligation shall be void. In case suit is brought upon this bond, Surety will pay a reasonable attorney's fee to be fixed by the court.

This bond shall inure to the benefit of any of the persons named in section 3181 of the California Civil Code as to give a right of action to such persons or their assigns in any suit brought upon this bond.

PROVIDED, undersigned Surety, for value received, hereby stipulates and agrees that no changes, extensions of time, alterations, change orders, or additions to the terms of the contract or to the work to be performed thereunder or the specifications referred to therein shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such changes, extensions of time, alterations, change orders, or additions to the terms of the contract or to the work or the specifications.

IN WITNESS WHEREOF, we have duly executed this bond this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_.

SURETY

PRINCIPAL

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

By \_\_\_\_\_

\_\_\_\_\_

Its Attorney in Fact

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Address of Surety

Address of Principal

Signatures of Principal and Surety must be acknowledged by a Notary Public.



**HAZARDOUS MATERIAL**  
**Definitions**

A. **HAZARDOUS MATERIAL**

Hazardous Material means any substance:

(I) the presence of which requires investigation or remediation under any federal, state or local statute, regulation, ordinance, order, action, policy or common law; or

(ii) which is or becomes defined as a "hazardous waste", "hazardous substance", pollutant or contaminant under any federal, state or local statute, regulation, rule or ordinance or amendments thereto including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. Section 9601 et seq.) and/or the Resource Conservation and Recovery Act (42 U.S.C. Section 6901 et seq.); or

(iii) which is toxic, explosive, corrosive, flammable, infectious, radioactive, carcinogenic, mutagenic, or otherwise hazardous and is or becomes regulated by any governmental authority, agency, department, commission, board, agency or instrumentality of the United States, the State of California or any political subdivision thereof; or

(iv) the presence of which on the Airport property causes or threatens to cause a nuisance upon the Airport property or to adjacent properties or poses or threatens to pose a hazard to the health or safety of persons on or about the Airport; or

(v) the presence of which on adjacent properties could constitute a trespass by; or

(vi) without limitation which contains gasoline, diesel fuel or other petroleum hydrocarbons;  
or

(vii) without limitation which contains polychlorinated bipheynols (PCBs), asbestos or urea formaldehyde foam insulation; or

(viii) without limitation radon gas.

B. **ENVIRONMENTAL REQUIREMENTS**

Environmental Requirements means all applicable present and future statutes, rules, ordinances, codes, licenses, permits, orders, approvals, plans, authorizations, and similar items, of all governmental agencies, departments, commissions, boards, bureaus, or instrumentalities of the United States, states and political subdivisions thereof and all applicable judicial, administrative, and regulatory decrees, judgments, and orders relating to the protection of human health or the environment, including, without limitation:

1. All requirements, including but not limited to those pertaining to reporting, licensing, permitting, investigation, and remediation of emissions, discharges, releases, or threatened releases of "Hazardous Materials", chemical substances, pollutants, contaminants, or hazardous or toxic substances, materials or wastes whether solid, liquid, or gaseous in nature, into the air, surface water, groundwater, or land, or relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport, or handling of chemical substances, pollutants, contaminants, or hazardous or toxic substances, materials, or wastes, whether solid, liquid, or gaseous in nature; and:

2. All requirements pertaining to the protection of the health and safety of employees or the public.

C. ENVIRONMENTAL DAMAGES

Environmental Damages means all claims, judgments, damages, losses, penalties, fines, liabilities, encumbrances, liens, costs, and expenses of investigation and defense of any claims, whether or not such claim is ultimately defeated, and of any good faith settlement of judgment, of whatever kind or nature, contingent or otherwise, matured or unmatured, foreseeable or unforeseeable, including without limitation reasonable attorneys' fees and disbursements and consultants' fees, any of which are incurred at any time caused by "Hazardous Materials" upon, about, beneath the Airport or migrating or threatening to migrate from the Airport property, or the existence of a violation of "Environmental Requirements" pertaining to the Airport as the result of Contractor's use or occupancy of the Airport or as the result of any of Contractor's (or Contractor's agents, employees, invitees or officers') actions or omissions, including without limitation:

1. Damages for personal injury, or injury to property or natural resources occurring upon or off of the Airport property, (foreseeable or unforeseeable), including, without limitation, lost profits, consequential damages, the cost of demolition and rebuilding of any improvements on real property, interest and penalties;

2. Fees incurred for the services of attorneys, consultants, contractors, experts, laboratories and all other costs incurred in connection with the investigation or remediation of such "Hazardous Materials" or violation of Environmental Requirements" including, but not limited to, the preparation of any feasibility studies or reports or the performance of any cleanup, remediation, removal, response, abatement, containment, closure, restoration or monitoring work required by any federal, state or local governmental agency or political subdivision, and including without limitation any attorney's fees, costs and expenses incurred in enforcing this agreement or collecting any sums due hereunder; and

3. Liability to any third person or governmental agency to indemnify such person or agency for costs expended in connection with the items referenced in subparagraph 2 herein;

4. Diminution in the value of the Airport property, and damages for the loss of business and restriction on the use of or adverse impact on the marketing of rentable or usable space or of any amenity of the Airport property.

## **TECHNICAL SPECIFICATIONS**

**Part 1 – General Contract Provisions**  
**Section 10 Definition of Terms**

When the following terms are used in these specifications, in the contract, or in any documents or other instruments pertaining to construction where these specifications govern, the intent and meaning shall be defined as follows:

<b>Paragraph Number</b>	<b>Term</b>	<b>Definition</b>
<b>10-01</b>	<b>AASHTO</b>	The American Association of State Highway and Transportation Officials.
<b>10-02</b>	<b>Access Road</b>	The right-of-way, the roadway and all improvements constructed thereon connecting the airport to a public roadway.
<b>10-03</b>	<b>Advertisement</b>	A public announcement, as required by local law, inviting bids for work to be performed and materials to be furnished.
<b>10-04</b>	<b>Airport</b>	Airport means an area of land or water which is used or intended to be used for the landing and takeoff of aircraft; an appurtenant area used or intended to be used for airport buildings or other airport facilities or rights of way; airport buildings and facilities located in any of these areas, and a heliport.
<b>10-05</b>	<b>Airport Improvement Program (AIP)</b>	A grant-in-aid program, administered by the Federal Aviation Administration (FAA).
<b>10-06</b>	<b>Air Operations Area (AOA)</b>	The term air operations area (AOA) shall mean any area of the airport used or intended to be used for the landing, takeoff, or surface maneuvering of aircraft. An air operation area shall include such paved or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiway, or apron.
<b>10-07</b>	<b>Apron</b>	Area where aircraft are parked, unloaded or loaded, fueled and/or serviced.
<b>10-08</b>	<b>ASTM International (ASTM)</b>	Formerly known as the American Society for Testing and Materials (ASTM).
<b>10-09</b>	<b>Award</b>	The Owner's notice to the successful bidder of the acceptance of the submitted bid.
<b>10-10</b>	<b>Bidder</b>	Any individual, partnership, firm, or corporation, acting directly or through a duly authorized representative, who submits a proposal for the work contemplated.

<b>Paragraph Number</b>	<b>Term</b>	<b>Definition</b>
<b>10-11</b>	<b>Building Area</b>	An area on the airport to be used, considered, or intended to be used for airport buildings or other airport facilities or rights-of-way together with all airport buildings and facilities located thereon.
<b>10-12</b>	<b>Calendar Day</b>	Every day shown on the calendar.
<b>10-13</b>	<b>Certificate of Analysis (COA)</b>	The COA is the manufacturer's Certificate of Compliance (COC) including all applicable test results required by the specifications.
<b>10-14</b>	<b>Certificate of Compliance (COC)</b>	The manufacturer's certification stating that materials or assemblies furnished fully comply with the requirements of the contract. The certificate shall be signed by the manufacturer's authorized representative.
<b>10-15</b>	<b>Change Order</b>	A written order to the Contractor covering changes in the plans, specifications, or proposal quantities and establishing the basis of payment and contract time adjustment, if any, for work within the scope of the contract and necessary to complete the project.
<b>10-16</b>	<b>Contract</b>	A written agreement between the Owner and the Contractor that establishes the obligations of the parties including but not limited to performance of work, furnishing of labor, equipment and materials and the basis of payment.  The awarded contract includes but may not be limited to: Advertisement, Contract form, Proposal, Performance bond, payment bond, General provisions, certifications and representations, Technical Specifications, Plans, Supplemental Provisions, standards incorporated by reference and issued addenda.
<b>10-17</b>	<b>Contract Item (Pay Item)</b>	A specific unit of work for which a price is provided in the contract.
<b>10-18</b>	<b>Contract Time</b>	The number of calendar days or working days, stated in the proposal, allowed for completion of the contract, including authorized time extensions. If a calendar date of completion is stated in the proposal, in lieu of a number of calendar or working days, the contract shall be completed by that date.
<b>10-19</b>	<b>Contractor</b>	The individual, partnership, firm, or corporation primarily liable for the acceptable performance of the work contracted and for the payment of all legal debts pertaining

<b>Paragraph Number</b>	<b>Term</b>	<b>Definition</b>
		to the work who acts directly or through lawful agents or employees to complete the contract work.
<b>10-20</b>	<b>Contractors Quality Control (QC) Facilities</b>	The Contractor's QC facilities in accordance with the Contractor Quality Control Program (CQCP).
<b>10-21</b>	<b>Contractor Quality Control Program (CQCP)</b>	Details the methods and procedures that will be taken to assure that all materials and completed construction required by the contract conform to contract plans, technical specifications and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors.
<b>10-22</b>	<b>Control Strip</b>	A demonstration by the Contractor that the materials, equipment, and construction processes results in a product meeting the requirements of the specification.
<b>10-23</b>	<b>Construction Safety and Phasing Plan (CSPP)</b>	The overall plan for safety and phasing of a construction project developed by the airport operator, or developed by the airport operator's consultant and approved by the airport operator. It is included in the invitation for bids and becomes part of the project specifications.
<b>10-24</b>	<b>Drainage System</b>	The system of pipes, ditches, and structures by which surface or subsurface waters are collected and conducted from the airport area.
<b>10-25</b>	<b>Engineer</b>	The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for engineering, inspection, and/or observation of the contract work and acting directly or through an authorized representative.
<b>10-26</b>	<b>Equipment</b>	All machinery, together with the necessary supplies for upkeep and maintenance; and all tools and apparatus necessary for the proper construction and acceptable completion of the work.
<b>10-27</b>	<b>Extra Work</b>	An item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, but which is found by the Owner's Engineer or Resident Project Representative (RPR) to be necessary to complete the work within the intended scope of the contract as previously modified.
<b>10-28</b>	<b>FAA</b>	The Federal Aviation Administration. When used to designate a person, FAA shall mean the Administrator or their duly authorized representative.

<b>Paragraph Number</b>	<b>Term</b>	<b>Definition</b>
<b>10-29</b>	<b>Federal Specifications</b>	The federal specifications and standards, commercial item descriptions, and supplements, amendments, and indices prepared and issued by the General Services Administration.
<b>10-30</b>	<b>Force Account</b>	<p><b>a.</b> Contract Force Account - A method of payment that addresses extra work performed by the Contractor on a time and material basis.</p> <p><b>b.</b> Owner Force Account - Work performed for the project by the Owner's employees.</p>
<b>10-31</b>	<b>Intention of Terms</b>	<p>Whenever, in these specifications or on the plans, the words “directed,” “required,” “permitted,” “ordered,” “designated,” “prescribed,” or words of like import are used, it shall be understood that the direction, requirement, permission, order, designation, or prescription of the Engineer and/or Resident Project Representative (RPR) is intended; and similarly, the words “approved,” “acceptable,” “satisfactory,” or words of like import, shall mean approved by, or acceptable to, or satisfactory to the Engineer and/or RPR, subject in each case to the final determination of the Owner.</p> <p>Any reference to a specific requirement of a numbered paragraph of the contract specifications or a cited standard shall be interpreted to include all general requirements of the entire section, specification item, or cited standard that may be pertinent to such specific reference.</p>
<b>10-32</b>	<b>Lighting</b>	A system of fixtures providing or controlling the light sources used on or near the airport or within the airport buildings. The field lighting includes all luminous signals, markers, floodlights, and illuminating devices used on or near the airport or to aid in the operation of aircraft landing at, taking off from, or taxiing on the airport surface.
<b>10-33</b>	<b>Major and Minor Contract Items</b>	A major contract item shall be any item that is listed in the proposal, the total cost of which is equal to or greater than 20% of the total amount of the award contract. All other items shall be considered minor contract items.
<b>10-34</b>	<b>Materials</b>	Any substance specified for use in the construction of the contract work.
<b>10-35</b>	<b>Modification of Standards (MOS)</b>	Any deviation from standard specifications applicable to material and construction methods in accordance with FAA Order 5300.1.

<b>Paragraph Number</b>	<b>Term</b>	<b>Definition</b>
<b>10-36</b>	<b>Notice to Proceed (NTP)</b>	A written notice to the Contractor to begin the actual contract work on a previously agreed to date. If applicable, the Notice to Proceed shall state the date on which the contract time begins.
<b>10-37</b>	<b>Owner</b>	The term "Owner" shall mean the party of the first part or the contracting agency signatory to the contract. Where the term "Owner" is capitalized in this document, it shall mean airport Sponsor only. The Owner for this project is <b>the Santa Maria Public Airport District.</b>
<b>10-38</b>	<b>Passenger Facility Charge (PFC)</b>	Per 14 Code of Federal Regulations (CFR) Part 158 and 49 United States Code (USC) § 40117, a PFC is a charge imposed by a public agency on passengers enplaned at a commercial service airport it controls.
<b>10-39</b>	<b>Pavement Structure</b>	The combined surface course, base course(s), and subbase course(s), if any, considered as a single unit.
<b>10-40</b>	<b>Payment bond</b>	The approved form of security furnished by the Contractor and their own surety as a guaranty that the Contractor will pay in full all bills and accounts for materials and labor used in the construction of the work.
<b>10-41</b>	<b>Performance bond</b>	The approved form of security furnished by the Contractor and their own surety as a guaranty that the Contractor will complete the work in accordance with the terms of the contract.
<b>10-42</b>	<b>Plans</b>	The official drawings or exact reproductions which show the location, character, dimensions and details of the airport and the work to be done and which are to be considered as a part of the contract, supplementary to the specifications. Plans may also be referred to as 'contract drawings.'
<b>10-43</b>	<b>Project</b>	The agreed scope of work for accomplishing specific airport development with respect to a particular airport.
<b>10-44</b>	<b>Proposal</b>	The written offer of the bidder (when submitted on the approved proposal form) to perform the contemplated work and furnish the necessary materials in accordance with the provisions of the plans and specifications.
<b>10-45</b>	<b>Proposal guaranty</b>	The security furnished with a proposal to guarantee that the bidder will enter into a contract if their own proposal is accepted by the Owner.



<b>Paragraph Number</b>	<b>Term</b>	<b>Definition</b>
10-46	<b>Quality Assurance (QA)</b>	Owner's responsibility to assure that construction work completed complies with specifications for payment.
10-47	<b>Quality Control (QC)</b>	Contractor's responsibility to control material(s) and construction processes to complete construction in accordance with project specifications.
10-48	<b>Quality Assurance (QA) Inspector</b>	An authorized representative of the Engineer and/or Resident Project Representative (RPR) assigned to make all necessary inspections, observations, tests, and/or observation of tests of the work performed or being performed, or of the materials furnished or being furnished by the Contractor.
10-49	<b>Quality Assurance (QA) Laboratory</b>	The official quality assurance testing laboratories of the Owner or such other laboratories as may be designated by the Engineer or RPR. May also be referred to as Engineer's, Owner's, or QA Laboratory.
10-50	<b>Resident Project Representative (RPR)</b>	The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for all necessary inspections, observations, tests, and/or observations of tests of the contract work performed or being performed, or of the materials furnished or being furnished by the Contractor, and acting directly or through an authorized representative.
10-51	<b>Runway</b>	The area on the airport prepared for the landing and takeoff of aircraft.
10-52	<b>Runway Safety Area (RSA)</b>	A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to aircraft. See the construction safety and phasing plan (CSPP) for limits of the RSA.
10-53	<b>Safety Plan Compliance Document (SPCD)</b>	Details how the Contractor will comply with the CSPP.
10-54	<b>Specifications</b>	A part of the contract containing the written directions and requirements for completing the contract work. Standards for specifying materials or testing which are cited in the contract specifications by reference shall have the same force and effect as if included in the contract physically.
10-55	<b>Sponsor</b>	A Sponsor is defined in 49 USC § 47102(24) as a public agency that submits to the FAA for an AIP grant; or a

<b>Paragraph Number</b>	<b>Term</b>	<b>Definition</b>
		private Owner of a public-use airport that submits to the FAA an application for an AIP grant for the airport.
<b>10-56</b>	<b>Structures</b>	Airport facilities such as bridges; culverts; catch basins, inlets, retaining walls, cribbing; storm and sanitary sewer lines; water lines; underdrains; electrical ducts, manholes, handholes, lighting fixtures and bases; transformers; navigational aids; buildings; vaults; and, other manmade features of the airport that may be encountered in the work and not otherwise classified herein.
<b>10-57</b>	<b>Subgrade</b>	The soil that forms the pavement foundation.
<b>10-58</b>	<b>Superintendent</b>	The Contractor's executive representative who is present on the work during progress, authorized to receive and fulfill instructions from the RPR, and who shall supervise and direct the construction.
<b>10-59</b>	<b>Supplemental Agreement</b>	A written agreement between the Contractor and the Owner that establishes the basis of payment and contract time adjustment, if any, for the work affected by the supplemental agreement. A supplemental agreement is required if: (1) in scope work would increase or decrease the total amount of the awarded contract by more than 25%; (2) in scope work would increase or decrease the total of any major contract item by more than 25%; (3) work that is not within the scope of the originally awarded contract; or (4) adding or deleting of a major contract item.
<b>10-60</b>	<b>Surety</b>	The corporation, partnership, or individual, other than the Contractor, executing payment or performance bonds that are furnished to the Owner by the Contractor.
<b>10-61</b>	<b>Taxilane</b>	A taxiway designed for low speed movement of aircraft between aircraft parking areas and terminal areas.
<b>10-62</b>	<b>Taxiway</b>	The portion of the air operations area of an airport that has been designated by competent airport authority for movement of aircraft to and from the airport's runways, aircraft parking areas, and terminal areas.
<b>10-63</b>	<b>Taxiway/Taxilane Safety Area (TSA)</b>	A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an aircraft. See the construction safety and phasing plan (CSPP) for limits of the TSA.
<b>10-64</b>	<b>Work</b>	The furnishing of all labor, materials, tools, equipment, and incidentals necessary or convenient to the Contractor's

<b>Paragraph Number</b>	<b>Term</b>	<b>Definition</b>
		performance of all duties and obligations imposed by the contract, plans, and specifications.
<b>10-65</b>	<b>Working day</b>	A working day shall be any day other than a legal holiday, Saturday, or Sunday on which the normal working forces of the Contractor may proceed with regular work for at least six (6) hours toward completion of the contract. When work is suspended for causes beyond the Contractor's control, it will not be counted as a working day. Saturdays, Sundays and holidays on which the Contractor's forces engage in regular work will be considered as working days.
<b>10-66</b>	<b>Owner Defined terms</b>	None

**END OF SECTION 10**

## Section 20 Proposal Requirements and Conditions

**20-01 Advertisement.** Refer to the Notice Inviting Sealed Bids included elsewhere in this specification document.

**20-02 Qualification of bidders.** Each bidder shall submit evidence of competency and evidence of financial responsibility to perform the work to the Owner at the time of bid opening.

Evidence of competency, unless otherwise specified, shall consist of statements covering the bidder's past experience on similar work, and a list of equipment and a list of key personnel that would be available for the work.

Each bidder shall furnish the Owner satisfactory evidence of their financial responsibility. Evidence of financial responsibility, unless otherwise specified, shall consist of a confidential statement or report of the bidder's financial resources and liabilities as of the last calendar year or the bidder's last fiscal year. Such statements or reports shall be certified by a public accountant. At the time of submitting such financial statements or reports, the bidder shall further certify whether their financial responsibility is approximately the same as stated or reported by the public accountant. If the bidder's financial responsibility has changed, the bidder shall qualify the public accountant's statement or report to reflect the bidder's true financial condition at the time such qualified statement or report is submitted to the Owner.

Unless otherwise specified, a bidder may submit evidence that they are prequalified with the State Highway Division and are on the current "bidder's list" of the state in which the proposed work is located. Evidence of State Highway Division prequalification may be submitted as evidence of financial responsibility in lieu of the certified statements or reports specified above.

**20-03 Contents of proposal forms.** The Owner's proposal forms state the location and description of the proposed construction; the place, date, and time of opening of the proposals; and the estimated quantities of the various items of work to be performed and materials to be furnished for which unit bid prices are asked. The proposal form states the time in which the work must be completed, and the amount of the proposal guaranty that must accompany the proposal. The Owner will accept only those Proposals properly executed on physical forms or electronic forms provided by the Owner. Bidder actions that may cause the Owner to deem a proposal irregular are given in paragraph 20-09 *Irregular proposals*.

**A Mandatory Pre-bid Conference will be held for this project. Refer to the Notice for date, time, and location.**

**20-04 Issuance of proposal forms.** The Owner reserves the right to refuse to issue a proposal form to a prospective bidder if the bidder is in default for any of the following reasons:

- a. Failure to comply with any prequalification regulations of the Owner, if such regulations are cited, or otherwise included, in the proposal as a requirement for bidding.
- b. Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts in force with the Owner at the time the Owner issues the proposal to a prospective bidder.
- c. Documented record of Contractor default under previous contracts with the Owner.
- d. Documented record of unsatisfactory work on previous contracts with the Owner.

**20-05 Interpretation of estimated proposal quantities.** An estimate of quantities of work to be done and materials to be furnished under these specifications is given in the proposal. It is the result of careful calculations and is believed to be correct. It is given only as a basis for comparison of proposals and the award of the contract. The Owner does not expressly, or by implication, agree that the actual quantities involved will correspond exactly therewith; nor shall the bidder plead misunderstanding or deception

because of such estimates of quantities, or of the character, location, or other conditions pertaining to the work. Payment to the Contractor will be made only for the actual quantities of work performed or materials furnished in accordance with the plans and specifications. It is understood that the quantities may be increased or decreased as provided in the Section 40, paragraph 40-02, Alteration of Work and Quantities, without in any way invalidating the unit bid prices.

**20-06 Examination of plans, specifications, and site.** The bidder is expected to carefully examine the site of the proposed work, the proposal, plans, specifications, and contract forms. Bidders shall satisfy themselves to the character, quality, and quantities of work to be performed, materials to be furnished, and to the requirements of the proposed contract. The submission of a proposal shall be prima facie evidence that the bidder has made such examination and is satisfied to the conditions to be encountered in performing the work and the requirements of the proposed contract, plans, and specifications.

Boring logs and other records of subsurface investigations and tests are available for inspection of bidders. It is understood and agreed that such subsurface information, whether included in the plans, specifications, or otherwise made available to the bidder, was obtained and is intended for the Owner's design and estimating purposes only. Such information has been made available for the convenience of all bidders. It is further understood and agreed that each bidder is solely responsible for all assumptions, deductions, or conclusions which the bidder may make or obtain from their own examination of the boring logs and other records of subsurface investigations and tests that are furnished by the Owner.

**20-07 Preparation of proposal.** The bidder shall submit their proposal on the forms furnished by the Owner. All blank spaces in the proposal forms, unless explicitly stated otherwise, must be correctly filled in where indicated for each and every item for which a quantity is given. The bidder shall state the price (written in ink or typed) both in words and numerals which they propose for each pay item furnished in the proposal. In case of conflict between words and numerals, the words, unless obviously incorrect, shall govern.

The bidder shall correctly sign the proposal in ink. If the proposal is made by an individual, their name and post office address must be shown. If made by a partnership, the name and post office address of each member of the partnership must be shown. If made by a corporation, the person signing the proposal shall give the name of the state where the corporation was chartered and the name, titles, and business address of the president, secretary, and the treasurer. Anyone signing a proposal as an agent shall file evidence of their authority to do so and that the signature is binding upon the firm or corporation.

**20-08 Responsive and responsible bidder.** A responsive bid conforms to all significant terms and conditions contained in the Owner's invitation for bid. It is the Owner's responsibility to decide if the exceptions taken by a bidder to the solicitation are material or not and the extent of deviation it is willing to accept.

A responsible bidder has the ability to perform successfully under the terms and conditions of a proposed procurement, as defined in 2 CFR § 200.318(h). This includes such matters as Contractor integrity, compliance with public policy, record of past performance, and financial and technical resources.

**20-09 Irregular proposals.** Proposals shall be considered irregular for the following reasons:

- a. If the proposal is on a form other than that furnished by the Owner, or if the Owner's form is altered, or if any part of the proposal form is detached.
- b. If there are unauthorized additions, conditional or alternate pay items, or irregularities of any kind that make the proposal incomplete, indefinite, or otherwise ambiguous.
- c. If the proposal does not contain a unit price for each pay item listed in the proposal, except in the case of authorized alternate pay items, for which the bidder is not required to furnish a unit price.
- d. If the proposal contains unit prices that are obviously unbalanced.

- e. If the proposal is not accompanied by the proposal guaranty specified by the Owner.
- f. If the applicable Disadvantaged Business Enterprise information is incomplete.

The Owner reserves the right to reject any irregular proposal and the right to waive technicalities if such waiver is in the best interest of the Owner and conforms to local laws and ordinances pertaining to the letting of construction contracts.

**20-10 Bid guarantee.** Each separate proposal shall be accompanied by a bid bond, certified check, or other specified acceptable collateral, in the amount specified in the proposal form. Such bond, check, or collateral, shall be made payable to the Owner.

**20-11 Delivery of proposal.** Each proposal submitted shall be placed in a sealed envelope plainly marked with the project number, location of airport, and name and business address of the bidder on the outside. When sent by mail, preferably registered, the sealed proposal, marked as indicated above, should be enclosed in an additional envelope. No proposal will be considered unless received at the place specified in the advertisement or as modified by Addendum before the time specified for opening all bids. Proposals received after the bid opening time shall be returned to the bidder unopened.

**20-12 Withdrawal or revision of proposals.** A bidder may withdraw or revise (by withdrawal of one proposal and submission of another) a proposal provided that the bidder's request for withdrawal is received by the Owner, in writing, before the time specified for opening bids. Revised proposals must be received at the place specified in the advertisement before the time specified for opening all bids.

**20-13 Public opening of proposals.** Refer to Notice Inviting Sealed Bids for bid opening location. Proposals that have been withdrawn (by written or telegraphic request) or received after the time specified for opening bids shall be returned to the bidder unopened.

**20-14 Disqualification of bidders.** A bidder shall be considered disqualified for any of the following reasons:

- a. Submitting more than one proposal from the same partnership, firm, or corporation under the same or different name.
- b. Evidence of collusion among bidders. Bidders participating in such collusion shall be disqualified as bidders for any future work of the Owner until any such participating bidder has been reinstated by the Owner as a qualified bidder.
- c. If the bidder is considered to be in "default" for any reason specified in paragraph 20-04, *Issuance of Proposal Forms*, of this section.

**20-15 Discrepancies and Omissions.** A Bidder who discovers discrepancies or omissions with the project bid documents shall immediately notify the Owner's Engineer of the matter. A bidder that has doubt as to the true meaning of a project requirement may submit to the Owner's Engineer a written request for interpretation no later than four (4) days prior to bid opening.

Any interpretation of the project bid documents by the Owner's Engineer will be by written addendum issued by the Owner. The Owner will not consider any instructions, clarifications or interpretations of the bidding documents in any manner other than written addendum.

**END OF SECTION 20**

## Section 30 Award and Execution of Contract

**30-01 Consideration of proposals.** Proposals will be compared on the basis of the summation of the products obtained by multiplying the estimated quantities shown in the proposal by the unit bid prices. If a bidder's proposal contains a discrepancy between unit bid prices written in words and unit bid prices written in numbers, the unit bid price written in words shall govern.

Until the award of a contract is made, the Owner reserves the right to reject a bidder's proposal for any of the following reasons:

a. If the proposal is irregular as specified in Section 20, paragraph 20-09, *Irregular Proposals*.

b. If the bidder is disqualified for any of the reasons specified Section 20, paragraph 20-14, *Disqualification of Bidders*.

In addition, until the award of a contract is made, the Owner reserves the right to reject any or all proposals, waive technicalities, if such waiver is in the best interest of the Owner and is in conformance with applicable state and local laws or regulations pertaining to the letting of construction contracts; advertise for new proposals; or proceed with the work otherwise. All such actions shall promote the Owner's best interests.

**30-02 Award of contract.** The award of a contract, if it is to be awarded, shall be made within **30 calendar days** of the date specified for publicly opening proposals, unless otherwise specified herein.

If the Owner elects to proceed with an award of contract, the Owner will make award to the responsible bidder whose bid, conforming with all the material terms and conditions of the bid documents, is the lowest in price.

**30-03 Cancellation of award.** The Owner reserves the right to cancel the award without liability to the bidder, except return of proposal guaranty, at any time before a contract has been fully executed by all parties and is approved by the Owner in accordance with paragraph 30-07 *Approval of Contract*.

**30-04 Return of proposal guaranty.** All proposal guaranties, except those of the two lowest bidders, will be returned immediately after the Owner has made a comparison of bids as specified in the paragraph 30-01, *Consideration of Proposals*. Proposal guaranties of the two lowest bidders will be retained by the Owner until such time as an award is made, at which time, the unsuccessful bidder's proposal guaranty will be returned. The successful bidder's proposal guaranty will be returned as soon as the Owner receives the contract bonds as specified in paragraph 30-05, *Requirements of Contract Bonds*.

**30-05 Requirements of contract bonds.** At the time of the execution of the contract, the successful bidder shall furnish the Owner a surety bond or bonds that have been fully executed by the bidder and the surety guaranteeing the performance of the work and the payment of all legal debts that may be incurred by reason of the Contractor's performance of the work. The surety and the form of the bond or bonds shall be acceptable to the Owner. Unless otherwise specified in this subsection, the surety bond or bonds shall be in a sum equal to the full amount of the contract.

**30-06 Execution of contract.** The successful bidder shall sign (execute) the necessary agreements for entering into the contract and return the signed contract to the Owner, along with the fully executed surety bond or bonds specified in paragraph 30-05, *Requirements of Contract Bonds*, of this section, within 15 calendar days from the date mailed or otherwise delivered to the successful bidder.

**30-07 Approval of contract.** Upon receipt of the contract and contract bond or bonds that have been executed by the successful bidder, the Owner shall complete the execution of the contract in accordance with local laws or ordinances, and return the fully executed contract to the Contractor. Delivery of the fully executed contract to the Contractor shall constitute the Owner's approval to be bound by the successful bidder's proposal and the terms of the contract.

**30-08 Failure to execute contract.** Failure of the successful bidder to execute the contract and furnish an acceptable surety bond or bonds within the period specified in paragraph 30-06, *Execution of Contract*, of this section shall be just cause for cancellation of the award and forfeiture of the proposal guaranty, not as a penalty, but as liquidated damages to the Owner.

**END OF SECTION 30**



## Section 40 Scope of Work

**40-01 Intent of contract.** The intent of the contract is to provide for construction and completion, in every detail, of the work described. It is further intended that the Contractor shall furnish all labor, materials, equipment, tools, transportation, and supplies required to complete the work in accordance with the plans, specifications, and terms of the contract.

**40-02 Alteration of work and quantities.** The Owner reserves the right to make such changes in quantities and work as may be necessary or desirable to complete, in a satisfactory manner, the original intended work. Unless otherwise specified in the Contract, the Owner's Engineer or RPR shall be and is hereby authorized to make, in writing, such in-scope alterations in the work and variation of quantities as may be necessary to complete the work, provided such action does not represent a significant change in the character of the work.

For purpose of this section, a significant change in character of work means: any change that is outside the current contract scope of work; any change (increase or decrease) in the total contract cost by more than 25%; or any change in the total cost of a major contract item by more than 25%.

Work alterations and quantity variances that do not meet the definition of significant change in character of work shall not invalidate the contract nor release the surety. Contractor agrees to accept payment for such work alterations and quantity variances in accordance with Section 90, paragraph 90-03, *Compensation for Altered Quantities*.

Should the value of altered work or quantity variance meet the criteria for significant change in character of work, such altered work and quantity variance shall be covered by a supplemental agreement. Supplemental agreements shall also require consent of the Contractor's surety and separate performance and payment bonds. If the Owner and the Contractor are unable to agree on a unit adjustment for any contract item that requires a supplemental agreement, the Owner reserves the right to terminate the contract with respect to the item and make other arrangements for its completion.

**40-03 Omitted items.** The Owner, the Owner's Engineer or the RPR may provide written notice to the Contractor to omit from the work any contract item that does not meet the definition of major contract item. Major contract items may be omitted by a supplemental agreement. Such omission of contract items shall not invalidate any other contract provision or requirement.

Should a contract item be omitted or otherwise ordered to be non-performed, the Contractor shall be paid for all work performed toward completion of such item prior to the date of the order to omit such item. Payment for work performed shall be in accordance with Section 90, paragraph 90-04, *Payment for Omitted Items*.

**40-04 Extra work.** Should acceptable completion of the contract require the Contractor to perform an item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, Owner may issue a Change Order to cover the necessary extra work. Change orders for extra work shall contain agreed unit prices for performing the change order work in accordance with the requirements specified in the order, and shall contain any adjustment to the contract time that, in the RPR's opinion, is necessary for completion of the extra work.

When determined by the RPR to be in the Owner's best interest, the RPR may order the Contractor to proceed with extra work as provided in Section 90, paragraph 90-05, *Payment for Extra Work*. Extra work that is necessary for acceptable completion of the project, but is not within the general scope of the work covered by the original contract shall be covered by a supplemental agreement as defined in Section 10, paragraph 10-59, *Supplemental Agreement*.

If extra work is essential to maintaining the project critical path, RPR may order the Contractor to commence the extra work under a Time and Material contract method. Once sufficient detail is available to establish the level of effort necessary for the extra work, the Owner shall initiate a change order or supplemental agreement to cover the extra work.

Any claim for payment of extra work that is not covered by written agreement (change order or supplemental agreement) shall be rejected by the Owner.

**40-05 Maintenance of traffic.** It is the explicit intention of the contract that the safety of aircraft, as well as the Contractor's equipment and personnel, is the most important consideration. The Contractor shall maintain traffic in the manner detailed in the Construction Safety and Phasing Plan (CSPP).

a. It is understood and agreed that the Contractor shall provide for the free and unobstructed movement of aircraft in the air operations areas (AOAs) of the airport with respect to their own operations and the operations of all subcontractors as specified in Section 80, paragraph 80-04, *Limitation of Operations*. It is further understood and agreed that the Contractor shall provide for the uninterrupted operation of visual and electronic signals (including power supplies thereto) used in the guidance of aircraft while operating to, from, and upon the airport as specified in Section 70, paragraph 70-15, *Contractor's Responsibility for Utility Service and Facilities of Others*.

b. With respect to their own operations and the operations of all subcontractors, the Contractor shall provide marking, lighting, and other acceptable means of identifying personnel, equipment, vehicles, storage areas, and any work area or condition that may be hazardous to the operation of aircraft, fire-rescue equipment, or maintenance vehicles at the airport in accordance with the construction safety and phasing plan (CSPP) and the safety plan compliance document (SPCD).

c. When the contract requires the maintenance of an existing road, street, or highway during the Contractor's performance of work that is otherwise provided for in the contract, plans, and specifications, the Contractor shall keep the road, street, or highway open to all traffic and shall provide maintenance as may be required to accommodate traffic. The Contractor, at their expense, shall be responsible for the repair to equal or better than preconstruction conditions of any damage caused by the Contractor's equipment and personnel. The Contractor shall furnish, erect, and maintain barricades, warning signs, flag person, and other traffic control devices in reasonable conformity with the Manual on Uniform Traffic Control Devices (MUTCD) (<http://mutcd.fhwa.dot.gov/>), unless otherwise specified. The Contractor shall also construct and maintain in a safe condition any temporary connections necessary for ingress to and egress from abutting property or intersecting roads, streets or highways.

**40-06 Removal of existing structures.** All existing structures encountered within the established lines, grades, or grading sections shall be removed by the Contractor, unless such existing structures are otherwise specified to be relocated, adjusted up or down, salvaged, abandoned in place, reused in the work or to remain in place. The cost of removing such existing structures shall not be measured or paid for directly, but shall be included in the various contract items.

Should the Contractor encounter an existing structure (above or below ground) in the work for which the disposition is not indicated on the plans, the Resident Project Representative (RPR) shall be notified prior to disturbing such structure. The disposition of existing structures so encountered shall be immediately determined by the RPR in accordance with the provisions of the contract.

Except as provided in Section 40, paragraph 40-07, *Rights in and Use of Materials Found in the Work*, it is intended that all existing materials or structures that may be encountered (within the lines, grades, or grading sections established for completion of the work) shall be used in the work as otherwise provided for in the contract and shall remain the property of the Owner when so used in the work.

**40-07 Rights in and use of materials found in the work.** Should the Contractor encounter any material such as (but not restricted to) sand, stone, gravel, slag, or concrete slabs within the established lines,

grades, or grading sections, the use of which is intended by the terms of the contract to be embankment, the Contractor may at their own option either:

- a. Use such material in another contract item, providing such use is approved by the RPR and is in conformance with the contract specifications applicable to such use; or,
- b. Remove such material from the site, upon written approval of the RPR; or
- c. Use such material for the Contractor's own temporary construction on site; or,
- d. Use such material as intended by the terms of the contract.

Should the Contractor wish to exercise option a., b., or c., the Contractor shall request the RPR's approval in advance of such use.

Should the RPR approve the Contractor's request to exercise option a., b., or c., the Contractor shall be paid for the excavation or removal of such material at the applicable contract price. The Contractor shall replace, at their expense, such removed or excavated material with an agreed equal volume of material that is acceptable for use in constructing embankment, backfills, or otherwise to the extent that such replacement material is needed to complete the contract work. The Contractor shall not be charged for use of such material used in the work or removed from the site.

Should the RPR approve the Contractor's exercise of option a., the Contractor shall be paid, at the applicable contract price, for furnishing and installing such material in accordance with requirements of the contract item in which the material is used.

It is understood and agreed that the Contractor shall make no claim for delays by reason of their own exercise of option a., b., or c.

The Contractor shall not excavate, remove, or otherwise disturb any material, structure, or part of a structure which is located outside the lines, grades, or grading sections established for the work, except where such excavation or removal is provided for in the contract, plans, or specifications.

**40-08 Final cleanup.** Upon completion of the work and before acceptance and final payment will be made, the Contractor shall remove from the site all machinery, equipment, surplus and discarded materials, rubbish, temporary structures, and stumps or portions of trees. The Contractor shall cut all brush and woods within the limits indicated and shall leave the site in a neat and presentable condition. Material cleared from the site and deposited on adjacent property will not be considered as having been disposed of satisfactorily, unless the Contractor has obtained the written permission of the property Owner.

**END OF SECTION 40**

## Section 50 Control of Work

**50-01 Authority of the Resident Project Representative (RPR).** The RPR has final authority regarding the interpretation of project specification requirements. The RPR shall determine acceptability of the quality of materials furnished, method of performance of work performed, and the manner and rate of performance of the work. The RPR does not have the authority to accept work that does not conform to specification requirements.

**50-02 Conformity with plans and specifications.** All work and all materials furnished shall be in reasonably close conformity with the lines, grades, grading sections, cross-sections, dimensions, material requirements, and testing requirements that are specified (including specified tolerances) in the contract, plans, or specifications.

If the RPR finds the materials furnished, work performed, or the finished product not within reasonably close conformity with the plans and specifications, but that the portion of the work affected will, in their opinion, result in a finished product having a level of safety, economy, durability, and workmanship acceptable to the Owner, the RPR will advise the Owner of their determination that the affected work be accepted and remain in place. The RPR will document the determination and recommend to the Owner a basis of acceptance that will provide for an adjustment in the contract price for the affected portion of the work. Changes in the contract price must be covered by contract change order or supplemental agreement as applicable.

If the RPR finds the materials furnished, work performed, or the finished product are not in reasonably close conformity with the plans and specifications and have resulted in an unacceptable finished product, the affected work or materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor in accordance with the RPR's written orders.

The term "reasonably close conformity" shall not be construed as waiving the Contractor's responsibility to complete the work in accordance with the contract, plans, and specifications. The term shall not be construed as waiving the RPR's responsibility to insist on strict compliance with the requirements of the contract, plans, and specifications during the Contractor's execution of the work, when, in the RPR's opinion, such compliance is essential to provide an acceptable finished portion of the work.

The term "reasonably close conformity" is also intended to provide the RPR with the authority, after consultation with the Sponsor and FAA, to use sound engineering judgment in their determinations to accept work that is not in strict conformity, but will provide a finished product equal to or better than that required by the requirements of the contract, plans and specifications.

The RPR will not be responsible for the Contractor's means, methods, techniques, sequences, or procedures of construction or the safety precautions incident thereto.

**50-03 Coordination of contract, plans, and specifications.** The contract, plans, specifications, and all referenced standards cited are essential parts of the contract requirements. If electronic files are provided and used on the project and there is a conflict between the electronic files and hard copy plans, the hard copy plans shall govern. A requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. In case of discrepancy, calculated dimensions will govern over scaled dimensions; contract technical specifications shall govern over contract general provisions, plans, cited standards for materials or testing, and cited advisory circulars (ACs); contract general provisions shall govern over plans, cited standards for materials or testing, and cited ACs; plans shall govern over cited standards for materials or testing and cited ACs. If any paragraphs contained in the Special Provisions conflict with General Provisions or Technical Specifications, the Special Provisions shall govern.

From time to time, discrepancies within cited testing standards occur due to the timing of the change, edits, and/or replacement of the standards. If the Contractor discovers any apparent discrepancy within standard test methods, the Contractor shall immediately ask the RPR for an interpretation and decision, and such decision shall be final.

The Contractor shall not take advantage of any apparent error or omission on the plans or specifications. In the event the Contractor discovers any apparent error or discrepancy, Contractor shall immediately notify the Owner or the designated representative in writing requesting their written interpretation and decision.

**50-04 List of Special Provisions. (none)**

**50-05 Cooperation of Contractor.** The Contractor shall be supplied with **three (3)** hard copies or an electronic PDF of the plans and specifications. The Contractor shall have available on the construction site at all times one hardcopy each of the plans and specifications. Additional hard copies of plans and specifications may be obtained by the Contractor for the cost of reproduction.

The Contractor shall give constant attention to the work to facilitate the progress thereof, and shall cooperate with the RPR and their inspectors and with other Contractors in every way possible. The Contractor shall have a competent superintendent on the work at all times who is fully authorized as their agent on the work. The superintendent shall be capable of reading and thoroughly understanding the plans and specifications and shall receive and fulfill instructions from the RPR or their authorized representative.

**50-06 Cooperation between Contractors.** The Owner reserves the right to contract for and perform other or additional work on or near the work covered by this contract.

When separate contracts are let within the limits of any one project, each Contractor shall conduct the work not to interfere with or hinder the progress of completion of the work being performed by other Contractors. Contractors working on the same project shall cooperate with each other as directed.

Each Contractor involved shall assume all liability, financial or otherwise, in connection with their own contract and shall protect and hold harmless the Owner from any and all damages or claims that may arise because of inconvenience, delays, or loss experienced because of the presence and operations of other Contractors working within the limits of the same project.

The Contractor shall arrange their work and shall place and dispose of the materials being used to not interfere with the operations of the other Contractors within the limits of the same project. The Contractor shall join their work with that of the others in an acceptable manner and shall perform it in proper sequence to that of the others.

**50-07 Construction layout and stakes.** The Engineer/RPR shall establish necessary horizontal and vertical control. The establishment of Survey Control and/or reestablishment of survey control shall be by a State Licensed Land Surveyor. Contractor is responsible for preserving integrity of horizontal and vertical controls established by Engineer/RPR. In case of negligence on the part of the Contractor or their employees, resulting in the destruction of any horizontal and vertical control, the resulting costs will be deducted as a liquidated damage against the Contractor.

Prior to the start of construction, the Contractor will check all control points for horizontal and vertical accuracy and certify in writing to the RPR that the Contractor concurs with survey control established for the project. All lines, grades and measurements from control points necessary for the proper execution and control of the work on this project will be provided to the RPR. The Contractor is responsible to establish all layout required for the construction of the project.

Copies of survey notes will be provided to the RPR for each area of construction and for each placement of material as specified to allow the RPR to make periodic checks for conformance with plan grades, alignments and grade tolerances required by the applicable material specifications. Surveys will be

provided to the RPR prior to commencing work items that cover or disturb the survey staking. Survey(s) and notes shall be provided in the following format(s): .dwg, .pdf, .xlsx

Laser, GPS, String line, or other automatic control shall be checked with temporary control as necessary. In the case of error, on the part of the Contractor, their surveyor, employees or subcontractors, resulting in established grades, alignment or grade tolerances that do not concur with those specified or shown on the plans, the Contractor is solely responsible for correction, removal, replacement and all associated costs at no additional cost to the Owner.

No direct payment will be made, unless otherwise specified in contract documents, for this labor, materials, or other expenses. The cost shall be included in the price of the bid for the various items of the Contract.

**50-08 Authority and duties of Quality Assurance (QA) inspectors.** QA inspectors shall be authorized to inspect all work done and all material furnished. Such QA inspection may extend to all or any part of the work and to the preparation, fabrication, or manufacture of the materials to be used. QA inspectors are not authorized to revoke, alter, or waive any provision of the contract. QA inspectors are not authorized to issue instructions contrary to the plans and specifications or to act as foreman for the Contractor.

QA Inspectors are authorized to notify the Contractor or their representatives of any failure of the work or materials to conform to the requirements of the contract, plans, or specifications and to reject such nonconforming materials in question until such issues can be referred to the RPR for a decision.

**50-09 Inspection of the work.** All materials and each part or detail of the work shall be subject to inspection. The RPR shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

If the RPR requests it, the Contractor, at any time before acceptance of the work, shall remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the specifications. Should the work thus exposed or examined prove acceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be paid for as extra work; but should the work so exposed or examined prove unacceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be at the Contractor's expense.

Provide advance written notice to the RPR of work the Contractor plans to perform each week and each day. Any work done or materials used without written notice and allowing opportunity for inspection by the RPR may be ordered removed and replaced at the Contractor's expense.

Should the contract work include relocation, adjustment, or any other modification to existing facilities, not the property of the (contract) Owner, authorized representatives of the Owners of such facilities shall have the right to inspect such work. Such inspection shall in no sense make any facility owner a party to the contract, and shall in no way interfere with the rights of the parties to this contract.

**50-10 Removal of unacceptable and unauthorized work.** All work that does not conform to the requirements of the contract, plans, and specifications will be considered unacceptable, unless otherwise determined acceptable by the RPR as provided in paragraph 50-02, *Conformity with Plans and Specifications*.

Unacceptable work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause found to exist prior to the final acceptance of the work, shall be removed immediately and replaced in an acceptable manner in accordance with the provisions of Section 70, paragraph 70-14, *Contractor's Responsibility for Work*.

No removal work made under provision of this paragraph shall be done without lines and grades having been established by the RPR. Work done contrary to the instructions of the RPR, work done beyond the lines shown on the plans or as established by the RPR, except as herein specified, or any extra work done

without authority, will be considered as unauthorized and will not be paid for under the provisions of the contract. Work so done may be ordered removed or replaced at the Contractor's expense.

Upon failure on the part of the Contractor to comply with any order of the RPR made under the provisions of this subsection, the RPR will have authority to cause unacceptable work to be remedied or removed and replaced; and unauthorized work to be removed and recover the resulting costs as a liquidated damage against the Contractor.

**50-11 Load restrictions.** The Contractor shall comply with all legal load restrictions in the hauling of materials on public roads beyond the limits of the work. A special permit will not relieve the Contractor of liability for damage that may result from the moving of material or equipment.

The operation of equipment of such weight or so loaded as to cause damage to structures or to any other type of construction will not be permitted. Hauling of materials over the base course or surface course under construction shall be limited as directed. No loads will be permitted on a concrete pavement, base, or structure before the expiration of the curing period. The Contractor, at their own expense, shall be responsible for the repair to equal or better than preconstruction conditions of any damage caused by the Contractor's equipment and personnel.

**50-12 Maintenance during construction.** The Contractor shall maintain the work during construction and until the work is accepted. Maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and forces so that the work is maintained in satisfactory condition at all times.

In the case of a contract for the placing of a course upon a course or subgrade previously constructed, the Contractor shall maintain the previous course or subgrade during all construction operations.

All costs of maintenance work during construction and before the project is accepted shall be included in the unit prices bid on the various contract items, and the Contractor will not be paid an additional amount for such work.

**50-13 Failure to maintain the work.** Should the Contractor at any time fail to maintain the work as provided in paragraph 50-12, *Maintenance during Construction*, the RPR shall immediately notify the Contractor of such noncompliance. Such notification shall specify a reasonable time within which the Contractor shall be required to remedy such unsatisfactory maintenance condition. The time specified will give due consideration to the exigency that exists.

Should the Contractor fail to respond to the RPR's notification, the Owner may suspend any work necessary for the Owner to correct such unsatisfactory maintenance condition, depending on the exigency that exists. Any maintenance cost incurred by the Owner, shall be recovered as a liquidated damage against the Contractor.

**50-14 Partial acceptance.** If at any time during the execution of the project the Contractor substantially completes a usable unit or portion of the work, the occupancy of which will benefit the Owner, the Contractor may request the RPR to make final inspection of that unit. If the RPR finds upon inspection that the unit has been satisfactorily completed in compliance with the contract, the RPR may accept it as being complete, and the Contractor may be relieved of further responsibility for that unit. Such partial acceptance and beneficial occupancy by the Owner shall not void or alter any provision of the contract.

**50-15 Final acceptance.** Upon due notice from the Contractor of presumptive completion of the entire project, the RPR and Owner will make an inspection. If all construction provided for and contemplated by the contract is found to be complete in accordance with the contract, plans, and specifications, such inspection shall constitute the final inspection. The RPR shall notify the Contractor in writing of final acceptance as of the date of the final inspection.

If, however, the inspection discloses any work, in whole or in part, as being unsatisfactory, the RPR will notify the Contractor and the Contractor shall correct the unsatisfactory work. Upon correction of the

work, another inspection will be made which shall constitute the final inspection, provided the work has been satisfactorily completed. In such event, the RPR will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

**50-16 Claims for adjustment and disputes.** If for any reason the Contractor deems that additional compensation is due for work or materials not clearly provided for in the contract, plans, or specifications or previously authorized as extra work, the Contractor shall notify the RPR in writing of their intention to claim such additional compensation before the Contractor begins the work on which the Contractor bases the claim. If such notification is not given or the RPR is not afforded proper opportunity by the Contractor for keeping strict account of actual cost as required, then the Contractor hereby agrees to waive any claim for such additional compensation. Such notice by the Contractor and the fact that the RPR has kept account of the cost of the work shall not in any way be construed as proving or substantiating the validity of the claim. When the work on which the claim for additional compensation is based has been completed, the Contractor shall, within 10 calendar days, submit a written claim to the RPR who will present it to the Owner for consideration in accordance with local laws or ordinances.

Nothing in this subsection shall be construed as a waiver of the Contractor's right to dispute final payment based on differences in measurements or computations.

**END OF SECTION 50**



## Section 60 Control of Materials

**60-01 Source of supply and quality requirements.** The materials used in the work shall conform to the requirements of the contract, plans, and specifications. Unless otherwise specified, such materials that are manufactured or processed shall be new (as compared to used or reprocessed).

In order to expedite the inspection and testing of materials, the Contractor shall furnish documentation to the RPR as to the origin, composition, and manufacture of all materials to be used in the work. Documentation shall be furnished promptly after execution of the contract but, in all cases, prior to delivery of such materials.

At the RPR's option, materials may be approved at the source of supply before delivery. If it is found after trial that sources of supply for previously approved materials do not produce specified products, the Contractor shall furnish materials from other sources.

The Contractor shall furnish airport lighting equipment that meets the requirements of the specifications; and is listed in AC 150/5345-53, *Airport Lighting Equipment Certification Program and Addendum*, that is in effect on the date of advertisement.

**60-02 Samples, tests, and cited specifications.** All materials used in the work shall be inspected, tested, and approved by the RPR before incorporation in the work unless otherwise designated. Any work in which untested materials are used without approval or written permission of the RPR shall be performed at the Contractor's risk. Materials found to be unacceptable and unauthorized will not be paid for and, if directed by the RPR, shall be removed at the Contractor's expense.

Unless otherwise designated, quality assurance tests will be made by and at the expense of the Owner in accordance with the cited standard methods of ASTM, American Association of State Highway and Transportation Officials (AASHTO), federal specifications, Commercial Item Descriptions, and all other cited methods, which are current on the date of advertisement for bids.

The testing organizations performing on-site quality assurance field tests shall have copies of all referenced standards on the construction site for use by all technicians and other personnel. Unless otherwise designated, samples for quality assurance will be taken by a qualified representative of the RPR. All materials being used are subject to inspection, test, or rejection at any time prior to or during incorporation into the work. Copies of all tests will be furnished to the Contractor's representative at their request after review and approval of the RPR.

A copy of all Contractor QC test data shall be provided to the RPR daily, along with printed reports, in an approved format, on a weekly basis. After completion of the project, and prior to final payment, the Contractor shall submit a final report to the RPR showing all test data reports, plus an analysis of all results showing ranges, averages, and corrective action taken on all failing tests.

The Contractor shall employ a Quality Control (QC) testing organization to perform all Contractor required QC tests in accordance with Item C-100 Contractor Quality Control Program (CQCP).

**60-03 Certification of compliance/analysis (COC/COA).** The RPR may permit the use, prior to sampling and testing, of certain materials or assemblies when accompanied by manufacturer's COC stating that such materials or assemblies fully comply with the requirements of the contract. The certificate shall be signed by the manufacturer. Each lot of such materials or assemblies delivered to the work must be accompanied by a certificate of compliance in which the lot is clearly identified. The COA is the manufacturer's COC and includes all applicable test results.

Materials or assemblies used on the basis of certificates of compliance may be sampled and tested at any time and if found not to be in conformity with contract requirements will be subject to rejection whether in place or not.

The form and distribution of certificates of compliance shall be as approved by the RPR.

When a material or assembly is specified by “brand name or equal” and the Contractor elects to furnish the specified “or equal,” the Contractor shall be required to furnish the manufacturer’s certificate of compliance for each lot of such material or assembly delivered to the work. Such certificate of compliance shall clearly identify each lot delivered and shall certify as to:

- a. Conformance to the specified performance, testing, quality or dimensional requirements; and,
- b. Suitability of the material or assembly for the use intended in the contract work.

The RPR shall be the sole judge as to whether the proposed “or equal” is suitable for use in the work.

The RPR reserves the right to refuse permission for use of materials or assemblies on the basis of certificates of compliance.

**60-04 Plant inspection.** The RPR or their authorized representative may inspect, at its source, any specified material or assembly to be used in the work. Manufacturing plants may be inspected from time to time for the purpose of determining compliance with specified manufacturing methods or materials to be used in the work and to obtain samples required for acceptance of the material or assembly.

Should the RPR conduct plant inspections, the following conditions shall exist:

- a. The RPR shall have the cooperation and assistance of the Contractor and the producer with whom the Contractor has contracted for materials.

- b. The RPR shall have full entry at all reasonable times to such parts of the plant that concern the manufacture or production of the materials being furnished.

- c. If required by the RPR, the Contractor shall arrange for adequate office or working space that may be reasonably needed for conducting plant inspections. Place office or working space in a convenient location with respect to the plant.

It is understood and agreed that the Owner shall have the right to retest any material that has been tested and approved at the source of supply after it has been delivered to the site. The RPR shall have the right to reject only material which, when retested, does not meet the requirements of the contract, plans, or specifications.

**60-05 Engineer/ Resident Project Representative (RPR) field office.** A field office is not required for this project.

**60-06 Storage of materials.** Materials shall be stored to assure the preservation of their quality and fitness for the work. Stored materials, even though approved before storage, may again be inspected prior to their use in the work. Stored materials shall be located to facilitate their prompt inspection. The Contractor shall coordinate the storage of all materials with the RPR. Materials to be stored on airport property shall not create an obstruction to air navigation nor shall they interfere with the free and unobstructed movement of aircraft. Unless otherwise shown on the plans and/or CSPP, the storage of materials and the location of the Contractor’s plant and parked equipment or vehicles shall be as directed by the RPR. Private property shall not be used for storage purposes without written permission of the Owner or lessee of such property. The Contractor shall make all arrangements and bear all expenses for the storage of materials on private property. Upon request, the Contractor shall furnish the RPR a copy of the property Owner’s permission.

All storage sites on private or airport property shall be restored to their original condition by the Contractor at their expense, except as otherwise agreed to (in writing) by the Owner or lessee of the property.

**60-07 Unacceptable materials.** Any material or assembly that does not conform to the requirements of the contract, plans, or specifications shall be considered unacceptable and shall be rejected. The

Contractor shall remove any rejected material or assembly from the site of the work, unless otherwise instructed by the RPR.

Rejected material or assembly, the defects of which have been corrected by the Contractor, shall not be returned to the site of the work until such time as the RPR has approved its use in the work.

**60-08 Owner furnished materials.** The Contractor shall furnish all materials required to complete the work, except those specified, if any, to be furnished by the Owner. Owner-furnished materials shall be made available to the Contractor at the location specified.

All costs of handling, transportation from the specified location to the site of work, storage, and installing Owner-furnished materials shall be included in the unit price bid for the contract item in which such Owner-furnished material is used.

After any Owner-furnished material has been delivered to the location specified, the Contractor shall be responsible for any demurrage, damage, loss, or other deficiencies that may occur during the Contractor's handling, storage, or use of such Owner-furnished material. The Owner will deduct from any monies due or to become due the Contractor any cost incurred by the Owner in making good such loss due to the Contractor's handling, storage, or use of Owner-furnished materials.

**END OF SECTION 60**

## Section 70 Legal Regulations and Responsibility to Public

**70-01 Laws to be observed.** The Contractor shall keep fully informed of all federal and state laws, all local laws, ordinances, and regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work. The Contractor shall at all times observe and comply with all such laws, ordinances, regulations, orders, and decrees; and shall protect and indemnify the Owner and all their officers, agents, or servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by the Contractor or the Contractor's employees.

**70-02 Permits, licenses, and taxes.** The Contractor shall procure all permits and licenses, pay all charges, fees, and taxes, and give all notices necessary and incidental to the due and lawful execution of the work.

**70-03 Patented devices, materials, and processes.** If the Contractor is required or desires to use any design, device, material, or process covered by letters of patent or copyright, the Contractor shall provide for such use by suitable legal agreement with the Patentee or Owner. The Contractor and the surety shall indemnify and hold harmless the Owner, any third party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, material or process, or any trademark or copyright, and shall indemnify the Owner for any costs, expenses, and damages which it may be obliged to pay by reason of an infringement, at any time during the execution or after the completion of the work.

**70-04 Restoration of surfaces disturbed by others.** The Owner reserves the right to authorize the construction, reconstruction, or maintenance of any public or private utility service, FAA or National Oceanic and Atmospheric Administration (NOAA) facility, or a utility service of another government agency at any time during the progress of the work. To the extent that such construction, reconstruction, or maintenance has been coordinated with the Owner, such authorized work (by others) must be shown on the plans.

Except as listed above, the Contractor shall not permit any individual, firm, or corporation to excavate or otherwise disturb such utility services or facilities located within the limits of the work without the written permission of the RPR.

Should the Owner of public or private utility service, FAA, or NOAA facility, or a utility service of another government agency be authorized to construct, reconstruct, or maintain such utility service or facility during the progress of the work, the Contractor shall cooperate with such Owners by arranging and performing the work in this contract to facilitate such construction, reconstruction or maintenance by others whether or not such work by others is listed above. When ordered as extra work by the RPR, the Contractor shall make all necessary repairs to the work which are due to such authorized work by others, unless otherwise provided for in the contract, plans, or specifications. It is understood and agreed that the Contractor shall not be entitled to make any claim for damages due to such authorized work by others or for any delay to the work resulting from such authorized work.

**70-05 Federal Participation.** (Not used).

**70-06 Sanitary, health, and safety provisions.** The Contractor's worksite and facilities shall comply with applicable federal, state, and local requirements for health, safety and sanitary provisions.

**70-07 Public convenience and safety.** The Contractor shall control their operations and those of their subcontractors and all suppliers, to assure the least inconvenience to the traveling public. Under all circumstances, safety shall be the most important consideration.

The Contractor shall maintain the free and unobstructed movement of aircraft and vehicular traffic with respect to their own operations and those of their own subcontractors and all suppliers in accordance with Section 40, paragraph 40-05, *Maintenance of Traffic*, and shall limit such operations for the convenience and safety of the traveling public as specified in Section 80, paragraph 80-04, *Limitation of Operations*.

The Contractor shall remove or control debris and rubbish resulting from its work operations at frequent intervals, and upon the order of the RPR. If the RPR determines the existence of Contractor debris in the work site represents a hazard to airport operations and the Contractor is unable to respond in a prompt and reasonable manner, the RPR reserves the right to assign the task of debris removal to a third party and recover the resulting costs as a liquidated damage against the Contractor.

**70-08 Construction Safety and Phasing Plan (CSPP).** The Contractor shall complete the work in accordance with the approved Construction Safety and Phasing Plan (CSPP) developed in accordance with AC 150/5370-2, Operational Safety on Airports During Construction.

**The CSPP is included in an appendix in this specification package.**

**70-09 Use of explosives.** The use of explosives is not permitted on this project.

**70-10 Protection and restoration of property and landscape.** The Contractor shall be responsible for the preservation of all public and private property, and shall protect carefully from disturbance or damage all land monuments and property markers until the Engineer/RPR has witnessed or otherwise referenced their location and shall not move them until directed.

The Contractor shall be responsible for all damage or injury to property of any character, during the execution of the work, resulting from any act, omission, neglect, or misconduct in manner or method of executing the work, or at any time due to defective work or materials, and said responsibility shall not be released until the project has been completed and accepted.

When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or in consequence of the non-execution thereof by the Contractor, the Contractor shall restore, at their expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, or otherwise restoring as may be directed, or the Contractor shall make good such damage or injury in an acceptable manner.

**70-11 Responsibility for damage claims.** The Contractor shall indemnify and hold harmless the Engineer/RPR and the Owner and their officers, agents, and employees from all suits, actions, or claims, of any character, brought because of any injuries or damage received or sustained by any person, persons, or property on account of the operations of the Contractor; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect, or misconduct of said Contractor; or because of any claims or amounts recovered from any infringements of patent, trademark, or copyright; or from any claims or amounts arising or recovered under the "Workmen's Compensation Act," or any other law, ordinance, order, or decree. Money due the Contractor under and by virtue of their own contract considered necessary by the Owner for such purpose may be retained for the use of the Owner or, in case no money is due, their own surety may be held until such suits, actions, or claims for injuries or damages shall have been settled and suitable evidence to that effect furnished to the Owner, except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that he or she is adequately protected by public liability and property damage insurance.

**70-12 Third party beneficiary clause.** It is specifically agreed between the parties executing the contract that it is not intended by any of the provisions of any part of the contract to create for the public or any member thereof, a third-party beneficiary or to authorize anyone not a party to the contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of the contract.

**70-13 Opening sections of the work to traffic.** If it is necessary for the Contractor to complete portions of the contract work for the beneficial occupancy of the Owner prior to completion of the entire contract, such “phasing” of the work must be specified below and indicated on the approved Construction Safety and Phasing Plan (CSPP) and the project plans. When so specified, the Contractor shall complete such portions of the work on or before the date specified or as otherwise specified.

**Contractor to refer to and comply with the CSPP.**

Upon completion of any portion of work listed above, such portion shall be accepted by the Owner in accordance with Section 50, paragraph 50-14, *Partial Acceptance*.

No portion of the work may be opened by the Contractor until directed by the Owner in writing. Should it become necessary to open a portion of the work to traffic on a temporary or intermittent basis, such openings shall be made when, in the opinion of the RPR, such portion of the work is in an acceptable condition to support the intended traffic. Temporary or intermittent openings are considered to be inherent in the work and shall not constitute either acceptance of the portion of the work so opened or a waiver of any provision of the contract. Any damage to the portion of the work so opened that is not attributable to traffic which is permitted by the Owner shall be repaired by the Contractor at their expense.

The Contractor shall make their own estimate of the inherent difficulties involved in completing the work under the conditions herein described and shall not claim any added compensation by reason of delay or increased cost due to opening a portion of the contract work.

The Contractor must conform to safety standards contained AC 150/5370-2 and the approved CSPP.

Contractor shall refer to the plans, specifications, and the approved CSPP to identify barricade requirements, temporary and/or permanent markings, airfield lighting, guidance signs and other safety requirements prior to opening up sections of work to traffic.

**70-14 Contractor’s responsibility for work.** Until the RPR’s final written acceptance of the entire completed work, excepting only those portions of the work accepted in accordance with Section 50, paragraph 50-14, *Partial Acceptance*, the Contractor shall have the charge and care thereof and shall take every precaution against injury or damage to any part due to the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof except damage to the work due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God such as earthquake, tidal wave, tornado, hurricane or other cataclysmic phenomenon of nature, or acts of the public enemy or of government authorities.

If the work is suspended for any cause whatever, the Contractor shall be responsible for the work and shall take such precautions necessary to prevent damage to the work. The Contractor shall provide for normal drainage and shall erect necessary temporary structures, signs, or other facilities at their own expense. During such period of suspension of work, the Contractor shall properly and continuously maintain in an acceptable growing condition all living material in newly established planting, seeding, and sodding furnished under the contract, and shall take adequate precautions to protect new tree growth and other important vegetative growth against injury.

**70-15 Contractor’s responsibility for utility service and facilities of others.** As provided in paragraph 70-04, *Restoration of Surfaces Disturbed by Others*, the Contractor shall cooperate with the owner of any public or private utility service, FAA or NOAA, or a utility service of another government agency that may be authorized by the Owner to construct, reconstruct or maintain such utility services or facilities during the progress of the work. In addition, the Contractor shall control their operations to prevent the unscheduled interruption of such utility services and facilities.

To the extent that such public or private utility services, FAA, or NOAA facilities, or utility services of another governmental agency are known to exist within the limits of the contract work, the approximate locations have been indicated on the plans and/or in the contract documents.

### **Airport and FAA Utilities and Systems**

#### **Contact:**

#### **Airport Operations Manager**

**Ric Tokoph**

**Santa Maria Public Airport District**

**3217 Terminal Drive**

**Santa Maria, CA 93455**

**(805) 922-1726 Work**

It is understood and agreed that the Owner does not guarantee the accuracy or the completeness of the location information relating to existing utility services, facilities, or structures that may be shown on the plans or encountered in the work. Any inaccuracy or omission in such information shall not relieve the Contractor of the responsibility to protect such existing features from damage or unscheduled interruption of service.

It is further understood and agreed that the Contractor shall, upon execution of the contract, notify the Owners of all utility services or other facilities of their plan of operations. Such notification shall be in writing addressed to "The Person to Contact" as provided in this paragraph and paragraph 70-04, *Restoration of Surfaces Disturbed By Others*. A copy of each notification shall be given to the RPR.

In addition to the general written notification provided, it shall be the responsibility of the Contractor to keep such individual Owners advised of changes in their plan of operations that would affect such Owners.

Prior to beginning the work in the general vicinity of an existing utility service or facility, the Contractor shall again notify each such Owner of their plan of operation. If, in the Contractor's opinion, the Owner's assistance is needed to locate the utility service or facility or the presence of a representative of the Owner is desirable to observe the work, such advice should be included in the notification. Such notification shall be given by the most expeditious means to reach the utility owner's "Person to Contact" no later than two normal business days prior to the Contractor's commencement of operations in such general vicinity. The Contractor shall furnish a written summary of the notification to the RPR.

The Contractor's failure to give the two days' notice shall be cause for the Owner to suspend the Contractor's operations in the general vicinity of a utility service or facility.

Where the outside limits of an underground utility service have been located and staked on the ground, the Contractor shall be required to use hand excavation methods within 3 feet (1 m) of such outside limits at such points as may be required to ensure protection from damage due to the Contractor's operations.

Should the Contractor damage or interrupt the operation of a utility service or facility by accident or otherwise, the Contractor shall immediately notify the proper authority and the RPR and shall take all reasonable measures to prevent further damage or interruption of service. The Contractor, in such events, shall cooperate with the utility service or facility owner and the RPR continuously until such damage has been repaired and service restored to the satisfaction of the utility or facility owner.

The Contractor shall bear all costs of damage and restoration of service to any utility service or facility due to their operations whether due to negligence or accident. The Owner reserves the right to deduct such costs from any monies due or which may become due the Contractor, or their own surety.

**70-15.1 FAA facilities and cable runs.** The Contractor is hereby advised that the construction limits of the project include existing facilities and buried cable runs that are owned, operated and maintained by the FAA. The Contractor, during the execution of the project work, shall comply with the following:

a. The Contractor shall permit FAA maintenance personnel the right of access to the project work site for purposes of inspecting and maintaining all existing FAA owned facilities.

b. The Contractor shall provide notice to the FAA a minimum of seven (7) calendar days prior to commencement of construction activities in order to permit sufficient time to locate and mark existing buried cables and to schedule any required facility outages.

c. If execution of the project work requires a facility outage, the Contractor shall contact the FAA Point-of-Contact a minimum of 72 hours prior to the time of the required outage.

d. Any damage to FAA cables, access roads, or FAA facilities during construction caused by the Contractor's equipment or personnel whether by negligence or accident will require the Contractor to repair or replace the damaged cables, access road, or FAA facilities to FAA requirements. The Contractor shall not bear the cost to repair damage to underground facilities or utilities improperly located by the FAA.

e. If the project work requires the cutting or splicing of FAA owned cables, the FAA Point-of-Contact shall be contacted a minimum of 72 hours prior to the time the cable work commences. The FAA reserves the right to have a FAA representative on site to observe the splicing of the cables as a condition of acceptance. All cable splices are to be accomplished in accordance with FAA specifications and require approval by the FAA Point-of-Contact as a condition of acceptance by the Owner. The Contractor is hereby advised that FAA restricts the location of where splices may be installed. If a cable splice is required in a location that is not permitted by FAA, the Contractor shall furnish and install a sufficient length of new cable that eliminates the need for any splice.

**70-16 Furnishing rights-of-way.** The Owner will be responsible for furnishing all rights-of-way upon which the work is to be constructed in advance of the Contractor's operations.

**70-17 Personal liability of public officials.** In carrying out any of the contract provisions or in exercising any power or authority granted by this contract, there shall be no liability upon the Engineer, RPR, their authorized representatives, or any officials of the Owner either personally or as an official of the Owner. It is understood that in such matters they act solely as agents and representatives of the Owner.

**70-18 No waiver of legal rights.** Upon completion of the work, the Owner will expeditiously make final inspection and notify the Contractor of final acceptance. Such final acceptance, however, shall not preclude or stop the Owner from correcting any measurement, estimate, or certificate made before or after completion of the work, nor shall the Owner be precluded or stopped from recovering from the Contractor or their surety, or both, such overpayment as may be sustained, or by failure on the part of the Contractor to fulfill their obligations under the contract. A waiver on the part of the Owner of any breach of any part of the contract shall not be held to be a waiver of any other or subsequent breach.

The Contractor, without prejudice to the terms of the contract, shall be liable to the Owner for latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the Owner's rights under any warranty or guaranty.

**70-19 Environmental protection.** The Contractor shall comply with all federal, state, and local laws and regulations controlling pollution of the environment. The Contractor shall take necessary precautions to prevent pollution of streams, lakes, ponds, and reservoirs with fuels, oils, asphalts, chemicals, or other harmful materials and to prevent pollution of the atmosphere from particulate and gaseous matter.

**70-20 Archaeological and historical findings.** Unless otherwise specified in this subsection, the Contractor is advised that the site of the work is not within any property, district, or site, and does not



contain any building, structure, or object listed in the current National Register of Historic Places published by the United States Department of Interior.

Should the Contractor encounter, during their operations, any building, part of a building, structure, or object that is incongruous with its surroundings, the Contractor shall immediately cease operations in that location and notify the RPR. The RPR will immediately investigate the Contractor's finding and the Owner will direct the Contractor to either resume operations or to suspend operations as directed.

Should the Owner order suspension of the Contractor's operations in order to protect an archaeological or historical finding, or order the Contractor to perform extra work, such shall be covered by an appropriate contract change order or supplemental agreement as provided in Section 40, paragraph 40-04, *Extra Work*, and Section 90, paragraph 90-05, *Payment for Extra Work*. If appropriate, the contract change order or supplemental agreement shall include an extension of contract time in accordance with Section 80, paragraph 80-07, *Determination and Extension of Contract Time*.

**70-21 Insurance Requirements.** Refer to the Sample Contract, and/or Instructions to Bidders sections.

**END OF SECTION 70**

## Section 80 Execution and Progress

**80-01 Subletting of contract.** The Owner will not recognize any subcontractor on the work. The Contractor shall at all times when work is in progress be represented either in person, by a qualified superintendent, or by other designated, qualified representative who is duly authorized to receive and execute orders of the Resident Project Representative (RPR).

The Contractor shall perform, with his organization, an amount of work equal to at least **twenty five percent (25%) of the total contract cost.**

Should the Contractor elect to assign their contract, said assignment shall be concurred in by the surety, shall be presented for the consideration and approval of the Owner, and shall be consummated only on the written approval of the Owner.

**The Contractor shall provide copies of all subcontracts to the RPR 14 days prior to being utilized on the project. As a minimum, the information shall include the following:**

- Subcontractor's legal company name.
- Subcontractor's legal company address, including County name.
- Principal contact person's name, telephone and fax number.
- Complete narrative description, and dollar value of the work to be performed by the subcontractor.
- Copies of required insurance certificates in accordance with the specifications.
- Minority/ non-minority status.

**80-02 Notice to proceed (NTP).** The Owners notice to proceed will state the date on which contract time commences. The Contractor is expected to commence project operations within 10 days of the NTP date. The Contractor shall notify the RPR at least 24 hours in advance of the time contract operations begins. The Contractor shall not commence any actual operations prior to the date on which the notice to proceed is issued by the Owner.

**80-03 Execution and progress.** Unless otherwise specified, the Contractor shall submit their coordinated construction schedule showing all work activities for the RPR's review and acceptance at least 10 days prior to the start of work. The Contractor's progress schedule, once accepted by the RPR, will represent the Contractor's baseline plan to accomplish the project in accordance with the terms and conditions of the Contract. The RPR will compare actual Contractor progress against the baseline schedule to determine that status of the Contractor's performance. The Contractor shall provide sufficient materials, equipment, and labor to guarantee the completion of the project in accordance with the plans and specifications within the time set forth in the proposal.

If the Contractor falls significantly behind the submitted schedule, the Contractor shall, upon the RPR's request, submit a revised schedule for completion of the work within the contract time and modify their operations to provide such additional materials, equipment, and labor necessary to meet the revised schedule. Should the execution of the work be discontinued for any reason, the Contractor shall notify the RPR at least 48 hours in advance of resuming operations.

The Contractor shall not commence any actual construction prior to the date on which the NTP is issued by the Owner.

The project schedule shall be prepared as a network diagram in Critical Path Method (CPM). It shall include information on the sequence of work activities, milestone dates, and activity duration. The

schedule shall show all work items identified in the project proposal for each work area and shall include the project start date and end date.

The Contractor shall maintain the work schedule and provide an update and analysis of the progress schedule on a **weekly** basis, or as otherwise specified in the contract. Submission of the work schedule shall not relieve the Contractor of overall responsibility for scheduling, sequencing, and coordinating all work to comply with the requirements of the contract.

**80-04 Limitation of operations.** The Contractor shall control their operations and the operations of their subcontractors and all suppliers to provide for the free and unobstructed movement of aircraft in the air operations areas (AOA) of the airport.

When the work requires the Contractor to conduct their operations within an AOA of the airport, the work shall be coordinated with airport operations (through the RPR) at least 48 hours prior to commencement of such work. The Contractor shall not close an AOA until so authorized by the RPR and until the necessary temporary marking, signage and associated lighting is in place as provided in Section 70, paragraph 70-08, *Construction Safety and Phasing Plan (CSPP)*.

When the contract work requires the Contractor to work within an AOA of the airport on an intermittent basis (intermittent opening and closing of the AOA), the Contractor shall maintain constant communications as specified; immediately obey all instructions to vacate the AOA; and immediately obey all instructions to resume work in such AOA. Failure to maintain the specified communications or to obey instructions shall be cause for suspension of the Contractor's operations in the AOA until satisfactory conditions are provided. The areas of the AOA identified in the Construction Safety Phasing Plan (CSPP) and as listed below, cannot be closed to operating aircraft to permit the Contractor's operations on a continuous basis and will therefore be closed to aircraft operations intermittently as follows:

**Contractor shall refer to the phasing plans on the project drawings and the CSPP.**

The Contractor shall be required to conform to safety standards contained in AC 150/5370-2, Operational Safety on Airports During Construction and the approved CSPP.

**80-04.1 Operational safety on airport during construction.** All Contractors' operations shall be conducted in accordance with the approved project Construction Safety and Phasing Plan (CSPP) and the Safety Plan Compliance Document (SPCD) and the provisions set forth within the current version of AC 150/5370-2, Operational Safety on Airports During Construction. The CSPP included within the contract documents conveys minimum requirements for operational safety on the airport during construction activities. The Contractor shall prepare and submit a SPCD that details how it proposes to comply with the requirements presented within the CSPP.

The Contractor shall implement all necessary safety plan measures prior to commencement of any work activity. The Contractor shall conduct routine checks to assure compliance with the safety plan measures.

The Contractor is responsible to the Owner for the conduct of all subcontractors it employs on the project. The Contractor shall assure that all subcontractors are made aware of the requirements of the CSPP and SPCD and that they implement and maintain all necessary measures.

No deviation or modifications may be made to the approved CSPP and SPCD unless approved in writing by the Owner. The necessary coordination actions to review Contractor proposed modifications to an approved CSPP or approved SPCD can require a significant amount of time.

**80-05 Character of workers, methods, and equipment.** The Contractor shall, at all times, employ sufficient labor and equipment for prosecuting the work to full completion in the manner and time required by the contract, plans, and specifications.

All workers shall have sufficient skill and experience to perform properly the work assigned to them. Workers engaged in special work or skilled work shall have sufficient experience in such work and in the operation of the equipment required to perform the work satisfactorily.

Any person employed by the Contractor or by any subcontractor who violates any operational regulations or operational safety requirements and, in the opinion of the RPR, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the RPR, be removed immediately by the Contractor or subcontractor employing such person, and shall not be employed again in any portion of the work without approval of the RPR.

Should the Contractor fail to remove such person or persons, or fail to furnish suitable and sufficient personnel for the proper execution of the work, the RPR may suspend the work by written notice until compliance with such orders.

All equipment that is proposed to be used on the work shall be of sufficient size and in such mechanical condition as to meet requirements of the work and to produce a satisfactory quality of work. Equipment used on any portion of the work shall not cause injury to previously completed work, adjacent property, or existing airport facilities due to its use.

When the methods and equipment to be used by the Contractor in accomplishing the work are not prescribed in the contract, the Contractor is free to use any methods or equipment that will accomplish the work in conformity with the requirements of the contract, plans, and specifications.

When the contract specifies the use of certain methods and equipment, such methods and equipment shall be used unless otherwise authorized by the RPR. If the Contractor desires to use a method or type of equipment other than specified in the contract, the Contractor may request authority from the RPR to do so. The request shall be in writing and shall include a full description of the methods and equipment proposed and of the reasons for desiring to make the change. If approval is given, it will be on the condition that the Contractor will be fully responsible for producing work in conformity with contract requirements. If, after trial use of the substituted methods or equipment, the RPR determines that the work produced does not meet contract requirements, the Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining work with the specified methods and equipment. The Contractor shall remove any deficient work and replace it with work of specified quality, or take such other corrective action as the RPR may direct. No change will be made in basis of payment for the contract items involved nor in contract time as a result of authorizing a change in methods or equipment under this paragraph.

**80-06 Temporary suspension of the work.** The Owner shall have the authority to suspend the work wholly, or in part, for such period or periods the Owner may deem necessary, due to unsuitable weather, or other conditions considered unfavorable for the execution of the work, or for such time necessary due to the failure on the part of the Contractor to carry out orders given or perform any or all provisions of the contract.

In the event that the Contractor is ordered by the Owner, in writing, to suspend work for some unforeseen cause not otherwise provided for in the contract and over which the Contractor has no control, the Contractor may be reimbursed for actual money expended on the work during the period of shutdown. No allowance will be made for anticipated profits. The period of shutdown shall be computed from the effective date of the written order to suspend work to the effective date of the written order to resume the work. Claims for such compensation shall be filed with the RPR within the time period stated in the RPR's order to resume work. The Contractor shall submit with their own claim information substantiating the amount shown on the claim. The RPR will forward the Contractor's claim to the Owner for consideration in accordance with local laws or ordinances. No provision of this article shall be construed as entitling the Contractor to compensation for delays due to inclement weather or for any other delay provided for in the contract, plans, or specifications.

If it becomes necessary to suspend work for an indefinite period, the Contractor shall store all materials in such manner that they will not become an obstruction nor become damaged in any way. The Contractor shall take every precaution to prevent damage or deterioration of the work performed and provide for normal drainage of the work. The Contractor shall erect temporary structures where necessary to provide for traffic on, to, or from the airport.

**80-07 Determination and extension of contract time.** The number of calendar days or the number of working days shall be stated in the proposal and contract and shall be known as the Contract Time.

If the contract time requires extension for reasons beyond the Contractor's control, it shall be adjusted as follows:

**80-07.1 Contract time based on calendar days.** Contract Time based on calendar days shall consist of the number of calendar days stated in the contract counting from the effective date of the Notice to Proceed and including all Saturdays, Sundays, holidays, and non-work days. All calendar days elapsing between the effective dates of the Owner's orders to suspend and resume all work, due to causes not the fault of the Contractor, shall be excluded.

At the time of final payment, the contract time shall be increased in the same proportion as the cost of the actually completed quantities bears to the cost of the originally estimated quantities in the proposal. Such increase in the contract time shall not consider either cost of work or the extension of contract time that has been covered by a change order or supplemental agreement. Charges against the contract time will cease as of the date of final acceptance.

**80-08 Failure to complete on time.** For each calendar day or working day, as specified in the contract, that any work remains uncompleted after the contract time (including all extensions and adjustments as provided in paragraph 80-07, *Determination and Extension of Contract Time*) the sum specified in the contract and proposal as liquidated damages (LD) will be deducted from any money due or to become due the Contractor or their own surety. Such deducted sums shall not be deducted as a penalty but shall be considered as liquidation of a reasonable portion of damages including but not limited to additional engineering services that will be incurred by the Owner should the Contractor fail to complete the work in the time provided in their contract.

**Contractor shall refer to the CSPP for liquidated damages and penalties.**

**The maximum construction time allowed is:**

**45 calendar days**

Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the Owner of any of its rights under the contract.

**80-09 Default and termination of contract.** The Contractor shall be considered in default of their contract and such default will be considered as cause for the Owner to terminate the contract for any of the following reasons, if the Contractor:

- a. Fails to begin the work under the contract within the time specified in the Notice to Proceed, or
- b. Fails to perform the work or fails to provide sufficient workers, equipment and/or materials to assure completion of work in accordance with the terms of the contract, or
- c. Performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable, or
- d. Discontinues the execution of the work, or
- e. Fails to resume work which has been discontinued within a reasonable time after notice to do so, or

- f. Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or
- g. Allows any final judgment to stand against the Contractor unsatisfied for a period of 10 days, or
- h. Makes an assignment for the benefit of creditors, or
- i. For any other cause whatsoever, fails to carry on the work in an acceptable manner.

Should the Owner consider the Contractor in default of the contract for any reason above, the Owner shall immediately give written notice to the Contractor and the Contractor's surety as to the reasons for considering the Contractor in default and the Owner's intentions to terminate the contract.

If the Contractor or surety, within a period of 10 days after such notice, does not proceed in accordance therewith, then the Owner will, upon written notification from the RPR of the facts of such delay, neglect, or default and the Contractor's failure to comply with such notice, have full power and authority without violating the contract, to take the execution of the work out of the hands of the Contractor. The Owner may appropriate or use any or all materials and equipment that have been mobilized for use in the work and are acceptable and may enter into an agreement for the completion of said contract according to the terms and provisions thereof, or use such other methods as in the opinion of the RPR will be required for the completion of said contract in an acceptable manner.

All costs and charges incurred by the Owner, together with the cost of completing the work under contract, will be deducted from any monies due or which may become due the Contractor. If such expense exceeds the sum which would have been payable under the contract, then the Contractor and the surety shall be liable and shall pay to the Owner the amount of such excess.

**80-10 Termination for national emergencies.** The Owner shall terminate the contract or portion thereof by written notice when the Contractor is prevented from proceeding with the construction contract as a direct result of an Executive Order of the President with respect to the execution of war or in the interest of national defense. When the contract, or any portion thereof, is terminated before completion of all items of work in the contract, payment will be made for the actual number of units or items of work completed at the contract price or as mutually agreed for items of work partially completed or not started. No claims or loss of anticipated profits shall be considered. Reimbursement for organization of the work, and other overhead expenses, (when not otherwise included in the contract) and moving equipment and materials to and from the job will be considered, the intent being that an equitable settlement will be made with the Contractor.

Acceptable materials, obtained or ordered by the Contractor for the work and that are not incorporated in the work shall, at the option of the Contractor, be purchased from the Contractor at actual cost as shown by receipted bills and actual cost records at such points of delivery as may be designated by the RPR. Termination of the contract or a portion thereof shall neither relieve the Contractor of their responsibilities for the completed work nor shall it relieve their surety of its obligation for and concerning any just claim arising out of the work performed.

**80-11 Work area, storage area and sequence of operations.** The Contractor shall obtain approval from the RPR prior to beginning any work in all areas of the airport. No operating runway, taxiway, or air operations area (AOA) shall be crossed, entered, or obstructed while it is operational. The Contractor shall plan and coordinate work in accordance with the approved CSPP and SPCD.

**80-12 Suspension for Air-Attack Operations.** SMX is home to a United States Forest Service Air-Attack Facility (USFS – Air-Attack). This entity is called into wildland firefighting service based on regional and state wide conditions and fire emergencies, often with little advance notice. By far, the majority of these air attack operations, should they occur, take place during daylight hours. The Owner, in conjunction with and consultation with the RPR, may temporarily suspend construction activities in support of air attack operations. The decision to suspend will be based on airfield conditions and the ability for safe airport operations. Advance notice, when possible, will be provided. No additional or

stand-by compensation to the contractor, sub-contractors, or material suppliers, related to a temporary suspension of construction to facilitate air-attack operations will be provided.

**END OF SECTION 80**

## Section 90 Measurement and Payment

**90-01 Measurement of quantities.** All work completed under the contract will be measured by the RPR, or their authorized representatives, using United States Customary Units of Measurement.

The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice.

Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures (or leave-outs) having an area of 9 square feet (0.8 square meters) or less. Unless otherwise specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered in writing by the RPR.

Unless otherwise specified, all contract items which are measured by the linear foot such as electrical ducts, conduits, pipe culverts, underdrains, and similar items shall be measured parallel to the base or foundation upon which such items are placed.

The term “lump sum” when used as an item of payment will mean complete payment for the work described in the contract. When a complete structure or structural unit (in effect, “lump sum” work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.

When requested by the Contractor and approved by the RPR in writing, material specified to be measured by the cubic yard (cubic meter) may be weighed, and such weights will be converted to cubic yards (cubic meters) for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the RPR and shall be agreed to by the Contractor before such method of measurement of pay quantities is used.

### Measurement and Payment Terms

Term	Description
<b>Excavation and Embankment Volume</b>	In computing volumes of excavation, the average end area method will be used unless otherwise specified.
<b>Measurement and Proportion by Weight</b>	The term “ton” will mean the short ton consisting of 2,000 pounds (907 kg) avoirdupois. All materials that are measured or proportioned by weights shall be weighed on accurate, independently certified scales by competent, qualified personnel at locations designated by the RPR. If material is shipped by rail, the car weight may be accepted provided that only the actual weight of material is paid for. However, car weights will not be acceptable for material to be passed through mixing plants. Trucks used to haul material being paid for by weight shall be weighed empty daily at such times as the RPR directs, and each truck shall bear a plainly legible identification mark.
<b>Measurement by Volume</b>	Materials to be measured by volume in the hauling vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable for the materials hauled, provided that the body is of such shape that the actual contents may be readily and accurately determined. All vehicles shall be loaded to at least their water level



Term	Description
	capacity, and all loads shall be leveled when the vehicles arrive at the point of delivery.
<b>Asphalt Material</b>	Asphalt materials will be measured by the gallon (liter) or ton (kg). When measured by volume, such volumes will be measured at 60°F (16°C) or will be corrected to the volume at 60°F (16°C) using ASTM D1250 for asphalts. Net certified scale weights or weights based on certified volumes in the case of rail shipments will be used as a basis of measurement, subject to correction when asphalt material has been lost from the car or the distributor, wasted, or otherwise not incorporated in the work. When asphalt materials are shipped by truck or transport, net certified weights by volume, subject to correction for loss or foaming, will be used for computing quantities.
<b>Cement</b>	Cement will be measured by the ton (kg) or hundredweight (km).
<b>Structure</b>	Structures will be measured according to neat lines shown on the plans or as altered to fit field conditions.
<b>Timber</b>	Timber will be measured by the thousand feet board measure (MFBM) actually incorporated in the structure. Measurement will be based on nominal widths and thicknesses and the extreme length of each piece.
<b>Plates and Sheets</b>	The thickness of plates and galvanized sheet used in the manufacture of corrugated metal pipe, metal plate pipe culverts and arches, and metal cribbing will be specified and measured in decimal fraction of inch.
<b>Miscellaneous Items</b>	When standard manufactured items are specified such as fence, wire, plates, rolled shapes, pipe conduit, etc., and these items are identified by gauge, unit weight, section dimensions, etc., such identification will be considered to be nominal weights or dimensions. Unless more stringently controlled by tolerances in cited specifications, manufacturing tolerances established by the industries involved will be accepted.
<b>Scales</b>	<p>Scales must be tested for accuracy and serviced before use. Scales for weighing materials which are required to be proportioned or measured and paid for by weight shall be furnished, erected, and maintained by the Contractor, or be certified permanently installed commercial scales. Platform scales shall be installed and maintained with the platform level and rigid bulkheads at each end.</p> <p>Scales shall be accurate within 0.5% of the correct weight throughout the range of use. The Contractor shall have the scales checked under the observation of the RPR before beginning work and at such other times as requested. The intervals shall be uniform in spacing throughout the graduated or marked length of the beam or dial and shall not exceed 0.1% of the nominal rated capacity of the scale, but not less than one pound (454 grams). The use of spring balances will not be permitted.</p> <p>In the event inspection reveals the scales have been “overweighing” (indicating more than correct weight) they will be immediately adjusted. All materials</p>

Term	Description
	<p>received subsequent to the last previous correct weighting-accuracy test will be reduced by the percentage of error in excess of 0.5%.</p> <p>In the event inspection reveals the scales have been under-weighting (indicating less than correct weight), they shall be immediately adjusted. No additional payment to the Contractor will be allowed for materials previously weighed and recorded.</p> <p>Beams, dials, platforms, and other scale equipment shall be so arranged that the operator and the RPR can safely and conveniently view them.</p> <p>Scale installations shall have available ten standard 50-pound (2.3 km) weights for testing the weighing equipment or suitable weights and devices for other approved equipment.</p> <p>All costs in connection with furnishing, installing, certifying, testing, and maintaining scales; for furnishing check weights and scale house; and for all other items specified in this subsection, for the weighing of materials for proportioning or payment, shall be included in the unit contract prices for the various items of the project.</p>
<b>Rental Equipment</b>	<p>Rental of equipment will be measured by time in hours of actual working time and necessary traveling time of the equipment within the limits of the work. Special equipment ordered in connection with extra work will be measured as agreed in the change order or supplemental agreement authorizing such work as provided in paragraph 90-05 <i>Payment for Extra Work</i>.</p>
<b>Pay Quantities</b>	<p>When the estimated quantities for a specific portion of the work are designated as the pay quantities in the contract, they shall be the final quantities for which payment for such specific portion of the work will be made, unless the dimensions of said portions of the work shown on the plans are revised by the RPR. If revised dimensions result in an increase or decrease in the quantities of such work, the final quantities for payment will be revised in the amount represented by the authorized changes in the dimensions.</p>

**90-02 Scope of payment.** The Contractor shall receive and accept compensation provided for in the contract as full payment for furnishing all materials, for performing all work under the contract in a complete and acceptable manner, and for all risk, loss, damage, or expense of whatever character arising out of the nature of the work or the execution thereof, subject to the provisions of Section 70, paragraph 70-18, *No Waiver of Legal Rights*.

When the “basis of payment” subsection of a technical specification requires that the contract price (price bid) include compensation for certain work or material essential to the item, this same work or material will not also be measured for payment under any other contract item which may appear elsewhere in the contract, plans, or specifications.

**90-03 Compensation for altered quantities.** When the accepted quantities of work vary from the quantities in the proposal, the Contractor shall accept as payment in full, so far as contract items are concerned, payment at the original contract price for the accepted quantities of work actually completed and accepted. No allowance, except as provided for in Section 40, paragraph 40-02, *Alteration of Work and Quantities*, will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor which results directly from such alterations or

indirectly from their own unbalanced allocation of overhead and profit among the contract items, or from any other cause.

**90-04 Payment for omitted items.** As specified in Section 40, paragraph 40-03, *Omitted Items*, the RPR shall have the right to omit from the work (order nonperformance) any contract item, except major contract items, in the best interest of the Owner.

Should the RPR omit or order nonperformance of a contract item or portion of such item from the work, the Contractor shall accept payment in full at the contract prices for any work actually completed and acceptable prior to the RPR's order to omit or non-perform such contract item.

Acceptable materials ordered by the Contractor or delivered on the work prior to the date of the RPR's order will be paid for at the actual cost to the Contractor and shall thereupon become the property of the Owner.

In addition to the reimbursement hereinbefore provided, the Contractor shall be reimbursed for all actual costs incurred for the purpose of performing the omitted contract item prior to the date of the RPR's order. Such additional costs incurred by the Contractor must be directly related to the deleted contract item and shall be supported by certified statements by the Contractor as to the nature the amount of such costs.

**90-05 Payment for extra work.** Extra work, performed in accordance with Section 40, paragraph 40-04, *Extra Work*, will be paid for at the contract prices or agreed prices specified in the change order or supplemental agreement authorizing the extra work.

**90-06 Partial payments.** Partial payments will be made to the Contractor at least once each month as the work progresses. Said payments will be based upon estimates, prepared by the RPR, of the value of the work performed and materials complete and in place, in accordance with the contract, plans, and specifications. Such partial payments may also include the delivered actual cost of those materials stockpiled and stored in accordance with paragraph 90-07, *Payment for Materials on Hand*. No partial payment will be made when the amount due to the Contractor since the last estimate amounts to less than five hundred dollars.

The Contractor is required to pay all subcontractors for satisfactory performance of their contracts no later than 30 days after the Contractor has received a partial payment. The Owner must ensure prompt and full payment of retainage from the prime Contractor to the subcontractor within 30 days after the subcontractor's work is satisfactorily completed. A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented as required by the Owner. When the Owner has made an incremental acceptance of a portion of a prime contract, the work of a subcontractor covered by that acceptance is deemed to be satisfactorily completed.

From the total of the amount determined to be payable on a partial payment, five (5) percent of such total amount will be deducted and retained by the Owner until the final payment is made, except as may be provided (at the Contractor's option) in the subsection 90-08 titled PAYMENT OF WITHHELD FUNDS of this section. The balance of the amount payable, less all previous payments, shall be certified for payment. Should the Contractor exercise his or her option, as provided in the subsection 90-08 titled PAYMENT OF WITHHELD FUNDS of this section, no such percent retainage shall be deducted.

When at least 95% of the work has been completed, the Engineer shall, at the Owner's discretion and with the consent of the surety, prepare estimates of both the contract value and the cost of the remaining work to be done.

The Owner may retain an amount not less than twice the contract value or estimated cost, whichever is greater, of the work remaining to be done. The remainder, less all previous payments and deductions, will then be certified for payment to the Contractor.

It is understood and agreed that the Contractor shall not be entitled to demand or receive partial payment based on quantities of work in excess of those provided in the proposal or covered by approved change orders or supplemental agreements, except when such excess quantities have been determined by the RPR to be a part of the final quantity for the item of work in question.

No partial payment shall bind the Owner to the acceptance of any materials or work in place as to quality or quantity. All partial payments are subject to correction at the time of final payment as provided in paragraph 90-09, *Acceptance and Final Payment*.

The Contractor shall deliver to the Owner a complete release of all claims for labor and material arising out of this contract before the final payment is made. If any subcontractor or supplier fails to furnish such a release in full, the Contractor may furnish a bond or other collateral satisfactory to the Owner to indemnify the Owner against any potential lien or other such claim. The bond or collateral shall include all costs, expenses, and attorney fees the Owner may be compelled to pay in discharging any such lien or claim.

**90-07 Payment for materials on hand.** Partial payments may be made to the extent of the delivered cost of materials to be incorporated in the work, provided that such materials meet the requirements of the contract, plans, and specifications and are delivered to acceptable sites on the airport property or at other sites in the vicinity that are acceptable to the Owner. Such delivered costs of stored or stockpiled materials may be included in the next partial payment after the following conditions are met:

- a. The material has been stored or stockpiled in a manner acceptable to the RPR at or on an approved site.
- b. The Contractor has furnished the RPR with acceptable evidence of the quantity and quality of such stored or stockpiled materials.
- c. The Contractor has furnished the RPR with satisfactory evidence that the material and transportation costs have been paid.
- d. The Contractor has furnished the Owner legal title (free of liens or encumbrances of any kind) to the material stored or stockpiled.
- e. The Contractor has furnished the Owner evidence that the material stored or stockpiled is insured against loss by damage to or disappearance of such materials at any time prior to use in the work.

It is understood and agreed that the transfer of title and the Owner's payment for such stored or stockpiled materials shall in no way relieve the Contractor of their responsibility for furnishing and placing such materials in accordance with the requirements of the contract, plans, and specifications.

In no case will the amount of partial payments for materials on hand exceed the contract price for such materials or the contract price for the contract item in which the material is intended to be used.

No partial payment will be made for stored or stockpiled living or perishable plant materials.

The Contractor shall bear all costs associated with the partial payment of stored or stockpiled materials in accordance with the provisions of this paragraph.

**90-08 Payment of withheld funds.** At the Contractor's option, if an Owner withholds retainage in accordance with the methods described in paragraph 90-06 *Partial Payments*, the Contractor may request that the Owner deposit the retainage into an escrow account. The Owner's deposit of retainage into an escrow account is subject to the following conditions:

a. The Contractor shall bear all expenses of establishing and maintaining an escrow account and escrow agreement acceptable to the Owner.

b. The Contractor shall deposit to and maintain in such escrow only those securities or bank certificates of deposit as are acceptable to the Owner and having a value not less than the retainage that would otherwise be withheld from partial payment.

c. The Contractor shall enter into an escrow agreement satisfactory to the Owner.

d. The Contractor shall obtain the written consent of the surety to such agreement.

**90-09 Acceptance and final payment.** When the contract work has been accepted in accordance with the requirements of Section 50, paragraph 50-15, *Final Acceptance*, the RPR will prepare the final estimate of the items of work actually performed. The Contractor shall approve the RPR's final estimate or advise the RPR of the Contractor's objections to the final estimate which are based on disputes in measurements or computations of the final quantities to be paid under the contract as amended by change order or supplemental agreement. The Contractor and the RPR shall resolve all disputes (if any) in the measurement and computation of final quantities to be paid within 30 calendar days of the Contractor's receipt of the RPR's final estimate. If, after such 30-day period, a dispute still exists, the Contractor may approve the RPR's estimate under protest of the quantities in dispute, and such disputed quantities shall be considered by the Owner as a claim in accordance with Section 50, paragraph 50-16, *Claims for Adjustment and Disputes*.

After the Contractor has approved, or approved under protest, the RPR's final estimate, and after the RPR's receipt of the project closeout documentation required in paragraph 90-11, *Contractor Final Project Documentation*, final payment will be processed based on the entire sum, or the undisputed sum in case of approval under protest, determined to be due the Contractor less all previous payments and all amounts to be deducted under the provisions of the contract. All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

If the Contractor has filed a claim for additional compensation under the provisions of Section 50, paragraph 50-16, *Claims for Adjustments and Disputes*, or under the provisions of this paragraph, such claims will be considered by the Owner in accordance with local laws or ordinances. Upon final adjudication of such claims, any additional payment determined to be due the Contractor will be paid pursuant to a supplemental final estimate.

**90-10 Construction warranty.**

a. In addition to any other warranties in this contract, the Contractor warrants that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, workmanship, or design furnished, or performed by the Contractor or any subcontractor or supplier at any tier.

b. This warranty shall continue for a period of one year from the date of final acceptance of the work, except as noted. If the Owner takes possession of any part of the work before final acceptance, this warranty shall continue for a period of one year from the date the Owner takes possession. However, this will not relieve the Contractor from corrective items required by the final acceptance of the project work. Light Emitting Diode emitting diode (LED) light fixtures with the exception of obstruction lighting, must be warranted by the manufacturer for a minimum of four (4) years after date of installation inclusive of all electronics.

c. The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Owner real or personal property, when that damage is the result of the Contractor's failure to conform to contract requirements; or any defect of equipment, material, workmanship, or design furnished by the Contractor.

**d.** The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for one year from the date of repair or replacement.

**e.** The Owner will notify the Contractor, in writing, within seven (7) days after the discovery of any failure, defect, or damage.

**f.** If the Contractor fails to remedy any failure, defect, or damage within 14 days after receipt of notice, the Owner shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

**g.** With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall: (1) Obtain all warranties that would be given in normal commercial practice; (2) Require all warranties to be executed, in writing, for the benefit of the Owner, as directed by the Owner, and (3) Enforce all warranties for the benefit of the Owner.

**h.** This warranty shall not limit the Owner's rights with respect to latent defects, gross mistakes, or fraud.

**90-11 Contractor Final Project Documentation.** Approval of final payment to the Contractor is contingent upon completion and submittal of the items listed below. The final payment will not be approved until the RPR approves the Contractor's final submittal. The Contractor shall:

**a.** Provide two (2) copies of all manufacturers warranties specified for materials, equipment, and installations.

**b.** Provide weekly payroll records (not previously received) from the general Contractor and all subcontractors.

**c.** Complete final cleanup in accordance with Section 40, paragraph 40-08, *Final Cleanup*.

**d.** Complete all punch list items identified during the Final Inspection.

**e.** Provide complete release of all claims for labor and material arising out of the Contract.

**f.** Provide a certified statement signed by the subcontractors, indicating actual amounts paid to the Disadvantaged Business Enterprise (DBE) subcontractors and/or suppliers associated with the project.

**g.** When applicable per state requirements, return copies of sales tax completion forms.

**h.** Manufacturer's certifications for all items incorporated in the work.

**i.** All required record drawings, as-built drawings or as-constructed drawings.

**j.** Project Operation and Maintenance (O&M) Manual(s).

**k.** Security for Construction Warranty.

**l.** Equipment commissioning documentation submitted, if required.

**END OF SECTION 90**

**Part 2 – General, Mobilization, Safety and Security**  
**Section 10 – General Requirements**

10-1. NOTIFICATION

The Santa Maria Public Airport District (SMPAD) shall be supplied at all times with the names and telephone numbers of at least two (2) persons in charge of, or responsible for, the work, who can be reached for emergency work twenty-four (24) hours a day, seven (7) days a week. The Contractor shall notify the District and the Engineer at least forty-eight (48) hours prior to the commencement of any phase of the work on the project. The Contractor shall notify SMPAD and the Engineer at least thirty (30) days prior to the commencement of any runway closure periods.

10-2. PROJECT SCHEDULE, WORK SCHEDULE AND TIME LIMITATIONS

It is understood that time is of the essence in starting and completing construction. Therefore, the District intends to award the construction contract in a timely manner and the Contractor shall be prepared to meet the following project schedule:

<u>Event</u>	<u>Date</u>
Bid Opening:	In accordance with the Notice to Bidders
Board Contract Award:	Within 30 days of bid opening
Notice to Proceed:	Within 10 days of acceptance of contract documents including bonds and insurance
First Day of Construction:	Within 10 days of the Notice to Proceed

The Contractor shall submit to the Engineer at the preconstruction meeting (or sooner if possible) a work plan and schedule for accomplishment of all work called for by the contract. The Contractor's schedule shall conform with the above schedule.

10-3. TIME OF COMPLETION AND LIQUIDATED DAMAGES

A. Overall Contract Time:

An Administrative Notice to Proceed will be issued upon receipt and acceptance of Contractor-provided bonds and insurance documentation. This provides authority to the Contractor to proceed with material submittals and for ordering and receiving material. Contract time will not start during this period. This period shall not exceed 30 calendar days.

A Notice to Proceed will be issued at an agreed upon time, not to exceed 30 calendar days from District acceptance of bonds and insurance. The work on the project shall begin in accordance with the project schedule in Section 10-2 after receipt of the "Notice to Proceed" from SMPAD and all work shall be completed within **45 calendar days** after the starting date set forth therein.

Should the above time schedule not be met, it is agreed that the Contractor shall be liable for and shall pay to SMPAD, as fixed, agreed, and liquidated damages and not as a penalty, the sum of **Five Hundred Dollars (\$500.00) per day for each and every calendar day** of delay in completion of the work from the date of completion as specified herein or in any written extension of time granted by SMPAD, up to and including thirty (30) calendar days past the date established for completion. Contractor shall pay to District the sum of \$1,000.00 per calendar day as liquidated damages for each calendar day that Project shall remain incomplete past thirty (30) days after the date established for completion. Times of completion as specified will be enforced. Liquidated damages will be deducted from final payments and do not include overtime inspection charges.

B. Coordination with Other Contractors:

The access control contractor shall coordinate and schedule his work in-line with the work of other contractors on the project, prepared to modify your schedule to conform with others. Project time could be extended to accommodate your efforts to conform with the schedules of others.

10-4. RUNWAY CLOSURE - WORK WITHIN THE ROFA

Not a part of this project.

10-5. TAXIWAY AND TAXILANE CLOSURE

Not a part of this project.

10-6. APRON CLOSURE

No apron closures, this project.

10-7. DUST CONTROL

The Contractor's attention is directed to Section 10 of the State Specifications. Full compensation for dust control shall be included in other items of work. If necessary, the Engineer will instruct the Contractor to clean pavements in proximity that are presenting accumulated dust. Said cleaning operation could include mechanical sweeping, vacuum effort and/or adequate blowers, as necessary.

The Contractor's responsibility for Dust Control extends over evenings, weekends, holidays, and any extended non-work periods.

10-8. WATERING

Contractor to secure his own source of construction water, including securing all authority for water and paying fees and for the actual water. Hydrants at the airport are served by the City of Santa Maria.

10-9. PRECEDENCE OF CONTRACT DOCUMENTS

The order of precedence of documents shall be: (1) Rules & Regulations of Federal/State Agencies relating to the source of funds for this project, (2) Permits from other agencies as may be required by law, (3) Special Provisions, (4) FAA Technical Specifications, (5) Technical Specifications including Appendices, (6) Plans, and (7) General Conditions. Change orders, addendums, supplemental agreements, and approved revisions to plans and specifications will take precedence over documents listed above. Detailed plans shall have precedence over general plans.

**Whenever any conflict appears in any portion of the contract, it shall be resolved by application of the order of precedence, unless determined otherwise by the Engineer. Additionally, with any conflict or inconsistency with contract document, unless instructed otherwise by the Engineer, the Contractor shall assume that the option or alternative that is more expensive, more labor intensive, and/or takes more time to complete, is the option or alternative required. Work required of the plans, either expressed or implied through the understanding of general, industry-standard construction practice, shall be considered as included in this contract.**

10-10. PRECONSTRUCTION MEETING

Prior to the start of construction, the Engineer will schedule a meeting with Airport representatives and tenants and representatives of the several businesses in proximity to the work. The Contractor will be called upon to indicate, at this meeting, the proposed operations to accomplish the work. Prior to, or at the preconstruction meeting, the Contractor shall submit a written schedule of work to the Engineer for



approval. A "Notice to Proceed" will not be issued until the written schedule has been reviewed and approved by the Engineer.

#### 10-11. SUBMITTALS

Submittals are required for all material intended for use on this project. Submittals are to be delivered electronically, in individual files in .pdf format, as e-mail attachments. One file per submittal, including transmittal, cover sheet, and submittal material. Contractor shall establish a numbering and naming scheme that assures clear and uniform organization, nomenclature, and electronic file organization, extending across all subcontractor-provided submittals as well. The naming scheme shall not restrict multiple revisions to submittals should that be necessary. Re-submittal file shall be a logical progression of the previous, for example: Resubmittal for Submittal 4 could be "Submittal 4.1" or "Submittal 4, rev 1".

Each submittal shall be clearly marked indicating all parameters that identify quality, integrity and capability, including but not limited to size, style, class, color, rating, conforming standard, etc. Manufactures cut sheets must be clearly marked. Material mix designs must specifically reference this project and shall not be more than 6-months old from the date of the start of work on this project. Review of the submittals will be a multi-step process:

1. Review and acceptance by the project design team.
2. Review and acceptance by United States Customs and Border Protection.

No materials shall be ordered unless and until submittals for said material have been reviewed and accepted by both entities.

#### 10-12. PROJECT SUPERINTENDENCE

A representative of the general contractor shall be on the project site at all times work is being performed by any contractor and /or subcontractor force. The general contractor representative shall be of a status and position to direct and control the subcontractor, and to take input and direction from the inspector and forward to the subcontractor. (Not required).

#### 10-13. POSTINGS

Not required of this contract.

#### 10-14. PORTABLE RESTROOM FACILITIES

On-site restroom facilities are not available for use by Contractor forces. The Contractor shall provide restroom facilities at quantities and at locations throughout the project as necessary to adequately serve all general contractor and subcontractor forces working on this project. Portable restroom facilities shall be serviced regularly throughout the duration of the project.

#### 10-15. PROJECT OFFICE

A project field office is not required of this project.

#### 10-16. PROJECT PLANS

Project plans are included in Appendix C.

#### 10-17. AS-BUILT PLANS

At the start of the project, the Contractor will receive a single, full-size set of project plans, marked "As-Built" The plans are to remain on-site at all times, available for review by the inspector. The Contractor mark up or modify these plans, identifying any changes to the work from what is shown, and identifying any elements or features that were not shown or not properly shown.

#### 10-18. PROGRESS PAYMENTS

A schedule for progress payments will be established at the Pre-Construction Conference. It is typical to receive a progress payment every 30 days. On occasion, small projects may have just one progress payment. In advance of any progress payment, the following will be reviewed:

- A. Submittal status.
- B. Access control badging (if applicable).
- C. As-Built Plans. Contractor is to keep these current.
- D. Certified Payroll statements, including benefit statements for general and all sub-contractors.
- E. Dust control and storm water pollution prevention compliance.
- F. Documentation for off-site disposal of materials including material that has been delivered to recycling facilities.

The status of these items may impact the progress for periodic progress payments to the Contractor.

#### 10-19 FACILITIES DURATION

In the event the contract requires contractor-provided facilities to support the field operation, the Contractor shall assume the duration of need for said facilities shall be the contract time period plus 50%. This could apply to the following, at a minimum, if required of this contract:

- A. Portable restroom
- B. Delineation
- C. Traffic control
- D. Access control / perimeter security
- E. Area lighting
- F. Project sign board
- G. Project field office
- H. Temporary fencing
- I. Solid waste collection facilities
- J. Water meter / construction water supply
- K. Attending / providing representation at periodic progress meetings

#### 10-20 CONSTRUCTION SURVEY

Not required of this project.

#### 10-21 CERTIFIED PAYROLL

The general contractor and all subcontractors are obligated to prepare and provide certified payroll statements and benefit statements at intervals in-line with contractor pay periods, not to exceed 30 days. Benefit statements shall be updated as employee benefits change. Statements shall be uploaded to the California Department of Industrial Relations (DIR) site intended to receive and log such information. Once the work begins, statements shall be prepared for each established period, including non-work periods, until such times as the work is deemed complete by the Owner. In addition, an electronic file copy of each prepared statement shall be e-mailed to the Owner.

#### 10-22 NON-DISCLOSURE AGREEMENT: Technical Specifications and Plans

Contractors interested in bidding this work must sign and deliver a Non-Disclosure Agreement (NDA) from the U.S. Department of Homeland Security, included in Appendix B of this specification booklet. This Agreement is between you and the Federal Government. Once received by the Engineer, the contents of Appendix C will be forwarded to you. The contractor is responsible for honoring the NDA, including seeking signature approval from sub-contractors should there be a need to forward on to others the contents of Appendix C.

## 10-23 MEASUREMENT AND PAYMENT

The work of Section 10 (General Requirements), Section 11 (Safety and Security), and Section 12 (Mobilization) are all to be performed in unison, together. Measurement for the work of these items shall be in straight line proportion, from zero to 100%, relative contract time, over the course of the construction contract, including any extensions should they be granted.

Payment for the work of these items shall be made at the contract lump-sum amount / price for Bid Item 1: Mobilization, Airfield Safety & Security, in straight line proportional amounts from zero to 100% relative to contract time, over the course of the construction contract, including any extension should they be granted. Payments as described shall be considered full and complete compensation for the furnishing of all materials and for all labor, equipment, tools, and incidentals necessary to complete these items of work.

The Contractor's bid price for Bid item 1: Mobilization, Airfield Safety & Security, **shall not exceed twelve percent (12%)** of the total amount of the bid. In the event the project includes multiple bid schedules with multiple Mobilization, Airfield Safety & Security bid items, the maximum amount of each Mobilization, Airfield Safety & Security bid item shall not exceed twelve percent (12%) of the bid schedule total.

Payments made for Mobilization, Airfield Safety & Security will be excluded from consideration in determining compensation under changed conditions.

END OF SECTION

## Section 11 – Safety and Security

### 11-1. GENERAL

The purpose of this section is to bring to the attention of the Contractor special safety regulations which are required when work is being performed adjacent to buildings, parking lots, and public rights-of-way, or within the Airport Operations Area (AOA).

### 11-2. STORAGE OF EQUIPMENT AND MATERIALS

- A. Equipment temporarily stored at the project shall be stored at the designated contractor yard, inside or outside the airport perimeter security fence.
- B. All materials delivered to the project shall be stored at the designated contractor yard or within the work site itself.
- C. Material and equipment shall be positioned / parked / stored such-as to avoid being an attractive nuisance. Particular attention shall be given to this requirement over weekends, holidays, and non-work periods.

### 11-3. OPERATION OF EQUIPMENT

Each piece of self-powered equipment and vehicles operated within or inside the Airport Operations Area (AOA) shall carry, displayed in full view above the vehicle or piece of equipment, a flashing amber dome-type light (daylight or darkness) or FAA-standard orange and white checkered flag (daytime only).

### 11-4. VEHICLE OPERATIONS AND ACCESS

- A. Refer to the project layout plan for the contractor point of access to the airport.
- B. All vehicles must use haul routes designed by the airport to gain access to the various locations of work. Any deviation from designated haul routes must be approved, in advance, by the airport.
- C. Aircraft taxiing, taking off or landing, emergency vehicles, or airport vehicles shall have right-of-way over all construction vehicles.
- D. The speed limit of 15 mph, maximum, shall be observed by all construction vehicles on the taxiways or runway.
- E. Active aircraft maneuvering areas shall be kept clean of dirt, sand, oil, and other foreign material and debris at all times.

### 11-5. LIMITATIONS ON CONSTRUCTION

- A. Any open flame, welding, or torch-cutting operations are prohibited unless adequate fire and safety precautions are approved by the Engineer prior to commencement of said operations.
- B. Any open trenches, excavations, earth voids created by felled trees, and stockpiled material at the construction site should be prominently marked with red flags and/or cones and lighted by light units acceptable to the Engineer during hours of restricted visibility and/or darkness.
- C. No debris, grindings, chips, mulch, timber, or waste material generated from this project shall be deposited on airport property at all, either inside or outside the fence.

#### 11-6. DELINEATION OF WORK AREAS

The Contractor shall be responsible for clearly delineating the limits, or phases, of his operation. Delineation shall be installed in accordance with the industry standard delineation practices and details included on the plans. Delineation left overnight shall be clearly and adequately lighted. Batteries shall be replaced monthly.

For building improvement projects including roof repair and replacement projects, the Contractor shall install and maintain delineation around the structure a distance out from the exterior wall of the structure equal to half the wall height, at a minimum.

#### 11-7. PUBLIC RIGHT OF WAY

No interaction with the public right-of-way during the completion of the work of this contract.

#### 11-8. AIR-BAND RADIO

Not required of this project.

#### 11-9. SECURITY

Throughout the duration of the project, the security of the airport provided by the perimeter fence and access gates shall remain equal to the pre-project condition. The access control contractor shall consider this building as being within the secured AOA, with the door to the parking lot serving as the secured perimeter.

Manual access gates and doors normally closed will remain closed. After entering or exiting the airport through an automatic gate, the Contractor shall remain in close proximity to the gate until the gate is fully closed, prohibiting airport access to any other individual.

After entering the airport through a manual gate or door, the Contractor must lock himself in. All manual gates and doors shall be locked after leaving the airport as well. During material import or export operations, the Contractor shall maintain a sentry at the access gate. The sentry shall be prepared to deny access to any unauthorized individuals. The gate shall be locked during all sentry breaks or lunch.

All employees working inside the fence at Santa Maria Airport shall successfully proceed through a background security check and security training program, and then receive a photo identification (badge) that shall be carried with the worker at all times while inside the fence. Upon receipt of a badge, the employee is considered safe and suitable for work within the secured area. He is responsible for himself. In addition, the employee can be considered an escort, tasked to accompany those whom do not acquire a badge. As an escort, he is responsible for himself and those in his charge.

- A. Non-badged workers shall work under the direct control of an escort. This means close enough to hear and respond to verbal commands, and no further than 50 feet separation.
- B. The escort responsibility is full time, from the moment the non-badged employee enters the secured area until the moment he leaves. If the escort goes to lunch, all non-badged employees in his charge go to lunch. If a non-badged employee goes to the bathroom, the escort and all other non-badged employees under the charge of the escort go to the bathroom.
- C. Due to the critical communication link responsibilities of escorts, they must remain away from operating equipment an adequate distance to hear and be heard.
- D. Truck drivers including material delivery drivers shall be badged or shall motor in and out of the airport under direct control of an escort.

- E. A violation of the security badging program including escort responsibility (worker, employee, material delivery driver) will result in TSA review and possible financial and work capability sanctions. It is possible that fines could exceed \$10,000 for each violation. In addition, it is possible that an employee or truck driver may be escorted off the airport, with future access denied.
- F. Fines levied against the Airport District by any state or federal agency for safety and security violations attributed to contractor operations, will be passed directly, dollar for dollar, on to the general contractor, being deducted from final payments.

#### 11-10. OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION

Contractor shall comply with the FAA's Advisory Circular "Operational Safety on Airports During Construction", included in its entirety as an appendix to this contract book.

#### 11-11. MEASUREMENT AND PAYMENT

The work of Section 10 (General Requirements), Section 11 (Safety and Security), and Section 12 (Mobilization) are all to be performed in unison, together. Measurement for the work of these items shall be in straight line proportion, from zero to 100%, relative contract time, over the course of the construction contract, including any extensions should they be granted.

Payment for the work of these items shall be made at the contract lump-sum amount / price for Bid Item 1: Mobilization, Airfield Safety & Security, in straight line proportional amounts from zero to 100% relative to contract time, over the course of the construction contract, including any extension should they be granted. Payments as described shall be considered full and complete compensation for the furnishing of all materials and for all labor, equipment, tools, and incidentals necessary to complete these items of work.

The Contractor's bid price for Bid item 1: Mobilization, Airfield Safety & Security, **shall not exceed twelve percent (12%)** of the total amount of the bid. In the event the project includes multiple bid schedules with multiple Mobilization, Airfield Safety & Security bid items, the maximum amount of each Mobilization, Airfield Safety & Security bid item shall not exceed twelve percent (12%) of the bid schedule total.

Payments made for Mobilization, Airfield Safety & Security will be excluded from consideration in determining compensation under changed conditions.

END OF SECTION

## Section 12 - Mobilization

### 12-1. MOBILIZATION

Mobilization shall consist of preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies, submittals, schedule preparation, and incidentals to the project site; for the establishment of all material storage yards, portable restroom facilities, sanitary facilities, and other facilities as required for work on the project; for the procurement of construction water; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site.

### 12-2. HONOR / ENFORCE THE NON-DISCLOSURE

The selected contractor, in order to submit a bid for this work, would have signed and submitted a Non-Disclosure Agreement (NDA) provided by the US Department of Homeland Security To receive Appendix C, the Technical Specifications. The Agreement is included in the appendix section of this contract book. The NDA is between the Contractor and the Federal Government, not the Airport District or the Project Engineer. The contractor is responsible for honoring the NDA, including seeking signature approval from sub-contractors should there be a need to forward on to others the contents of Appendix C.

The obligations of this NDA extend beyond the life of the project, for the time duration identified in the Agreement.

### 12-3. COORDINATION OF WORK WITH OTHER CONTRACTORS

The Contractor is advised the work of this contract must be coordinated with the work of other contractors on the site. Other contractors will be on-site, within and around the building, constructing and installing building upgrades. To facilitate this coordination, the security contractor will prepare and submit a construction sequencing schedule, with four main parts:

- Part 1 – Infrastructure:  
Installation of what could be considered as “infrastructure” or “rough-in” facilities, including but not limited to conduits, fittings, boxes, panels, junctions, mounting brackets, anchoring devices, etc. All elements and components that must be constructed and installed in advance of other contractors finishing or closing-up all walls, ceiling components, trim, building envelop, etc.
- Part 2 – Security Components:  
Installation of all sensors, controllers, detectors, data collection devices including surveillance cameras, cabling and wiring, breakers and blocks, being those parts and pieces to be installed on or within the “infrastructure”.
- Part 3 – Testing, Start-Up, Acceptance:  
Power up and work through testing and trouble-shooting of all systems and components to establish, verify, confirm, and present proper, complete, appropriate, and acceptable operation of all elements of access control, intrusion detection, and surveillance.
- Part 4 – Training:  
Schedule, coordinate, and provide in-person training of all systems and functions of the equipment.

### 12-4. USCBP INSPECTIONS

The Security contractor is to coordinate, schedule, and facilitate periodic in-person inspections by US CBP staff.

- Contractor to plan on three (3) in-person USCBP inspections, at milestone construction / installation points to be identified by USCBP at the time work begins, not including the final inspection.
- Inspections to be scheduled 7-days in advance to allow time for coordination of USCPB team members including travel time to Santa Maria.
- Contractor to facilitate USCBP unrestricted access to all elements and components of the installed

systems, allowing USCBP room and physical ability to confirm acceptable and proper installation of materials and equipment.

- Security contractor shall inform all other contractors of each scheduled inspection to assure unstructured access by USCBP personal.

#### 12-5. CONTRACTOR YARD

The Contractor yard is in-place, having been established by the general contractor. The security contractor shall honor the existing yard and provide their own enhancements as necessary to serve their own specific yard needs. All yards shall be neat and tidy, not creating a public attraction or nuisance. Excess materials shall be removed off-site as soon as possible.

#### 12-6. MEASUREMENT AND PAYMENT

The work of Section 10 (General Requirements), Section 11 (Safety and Security), and Section 12 (Mobilization) are all to be performed in unison, together. Measurement for the work of these items shall be in straight line proportion, from zero to 100%, relative contract time, over the course of the construction contract, including any extensions should they be granted.

Payment for the work of these items shall be made at the contract lump-sum amount / price for Bid Item 1: Mobilization, Airfield Safety & Security, in straight line proportional amounts from zero to 100% relative to contract time, over the course of the construction contract, including any extension should they be granted. Payments as described shall be considered full and complete compensation for the furnishing of all materials and for all labor, equipment, tools, and incidentals necessary to complete these items of work.

The Contractor's bid price for Bid item 1: Mobilization, Airfield Safety & Security, **shall not exceed twelve percent (12%)** of the total amount of the bid. In the event the project includes multiple bid schedules with multiple Mobilization, Airfield Safety & Security bid items, the maximum amount of each Mobilization, Airfield Safety & Security bid item shall not exceed fifteen percent (15%) of the bid schedule total.

Payments made for Mobilization, Airfield Safety & Security will be excluded from consideration in determining compensation under changed conditions.

END OF SECTION



## Section 13 – Access Control, Intrusion Detection, Surveillance

### 13-1. GENERAL

This item shall consist of furnishing all labor, equipment, and materials as necessary to satisfactorily perform the following tasks related to access control, intrusion detection, and surveillance (collectively referred to as Security Systems) for the building at 3335 Corsair Circle, Santa Maria, California.

- A. Using the architect-provided building footprint plan (.pdf) as a base, preparation of a design plan / drawing that shows the location of all Security Systems components, sensors, conduits and raceways, panels, boards, junction boxes, devices, etc.
- B. Preparation and submission of a detailed product list suitable for submission to US CBP.
- C. Preparation of detailed material submittals.
- D. Ordering and receiving all parts, pieces, and components.
- E. Construction and installation of the systems, working as part of a team of contractors serving this project.
- F. Establishing an interface with work-stations and other elements intended to be linked with the on-site equipment and systems.
- G. Coordination of the work with others on the site.
- H. Facilitating periodic walking inspections during the construction by team members with US CBP (out-of-town team members, requires advance scheduling) and the Airport District.
- I. Testing, start-up, and trouble-shooting of all systems, including software installation supporting proper, complete, and unrestricted operation of all systems and equipment.
- J. On-site, in person training of District and CBP staff.
- K. Revisions and updates to the plan reflecting as-built conditions.
- L. Generation of an Operations and Maintenance (O&M) Manual.

### 13-2. STANDARDS AND PERMITS

- A. All materials, work, and workmanship shall be in conformance with the following codes and standards, as last revised:
  - a. California Building Code (CBC).
  - b. California Electric Code (CEC).
  - c. Underwriters Laboratories (UL).
  - d. Standards of the US Customs and Border Protection, a division of the US Department of Homeland Security, for design and construction of access control, intrusion detection, and surveillance systems and facilities at general aviation airports.

### 13-3. TECHNICAL SPECIFICATIONS

- A. All materials, work, and workmanship shall be in conformance with the technical specifications included as an appendix to this specification / contract book.
- B. U.S. Customs and Border Protection Design Standards – as they apply to the Security Systems.
- C. U.S. Customs and Border Protection Approved Product Lists / Schedules.
- D. Architect-prepared building footprint plan showing location of all Security Systems components.
- E. USCBP-provided building layout plan with designated locations for equipment, sensors, controllers, etc.

The Technical Specification package will be distributed to individual contractors (individuals or firms as appropriate) upon receipt of a signed / completed Non-Disclosure Agreement.

#### 13-4. SUBMITTALS

- A. Contractor prepared / provided design.  
Design shall be to-scale, using the architect-provided .pdf electronic file of the building footprint with interior room layout as a base of the drawing. Plan to include the following, at a minimum:
  - a. Main / central communications and control panel / box, along with work-station control identifications.
  - b. All conduit runs including diameters and junction / pull boxes.
  - c. All power and communications cabling call-outs, including shielding, size, capacity, or other capability-identifying parameters.
  - d. All equipment mounting and support materials.
  - e. All sensors, controllers, and detectors.
  - f. The plan will show horizontal location of features. Contractor to add in vertical dimension from the floor to the height of each component installation.
- B. Summary list of all proposed materials and equipment: brand, model, other distinguishing features. This is to be a contractor-prepared material table, to facilitate quick confirmation that proposed equipment and materials will be acceptable.
- C. Complete submittals for each component. Material cut-sheets, marked up / highlighted to identify all specific parameters of each component, including but not necessarily limited to size, power, communications, style, class, color, mounting features, function parameters, etc.
- D. Schedule, highlighting the four parts of the overall effort, as previously identified: Infrastructure, Security Components, Testing and Acceptance, and Training.

#### 13-5. CONSTRUCTION METHODS

- A. Do not proceed with ordering material and equipment until after receipt of approved submittals.
- B. All work and workmanship, methods, and procedures shall be in conformance with the technical specifications included as an appendix to this specification / contract book.
- C. All materials and equipment to be securely installed with adequate fasteners, supports, and other attaching mechanisms to assure long life as intended, without crack or wobble. Exterior cameras shall withstand wind gusts to 70 mph.
- D. The contractor is responsible for site / worker safety, providing ample lifts, braces, supports, scaffolds, etc., as necessary to safely accomplish the effort.
- E. Delineate the work site to help define a public limited access space around the building.
- F. Contractor is advised the work of this project may take place concurrent with other construction efforts in proximity including on / inside this structure. Contractor shall provide reasonable accommodations for access to others on the site.
- G. Maintain a clean site, removing and disposing excess materials / waste materials as it is generated. All materials shall be secured, capable of withstanding prop-blast winds (70 mph) from nearby aircraft, at any time, evenings and weekends included.
- H. Coordinate and schedule inspection by USCBP and Airport District at previously identified construction milestones.

#### 13-6. TRAINING

- A. After preliminary acceptance of the installation, schedule, coordinate, and provide in-person training of all systems and functions of the equipment.
- B. Training cannot be a casual activity. It must be scheduled 7-days in advance to allow for attendance by out-of-town USCBP personal, along with Airport District staff.
- C. Training to extend for a minimum of 6-hours.
- D. Instructor to include materials / handouts to facilitate the training, for up to ten (10) individuals.

### 13-7. ACCEPTANCE

- A. Contractor to call for preliminary final inspection. The Engineer and Architect will perform the inspection, facilitated by the contractor, and prepare a Punch List of outstanding items. This inspection shall include a detailed run-through of all systems, with acceptable results.
- B. All items on the Punch List to be addressed / accomplished to the satisfaction of the engineer and architect.
- C. Contractor to provide Operations and Maintenance (O&M) Manuals. Four (4) bound and four electronic copies, each on its own memory stick. Each O&M manual shall include complete lists of all components of each system, including model number and manufacturer. In addition, the manuals shall include all software license codes and authorities, along with exploded view features for complex elements, software operating and servicing parameters and requirements, etc.
- D. All excess material shall be removed from the site. The site shall be swept clean.
- E. Software licenses and warranties have been provided to the District.
- F. Final acceptance to occur after training, and acceptance of the Manuals.
- G. Any contractor-secured Airport Access badges shall be returned.

### 13-8. MEASUREMENT AND PAYMENT

The measurement for payment for Design and Installation of Video Surveillance, Access Control, and Intrusion Detection Systems shall be on a job-lot basis, for acceptably performing the work of this specification, Paragraphs 13-1 through 13-7, excluding 13-6.

The measurement for payment for Training shall be on a job-lot basis, for acceptably perform the work if this specification, Paragraphs 13-1 and 13-6.

Payment for Design and Installation of Video Surveillance, Access Control, and Intrusion Detection Systems, complete, shall be at the bid Lump Sum amount for Bid Item 2, based on percent complete milestones determined by the Engineer, in 10% increments.

Payment for Training, complete, shall be at the bid Lump Sum amount for Bid Item 3.

Said payments as described shall be considered full compensation for furnishing all materials, labor, equipment, tools and incidentals necessary to complete these items of work.

END OF SECTION

## **Appendix A**

FAA Advisory Circular: 150/5370-2G  
Operational Safety on Airports During Construction



# Advisory Circular

---

**Subject:** Operational Safety on  
Airports During Construction

**Date:** 12/13/2017  
**Initiated By:** AAS-100

**AC No:** 150/5370-2G  
**Change:**

1 **Purpose.**

This AC sets forth guidelines for operational safety on airports during construction.

2 **Cancellation.**

This AC cancels AC 150/5370-2F, *Operational Safety on Airports during Construction*, dated September 29, 2011.

3 **Application.**

This AC assists airport operators in complying with Title 14 Code of Federal Regulations (CFR) Part 139, *Certification of Airports*. For those certificated airports, this AC provides one way, but not the only way, of meeting those requirements. The use of this AC is mandatory for those airport construction projects receiving funds under the Airport Improvement Program (AIP). See Grant Assurance No. 34, *Policies, Standards, and Specifications*. While we do not require non-certificated airports without grant agreements or airports using Passenger Facility Charge (PFC) Program funds for construction projects to adhere to these guidelines, we recommend that they do so to help these airports maintain operational safety during construction.

4 **Related Documents.**

ACs and Orders referenced in the text of this AC do not include a revision letter, as they refer to the latest version. [Appendix A](#) contains a list of reading material on airport construction, design, and potential safety hazards during construction, as well as instructions for obtaining these documents.

5 **Principal Changes.**

The AC incorporates the following principal changes:

1. Notification about impacts to both airport owned and FAA-owned NAVAIDs was added. See paragraph [2.13.5.3](#), NAVAIDs.

2. Guidance for the use of orange construction signs was added. See paragraph 2.18.4.2, Temporary Signs.
3. Open trenches or excavations may be permitted in the taxiway safety area while the taxiway is open to aircraft operations, subject to restrictions. See paragraph 2.22.3.4, Excavations.
4. Guidance for temporary shortened runways and displaced thresholds has been enhanced. See Figure 2-1 and Figure 2-2.
5. Figures have been improved and a new Appendix F on the placement of orange construction signs has been added.

Hyperlinks (allowing the reader to access documents located on the internet and to maneuver within this document) are provided throughout this document and are identified with underlined text. When navigating within this document, return to the previously viewed page by pressing the “ALT” and “ ← ” keys simultaneously.

Figures in this document are schematic representations and are not to scale.

6 **Use of Metrics.**

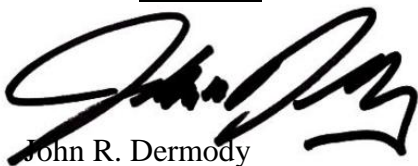
Throughout this AC, U.S. customary units are used followed with “soft” (rounded) conversion to metric units. The U.S. customary units govern.

7 **Where to Find this AC.**

You can view a list of all ACs at [http://www.faa.gov/regulations\\_policies/advisory\\_circulars/](http://www.faa.gov/regulations_policies/advisory_circulars/). You can view the Federal Aviation Regulations at [http://www.faa.gov/regulations\\_policies/faa\\_regulations/](http://www.faa.gov/regulations_policies/faa_regulations/).

8 **Feedback on this AC.**

If you have suggestions for improving this AC, you may use the Advisory Circular Feedback form at the end of this AC.



John R. Dermody  
Director of Airport Safety and Standards

## CONTENTS

Paragraph	Page
<b>Chapter 1. Planning an Airfield Construction Project .....</b>	<b>1-1</b>
1.1 Overview.....	1-1
1.2 Plan for Safety.....	1-1
1.3 Develop a Construction Safety and Phasing Plan (CSPP).....	1-3
1.4 Who Is Responsible for Safety During Construction?.....	1-4
<b>Chapter 2. Construction Safety and Phasing Plans .....</b>	<b>2-1</b>
2.1 Overview.....	2-1
2.2 Assume Responsibility.....	2-1
2.3 Submit the CSPP.....	2-1
2.4 Meet CSPP Requirements.....	2-2
2.5 Coordination. ....	2-6
2.6 Phasing.....	2-7
2.7 Areas and Operations Affected by Construction Activity. ....	2-7
2.8 Navigation Aid (NAVAID) Protection.....	2-11
2.9 Contractor Access. ....	2-11
2.10 Wildlife Management. ....	2-15
2.11 Foreign Object Debris (FOD) Management. ....	2-16
2.12 Hazardous Materials (HAZMAT) Management.....	2-16
2.13 Notification of Construction Activities.....	2-16
2.14 Inspection Requirements.....	2-18
2.15 Underground Utilities. ....	2-19
2.16 Penalties. ....	2-19
2.17 Special Conditions. ....	2-19
2.18 Runway and Taxiway Visual Aids. ....	2-19
2.19 Marking and Signs for Access Routes. ....	2-29
2.20 Hazard Marking, Lighting and Signing. ....	2-30
2.21 Work Zone Lighting for Nighttime Construction.....	2-32
2.22 Protection of Runway and Taxiway Safety Areas. ....	2-33
2.23 Other Limitations on Construction. ....	2-37

<b>Chapter 3. Guidelines for Writing a CSPP .....</b>	<b>3-1</b>
3.1 General Requirements.....	3-1
3.2 Applicability of Subjects.....	3-1
3.3 Graphical Representations. ....	3-1
3.4 Reference Documents. ....	3-2
3.5 Restrictions. ....	3-2
3.6 Coordination. ....	3-2
3.7 Phasing.....	3-2
3.8 Areas and Operations Affected by Construction. ....	3-2
3.9 NAVAID Protection. ....	3-2
3.10 Contractor Access. ....	3-3
3.11 Wildlife Management. ....	3-4
3.12 FOD Management.....	3-4
3.13 HAZMAT Management.....	3-4
3.14 Notification of Construction Activities.....	3-4
3.15 Inspection Requirements.....	3-5
3.16 Underground Utilities. ....	3-5
3.17 Penalties. ....	3-5
3.18 Special Conditions. ....	3-5
3.19 Runway and Taxiway Visual Aids. ....	3-6
3.20 Marking and Signs for Access Routes. ....	3-6
3.21 Hazard Marking and Lighting.....	3-6
3.22 Work Zone Lighting for Nighttime Construction.....	3-6
3.23 Protection of Runway and Taxiway Safety Areas. ....	3-7
3.24 Other Limitations on Construction. ....	3-7
<b>Appendix A. Related Reading Material .....</b>	<b>A-1</b>
<b>Appendix B. Terms and Acronyms .....</b>	<b>B-1</b>
<b>Appendix C. Safety and Phasing Plan Checklist.....</b>	<b>C-1</b>
<b>Appendix D. Construction Project Daily Safety Inspection Checklist.....</b>	<b>D-1</b>
<b>Appendix E. Sample Operational Effects Table.....</b>	<b>E-1</b>
<b>Appendix F. Orange Construction Signs .....</b>	<b>F-1</b>



## FIGURES

<b>Number</b>	<b>Page</b>
Figure 2-1. Temporary Partially Closed Runway .....	2-9
Figure 2-2. Temporary Displaced Threshold.....	2-10
Figure 2-3. Markings for a Temporarily Closed Runway.....	2-21
Figure 2-4. Temporary Taxiway Closure.....	2-22
Figure 2-5. Temporary Outboard White Threshold Bars and Yellow Arrowheads .....	2-24
Figure 2-6. Lighted X in Daytime.....	2-26
Figure 2-7. Lighted X at Night.....	2-26
Figure 2-8. Interlocking Barricades .....	2-31
Figure 2-9. Low Profile Barricades .....	2-32
Figure E-1. Phase I Example .....	E-1
Figure E-2. Phase II Example .....	E-2
Figure E-3. Phase III Example.....	E-3
Figure F-1. Approved Sign Legends.....	F-1
Figure F-2. Orange Construction Sign Example 1.....	F-2
Figure F-3. Orange Construction Sign Example 2.....	F-3

## TABLES

<b>Number</b>	<b>Page</b>
Table A-1. FAA Publications .....	A-1
Table A-2. Code of Federal Regulation.....	A-3
Table B-1. Terms and Acronyms.....	B-1
Table C-1. CSPP Checklist.....	C-1
Table D-1. Potentially Hazardous Conditions .....	D-1
Table E-1. Operational Effects Table .....	E-4
Table E-2. Runway and Taxiway Edge Protection.....	E-6
Table E-3. Protection Prior to Runway Threshold.....	E-7

Page Intentionally Blank

## CHAPTER 1. PLANNING AN AIRFIELD CONSTRUCTION PROJECT

### 1.1 Overview.

Airports are complex environments, and procedures and conditions associated with construction activities often affect aircraft operations and can jeopardize operational safety. Safety considerations are paramount and may make operational impacts unavoidable. However, careful planning, scheduling, and coordination of construction activities can minimize disruption of normal aircraft operations and avoid situations that compromise the airport's operational safety. The airport operator must understand how construction activities and aircraft operations affect one another to be able to develop an effective plan to complete the project. While the guidance in this AC is primarily used for construction operations, the concepts, methods and procedures described may also enhance the day-to-day airport maintenance operations, such as lighting maintenance and snow removal operations.

### 1.2 Plan for Safety.

Safety, maintaining aircraft operations, and construction costs are all interrelated. Since safety must not be compromised, the airport operator must strike a balance between maintaining aircraft operations and construction costs. This balance will vary widely depending on the operational needs and resources of the airport and will require early coordination with airport users and the FAA. As the project design progresses, the necessary construction locations, activities, and associated costs will be identified and their impact to airport operations must be assessed. Adjustments are made to the proposed construction activities, often by phasing the project, and/or to airport operations to maintain operational safety. This planning effort will ultimately result in a project Construction Safety and Phasing Plan (CSPP). The development of the CSPP takes place through the following five steps:

#### 1.2.1 Identify Affected Areas.

The airport operator must determine the geographic areas on the airport affected by the construction project. Some, such as a runway extension, will be defined by the project. Others may be variable, such as the location of haul routes and material stockpiles.

#### 1.2.2 Describe Current Operations.

Identify the normal airport operations in each affected area for each phase of the project. This becomes the baseline from which the impact on operations by construction activities can be measured. This should include a narrative of the typical users and aircraft operating within the affected areas. It should also include information related to airport operations: the Aircraft Approach Category (AAC) and Airplane Design Group (ADG) of the airplanes that operate on each runway; the ADG and Taxiway Design Group (TDG)<sup>1</sup> for each affected taxiway; designated approach visibility minimums;

---

<sup>1</sup> Find Taxiway Design Group information in [AC 150/5300-13, Airport Design](#).

available approach and departure procedures; most demanding aircraft; declared distances; available air traffic control services; airport Surface Movement Guidance and Control System (SMGCS) plan; and others. The applicable seasons, days and times for certain operations should also be identified as applicable.

#### 1.2.3 Allow for Temporary Changes to Operations.

To the extent practical, current airport operations should be maintained during the construction. In consultation with airport users, Aircraft Rescue and Fire Fighting (ARFF) personnel, and FAA Air Traffic Organization (ATO) personnel, the airport operator should identify and prioritize the airport's most important operations. The construction activities should be planned, through project phasing if necessary, to safely accommodate these operations. When the construction activities cannot be adjusted to safely maintain current operations, regardless of their importance, then the operations must be revised accordingly. Allowable changes include temporary revisions to approach procedures, restricting certain aircraft to specific runways and taxiways, suspension of certain operations, decreased weights for some aircraft due to shortened runways, and other changes. An example of a table showing temporary operations versus current operations is shown in Appendix E.

#### 1.2.4 Take Required Measures to Revise Operations.

Once the level and type of aircraft operations to be maintained are identified, the airport operator must determine the measures required to safely conduct the planned operations during the construction. These measures will result in associated costs, which can be broadly interpreted to include not only direct construction costs, but also loss of revenue from impacted operations. Analysis of costs may indicate a need to reevaluate allowable changes to operations. As aircraft operations and allowable changes will vary widely among airports, this AC presents general guidance on those subjects.

#### 1.2.5 Manage Safety Risk.

The FAA is committed to incorporating proactive safety risk management (SRM) tools into its decision-making processes. FAA Order 5200.11, *FAA Airports (ARP) Safety Management System (SMS)*, requires the FAA to conduct a Safety Assessment for certain triggering actions. Certain airport projects may require the airport operator to provide a Project Proposal Summary to help the FAA determine whether a Safety Assessment is required prior to FAA approval of the CSPP. The airport operator must coordinate with the appropriate FAA Airports Regional or District Office early in the development of the CSPP to determine the need for a Safety Risk Assessment. If the FAA requires an assessment, the airport operator must at a minimum:

1. Notify the appropriate FAA Airports Regional or District Office during the project "scope development" phase of any project requiring a CSPP.
2. Provide documents identified by the FAA as necessary to conduct SRM.
3. Participate in the SRM process for airport projects.
4. Provide a representative to participate on the SRM panel.

5. Ensure that all applicable SRM identified risks elements are recorded and mitigated within the CSPP.

### 1.3 **Develop a Construction Safety and Phasing Plan (CSPP).**

Development of an effective CSPP will require familiarity with many other documents referenced throughout this AC. See Appendix A for a list of related reading material.

#### 1.3.1 List Requirements.

A CSPP must be developed for each on-airfield construction project funded by the Airport Improvement Program (AIP) or located on an airport certificated under Part 139. For on-airfield construction projects at Part 139 airports funded without AIP funds, the preparation of a CSPP represents an acceptable method the certificate holder may use to meet Part 139 requirements during airfield construction activity. As per FAA Order 5200.11, projects that require Safety Assessments do not include construction, rehabilitation, or change of any facility that is entirely outside the air operations area, does not involve any expansion of the facility envelope and does not involve construction equipment, haul routes or placement of material in locations that require access to the air operations area, increase the facility envelope, or impact line-of-sight. Such facilities may include passenger terminals and parking or other structures. However, extraordinary circumstances may trigger the need for a Safety Assessment and a CSPP. The CSPP is subject to subsequent review and approval under the FAA's Safety Risk Management procedures (see paragraph 1.2.5).

#### 1.3.2 Prepare a Safety Plan Compliance Document (SPCD).

The Safety Plan Compliance Document (SPCD) details how the contractor will comply with the CSPP. Also, it will not be possible to determine all safety plan details (for example specific hazard equipment and lighting, contractor's points of contact, construction equipment heights) during the development of the CSPP. The successful contractor must define such details by preparing an SPCD that the airport operator reviews for approval prior to issuance of a notice-to-proceed. The SPCD is a subset of the CSPP, similar to how a shop drawing review is a subset to the technical specifications.

#### 1.3.3 Assume Responsibility for the CSPP.

The airport operator is responsible for establishing and enforcing the CSPP. The airport operator may use the services of an engineering consultant to help develop the CSPP. However, writing the CSPP cannot be delegated to the construction contractor. Only those details the airport operator determines cannot be addressed before contract award are developed by the contractor and submitted for approval as the SPCD. The SPCD does not restate nor propose differences to provisions already addressed in the CSPP.

## 1.4 **Who Is Responsible for Safety During Construction?**

### 1.4.1 Establish a Safety Culture.

Everyone has a role in operational safety on airports during construction: the airport operator, the airport's consultants, the construction contractor and subcontractors, airport users, airport tenants, ARFF personnel, Air Traffic personnel, including Technical Operations personnel, FAA Airports Division personnel, and others, such as military personnel at any airport supporting military operations (e.g. national guard or a joint use facility). Close communication and coordination between all affected parties is the key to maintaining safe operations. Such communication and coordination should start at the project scoping meeting and continue through the completion of the project. The airport operator and contractor should conduct onsite safety inspections throughout the project and immediately remedy any deficiencies, whether caused by negligence, oversight, or project scope change.

### 1.4.2 Assess Airport Operator's Responsibilities.

An airport operator has overall responsibility for all activities on an airport, including construction. This includes the predesign, design, preconstruction, construction, and inspection phases. Additional information on the responsibilities listed below can be found throughout this AC. The airport operator must:

- 1.4.2.1 Develop a CSPP that complies with the safety guidelines of Chapter 2, Construction Safety and Phasing Plans, and Chapter 3, Guidelines for Writing a CSPP. The airport operator may develop the CSPP internally or have a consultant develop the CSPP for approval by the airport operator. For tenant sponsored projects, approve a CSPP developed by the tenant or its consultant.
- 1.4.2.2 Require, review and approve the SPCD by the contractor that indicates how it will comply with the CSPP and provides details that cannot be determined before contract award.
- 1.4.2.3 Convene a preconstruction meeting with the construction contractor, consultant, airport employees and, if appropriate, tenant sponsor and other tenants to review and discuss project safety before beginning construction activity. The appropriate FAA representatives should be invited to attend the meeting. See AC 150/5370-12, Quality Management for Federally Funded Airport Construction Projects. (Note “FAA” refers to the Airports Regional or District Office, the Air Traffic Organization, Flight Standards Service, and other offices that support airport operations, flight regulations, and construction/environmental policies.)
- 1.4.2.4 Ensure contact information is accurate for each representative/point of contact identified in the CSPP and SPCD.
- 1.4.2.5 Hold weekly or, if necessary, daily safety meetings with all affected parties to coordinate activities.
- 1.4.2.6 Notify users, ARFF personnel, and FAA ATO personnel of construction and conditions that may adversely affect the operational safety of the airport via Notices to Airmen (NOTAM) and other methods, as appropriate. Convene a meeting for review and discussion if necessary.
- 1.4.2.7 Ensure construction personnel know applicable airport procedures and changes to those procedures that may affect their work.
- 1.4.2.8 Ensure that all temporary construction signs are located per the scheduled list for each phase of the project.
- 1.4.2.9 Ensure construction contractors and subcontractors undergo training required by the CSPP and SPCD.
- 1.4.2.10 Ensure vehicle and pedestrian operations addressed in the CSPP and SPCD are coordinated with airport tenants, the airport traffic control tower (ATCT), and construction contractors.
- 1.4.2.11 At certificated airports, ensure each CSPP and SPCD is consistent with Part 139.

- 1.4.2.12 Conduct inspections sufficiently frequently to ensure construction contractors and tenants comply with the CSPP and SPCD and that there are no altered construction activities that could create potential safety hazards.
  - 1.4.2.13 Take immediate action to resolve safety deficiencies.
  - 1.4.2.14 At airports subject to 49 CFR Part 1542, *Airport Security*, ensure construction access complies with the security requirements of that regulation.
  - 1.4.2.15 Notify appropriate parties when conditions exist that invoke provisions of the CSPP and SPCD (for example, implementation of low-visibility operations).
  - 1.4.2.16 Ensure prompt submittal of a Notice of Proposed Construction or Alteration (Form 7460-1) for conducting an aeronautical study of potential obstructions such as tall equipment (cranes, concrete pumps, other), stock piles, and haul routes. A separate form may be filed for each potential obstruction, or one form may be filed describing the entire construction area and maximum equipment height. In the latter case, a separate form must be filed for any object beyond or higher than the originally evaluated area/height. The FAA encourages online submittal of forms for expediency at <https://oeaaa.faa.gov/oeaaa/external/portal.jsp>. The appropriate FAA Airports Regional or District Office can provide assistance in determining which objects require an aeronautical study.
  - 1.4.2.17 Ensure prompt transmission of the Airport Sponsor Strategic Event Submission, FAA Form 6000-26, located at [https://oeaaa.faa.gov/oeaaa/external/content/AIRPORT\\_SPONSOR\\_STRATEGIC\\_EVENT\\_SUBMISSION\\_FORM.pdf](https://oeaaa.faa.gov/oeaaa/external/content/AIRPORT_SPONSOR_STRATEGIC_EVENT_SUBMISSION_FORM.pdf), to assure proper coordination for NAS Strategic Interruption per Service Level Agreement with ATO.
  - 1.4.2.18 Promptly notify the FAA Airports Regional or District Office of any proposed changes to the CSPP prior to implementation of the change. Changes to the CSPP require review and approval by the airport operator and the FAA. The FAA Airports Regional or District office will determine if further coordination within the FAA is needed. Coordinate with appropriate local and other federal government agencies, such as Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), Transportation Security Administration (TSA), and the state environmental agency.
- 1.4.3 Define Construction Contractor's Responsibilities.  
The contractor is responsible for complying with the CSPP and SPCD. The contractor must:



- 1.4.3.1 Submit a Safety Plan Compliance Document (SPCD) to the airport operator describing how it will comply with the requirements of the CSPP and supply any details that could not be determined before contract award. The SPCD must include a certification statement by the contractor, indicating an understanding of the operational safety requirements of the CSPP and the assertion of compliance with the approved CSPP and SPCD unless written approval is granted by the airport operator. Any construction practice proposed by the contractor that does not conform to the CSPP and SPCD may impact the airport's operational safety and will require a revision to the CSPP and SPCD and re-coordination with the airport operator and the FAA in advance.
- 1.4.3.2 Have available at all times copies of the CSPP and SPCD for reference by the airport operator and its representatives, and by subcontractors and contractor employees.
- 1.4.3.3 Ensure that construction personnel are familiar with safety procedures and regulations on the airport. Provide a point of contact who will coordinate an immediate response to correct any construction-related activity that may adversely affect the operational safety of the airport. Many projects will require 24-hour coverage.
- 1.4.3.4 Identify in the SPCD the contractor's on-site employees responsible for monitoring compliance with the CSPP and SPCD during construction. At least one of these employees must be on-site when active construction is taking place.
- 1.4.3.5 Conduct sufficient inspections to ensure construction personnel comply with the CSPP and SPCD and that there are no altered construction activities that could create potential safety hazards.
- 1.4.3.6 Restrict movement of construction vehicles and personnel to permitted construction areas by flagging, barricading, erecting temporary fencing, or providing escorts, as appropriate, and as specified in the CSPP and SPCD.
- 1.4.3.7 Ensure that no contractor employees, employees of subcontractors or suppliers, or other persons enter any part of the air operations area (AOA) from the construction site unless authorized.
- 1.4.3.8 Ensure prompt submittal through the airport operator of Form 7460-1 for the purpose of conducting an aeronautical study of contractor equipment such as tall equipment (cranes, concrete pumps, and other equipment), stock piles, and haul routes when different from cases previously filed by the airport operator. The FAA encourages online submittal of forms for expediency at <https://oeaaa.faa.gov/oeaaa/external/portal.jsp>.

- 1.4.3.9 Ensure that all necessary safety mitigations are understood by all parties involved, and any special requirements of each construction phase will be fulfilled per the approved timeframe.
- 1.4.3.10 Participate in pre-construction meetings to review construction limits, safety mitigations, NOTAMs, and understand all special airport operational needs during each phase of the project.

#### 1.4.4 Define Tenant's Responsibilities.

If planning construction activities on leased property, Airport tenants, such as airline operators, fixed base operators, and FAA ATO/Technical Operations sponsoring construction are strongly encouraged to:

1. Develop, or have a consultant develop, a project specific CSPP and submit it to the airport operator. The airport operator may forgo a complete CSPP submittal and instead incorporate appropriate operational safety principles and measures addressed in the advisory circular within their tenant lease agreements.
2. In coordination with its contractor, develop an SPCD and submit it to the airport operator for approval issued prior to issuance of a Notice to Proceed.
3. Ensure that construction personnel are familiar with safety procedures and regulations on the airport during all phases of the construction.
4. Provide a point of contact of who will coordinate an immediate response to correct any construction-related activity that may adversely affect the operational safety of the airport.
5. Identify in the SPCD the contractor's on-site employees responsible for monitoring compliance with the CSPP and SPCD during construction. At least one of these employees must be on-site when active construction is taking place.
6. Ensure that no tenant or contractor employees, employees of subcontractors or suppliers, or any other persons enter any part of the AOA from the construction site unless authorized.
7. Restrict movement of construction vehicles to construction areas by flagging and barricading, erecting temporary fencing, or providing escorts, as appropriate, as specified in the CSPP and SPCD.
8. Ensure prompt submittal through the airport operator of Form 7460-1 for conducting an aeronautical study of contractor equipment such as tall equipment (cranes, concrete pumps, other), stock piles, and haul routes. The FAA encourages online submittal of forms for expediency at <https://oeaaa.faa.gov/oeaaa/external/portal.jsp>.
9. Participate in pre-construction meetings to review construction limits, safety mitigations, NOTAMs, and understand all special airport operational needs during each phase of the project.

## CHAPTER 2. CONSTRUCTION SAFETY AND PHASING PLANS

### 2.1 **Overview.**

Aviation safety is the primary consideration at airports, especially during construction. The airport operator's CSPP and the contractor's Safety Plan Compliance Document (SPCD) are the primary tools to ensure safety compliance when coordinating construction activities with airport operations. These documents identify all aspects of the construction project that pose a potential safety hazard to airport operations and outline respective mitigation procedures for each hazard. They must provide information necessary for the Airport Operations department to conduct airfield inspections and expeditiously identify and correct unsafe conditions during construction. All aviation safety provisions included within the project drawings, contract specifications, and other related documents must also be reflected in the CSPP and SPCD.

### 2.2 **Assume Responsibility.**

Operational safety on the airport remains the airport operator's responsibility at all times. The airport operator must develop, certify, and submit for FAA approval each CSPP. It is the airport operator's responsibility to apply the requirements of the FAA approved CSPP. The airport operator must revise the CSPP when conditions warrant changes and must submit the revised CSPP to the FAA for approval. The airport operator must also require and approve a SPCD from the project contractor.

### 2.3 **Submit the CSPP.**

Construction Safety and Phasing Plans should be developed concurrently with the project design. Milestone versions of the CSPP should be submitted for review and approval as follows. While these milestones are not mandatory, early submission will help to avoid delays. Submittals are preferred in 8.5 × 11 inch or 11 × 17 inch format for compatibility with the FAA's Obstruction Evaluation / Airport Airspace Analysis (OE / AAA) process.

#### 2.3.1 Submit an Outline/Draft.

By the time approximately 25% to 30% of the project design is completed, the principal elements of the CSPP should be established. Airport operators are encouraged to submit an outline or draft, detailing all CSPP provisions developed to date, to the FAA for review at this stage of the project design.

#### 2.3.2 Submit a CSPP.

The CSPP should be formally submitted for FAA approval when the project design is 80 percent to 90 percent complete. Since provisions in the CSPP will influence contract costs, it is important to obtain FAA approval in time to include all such provisions in the procurement contract.

### 2.3.3 Submit an SPCD.

The contractor should submit the SPCD to the airport operator for approval to be issued prior to the Notice to Proceed.

### 2.3.4 Submit CSPP Revisions.

All revisions to a previously approved CSPP must be re-submitted to the FAA for review and approval/disapproval action.

## 2.4 **Meet CSPP Requirements.**

2.4.1 To the extent possible, the CSPP should address the following as outlined in Chapter 3, Guidelines for Writing a CSPP. Details that cannot be determined at this stage are to be included in the SPCD.

1. Coordination.
  - a. Contractor progress meetings.
  - b. Scope or schedule changes.
  - c. FAA ATO coordination.
2. Phasing.
  - a. Phase elements.
  - b. Construction safety drawings.
3. Areas and operations affected by the construction activity.
  - a. Identification of affected areas.
  - b. Mitigation of effects.
4. Protection of navigation aids (NAVAIDs).
5. Contractor access.
  - a. Location of stockpiled construction materials.
  - b. Vehicle and pedestrian operations.
6. Wildlife management.
  - a. Trash.
  - b. Standing water.
  - c. Tall grass and seeds.
  - d. Poorly maintained fencing and gates.
  - e. Disruption of existing wildlife habitat.
7. Foreign Object Debris (FOD) management.
8. Hazardous materials (HAZMAT) management.
9. Notification of construction activities.

- a. Maintenance of a list of responsible representatives/ points of contact.
  - b. NOTAM.
  - c. Emergency notification procedures.
  - d. Coordination with ARFF Personnel.
  - e. Notification to the FAA.
10. Inspection requirements.
    - a. Daily (or more frequent) inspections.
    - b. Final inspections.
  11. Underground utilities.
  12. Penalties.
  13. Special conditions.
  14. Runway and taxiway visual aids. Marking, lighting, signs, and visual NAVAIDs.
    - a. General.
    - b. Markings.
    - c. Lighting and visual NAVAIDs.
    - d. Signs, temporary, including orange construction signs, and permanent signs.
  15. Marking and signs for access routes.
  16. Hazard marking and lighting.
    - a. Purpose.
    - b. Equipment.
  17. Work zone lighting for nighttime construction (if applicable).
  18. Protection of runway and taxiway safety areas, object free areas, obstacle free zones, and approach/departure surfaces.
    - a. Runway Safety Area (RSA).
    - b. Runway Object Free Area (ROFA).
    - c. Taxiway Safety Area (TSA). Provide details for any adjustments to Taxiway Safety Area width to allow continued operation of smaller aircraft. See paragraph 2.22.3.
    - d. Taxiway Object Free Area (TOFA). Provide details for any continued aircraft operations while construction occurs within the TOFA. See paragraph 2.22.4.
    - e. Obstacle Free Zone (OFZ).
    - f. Runway approach/departure surfaces.
  19. Other limitations on construction.
    - a. Prohibitions.

b. Restrictions.

2.4.2 The Safety Plan Compliance Document (SPCD) should include a general statement by the construction contractor that he/she has read and will abide by the CSPP. In addition, the SPCD must include all supplemental information that could not be included in the CSPP prior to the contract award. The contractor statement should include the name of the contractor, the title of the project CSPP, the approval date of the CSPP, and a reference to any supplemental information (that is, “I, (Name of Contractor), have read the (Title of Project) CSPP, approved on (Date), and will abide by it as written and with the following additions as noted:”). The supplemental information in the SPCD should be written to match the format of the CSPP indicating each subject by corresponding CSPP subject number and title. If no supplemental information is necessary for any specific subject, the statement, “No supplemental information,” should be written after the corresponding subject title. The SPCD should not duplicate information in the CSPP:

1. Coordination. Discuss details of proposed safety meetings with the airport operator and with contractor employees and subcontractors.
2. Phasing. Discuss proposed construction schedule elements, including:
  - a. Duration of each phase.
  - b. Daily start and finish of construction, including “night only” construction.
  - c. Duration of construction activities during:
    - i. Normal runway operations.
    - ii. Closed runway operations.
    - iii. Modified runway “Aircraft Reference Code” usage.
3. Areas and operations affected by the construction activity. These areas and operations should be identified in the CSPP and should not require an entry in the SPCD.
4. Protection of NAVAIDs. Discuss specific methods proposed to protect operating NAVAIDs.
5. Contractor access. Provide the following:
  - a. Details on how the contractor will maintain the integrity of the airport security fence (gate guards, daily log of construction personnel, and other).
  - b. Listing of individuals requiring driver training (for certificated airports and as requested).
  - c. Radio communications.
    - i. Types of radios and backup capabilities.
    - ii. Who will be monitoring radios.
    - iii. Who to contact if the ATCT cannot reach the contractor’s designated person by radio.

- d. Details on how the contractor will escort material delivery vehicles.
6. Wildlife management. Discuss the following:
  - a. Methods and procedures to prevent wildlife attraction.
  - b. Wildlife reporting procedures.
7. Foreign Object Debris (FOD) management. Discuss equipment and methods for control of FOD, including construction debris and dust.
8. Hazardous Materials (HAZMAT) management. Discuss equipment and methods for responding to hazardous spills.
9. Notification of construction activities. Provide the following:
  - a. Contractor points of contact.
  - b. Contractor emergency contact.
  - c. Listing of tall or other requested equipment proposed for use on the airport and the timeframe for submitting 7460-1 forms not previously submitted by the airport operator.
  - d. Batch plant details, including 7460-1 submittal.
10. Inspection requirements. Discuss daily (or more frequent) inspections and special inspection procedures.
11. Underground utilities. Discuss proposed methods of identifying and protecting underground utilities.
12. Penalties. Penalties should be identified in the CSPP and should not require an entry in the SPCD.
13. Special conditions. Discuss proposed actions for each special condition identified in the CSPP.
14. Runway and taxiway visual aids. Including marking, lighting, signs, and visual NAVAIDs. Discuss proposed visual aids including the following:
  - a. Equipment and methods for covering signage and airfield lights.
  - b. Equipment and methods for temporary closure markings (paint, fabric, other).
  - c. Temporary orange construction signs.
  - d. Types of temporary Visual Guidance Slope Indicators (VGSI).
15. Marking and signs for access routes. Discuss proposed methods of demarcating access routes for vehicle drivers.
16. Hazard marking and lighting. Discuss proposed equipment and methods for identifying excavation areas.
17. Work zone lighting for nighttime construction (if applicable). Discuss proposed equipment, locations, aiming, and shielding to prevent interference with air traffic control and aircraft operations.

18. Protection of runway and taxiway safety areas, object free areas, obstacle free zones, and approach/departure surfaces. Discuss proposed methods of identifying, demarcating, and protecting airport surfaces including:
  - a. Equipment and methods for maintaining Taxiway Safety Area standards.
  - b. Equipment and methods to ensure the safe passage of aircraft where Taxiway Safety Area or Taxiway Object Free Area standards cannot be maintained.
  - c. Equipment and methods for separation of construction operations from aircraft operations, including details of barricades.
19. Other limitations on construction should be identified in the CSPP and should not require an entry in the SPCD.

## 2.5 **Coordination.**

Airport operators, or tenants responsible for design, bidding and conducting construction on their leased properties, should ensure at all project developmental stages, such as predesign, prebid, and preconstruction conferences, they capture the subject of airport operational safety during construction (see [AC 150/5370-12, \*Quality Management for Federally Funded Airport Construction Projects\*](#)). In addition, the following should be coordinated as required:

### 2.5.1 Progress Meetings.

Operational safety should be a standing agenda item for discussion during progress meetings throughout the project developmental stages.

### 2.5.2 Scope or Schedule Changes.

Changes in the scope or duration at any of the project stages may require revisions to the CSPP and review and approval by the airport operator and the FAA (see paragraph [1.4.2.17](#)).

### 2.5.3 FAA ATO Coordination.

Early coordination with FAA ATO is highly recommended during the design phase and is required for scheduling Technical Operations shutdowns prior to construction. Coordination is critical to restarts of NAVAID services and to the establishment of any special procedures for the movement of aircraft. Formal agreements between the airport operator and appropriate FAA offices are recommended. All relocation or adjustments to NAVAIDs, or changes to final grades in critical areas, should be coordinated with FAA ATO and may require an FAA flight inspection prior to restarting the facility. Flight inspections must be coordinated and scheduled well in advance of the intended facility restart. Flight inspections may require a reimbursable agreement between the airport operator and FAA ATO. Reimbursable agreements should be coordinated a minimum of 12 months prior to the start of construction. (See paragraph [2.13.5.3.2](#) for required FAA notification regarding FAA-owned NAVAIDs.)



## 2.6 **Phasing.**

Once it has been determined what types and levels of airport operations will be maintained, the most efficient sequence of construction may not be feasible. In this case, the sequence of construction may be phased to gain maximum efficiency while allowing for the required operations. The development of the resulting construction phases should be coordinated with local Air Traffic personnel and airport users. The sequenced construction phases established in the CSPP must be incorporated into the project design and must be reflected in the contract drawings and specifications.

### 2.6.1 Phase Elements.

For each phase the CSPP should detail:

- Areas closed to aircraft operations.
- Duration of closures.
- Taxi routes and/or areas of reduced TSA and TOFA to reflect reduced ADG use.
- ARFF access routes.
- Construction staging, disposal, and cleanout areas.
- Construction access and haul routes.
- Impacts to NAVAIDs.
- Lighting, marking, and signing changes.
- Available runway length and/or reduced RSA and ROFA to reflect reduced ADG use.
- Declared distances (if applicable).
- Required hazard marking, lighting, and signing.
- Work zone lighting for nighttime construction (if applicable).
- Lead times for required notifications.

### 2.6.2 Construction Safety Drawings.

Drawings specifically indicating operational safety procedures and methods in affected areas (i.e., construction safety drawings) should be developed for each construction phase. Such drawings should be included in the CSPP as referenced attachments and should also be included in the contract drawing package.

## 2.7 **Areas and Operations Affected by Construction Activity.**

Runways and taxiways should remain in use by aircraft to the maximum extent possible without compromising safety. Pre-meetings with the FAA ATO will support operational simulations. See Appendix E for an example of a table showing temporary operations versus current operations. The tables in Appendix E can be useful for coordination among all interested parties, including FAA Lines of Business.

## 2.7.1 Identification of Affected Areas.

Identifying areas and operations affected by the construction helps to determine possible safety problems. The affected areas should be identified in the construction safety drawings for each construction phase. (See paragraph 2.6.2.) Of particular concern are:

### 2.7.1.1 **Closing, or Partial Closing, of Runways, Taxiways and Aprons, and Displaced Thresholds.**

When a runway is partially closed, a portion of the pavement is unavailable for any aircraft operation, meaning taxiing, landing, or takeoff in either direction on that pavement is prohibited. A displaced threshold, by contrast, is established to ensure obstacle clearance and adequate safety area for landing aircraft. The pavement prior to the displaced threshold is normally available for take-off in the direction of the displacement and for landing and takeoff in the opposite direction. Misunderstanding this difference, may result in issuance of an inaccurate NOTAM, and can lead to a hazardous condition.

#### 2.7.1.1.1 Partially Closed Runways.

The temporarily closed portion of a partially closed runway will generally extend from the threshold to a taxiway that may be used for entering and exiting the runway. If the closed portion extends to a point between taxiways, pilots will have to back-taxi on the runway, which is an undesirable operation. See Figure 2-1 for a desirable configuration.

#### 2.7.1.1.2 Displaced Thresholds.

Since the portion of the runway pavement between the permanent threshold and a standard displaced threshold is available for takeoff and for landing in the opposite direction, the temporary displaced threshold need not be located at an entrance/exit taxiway. See Figure 2-2.

2.7.1.2 Closing of aircraft rescue and fire fighting access routes.

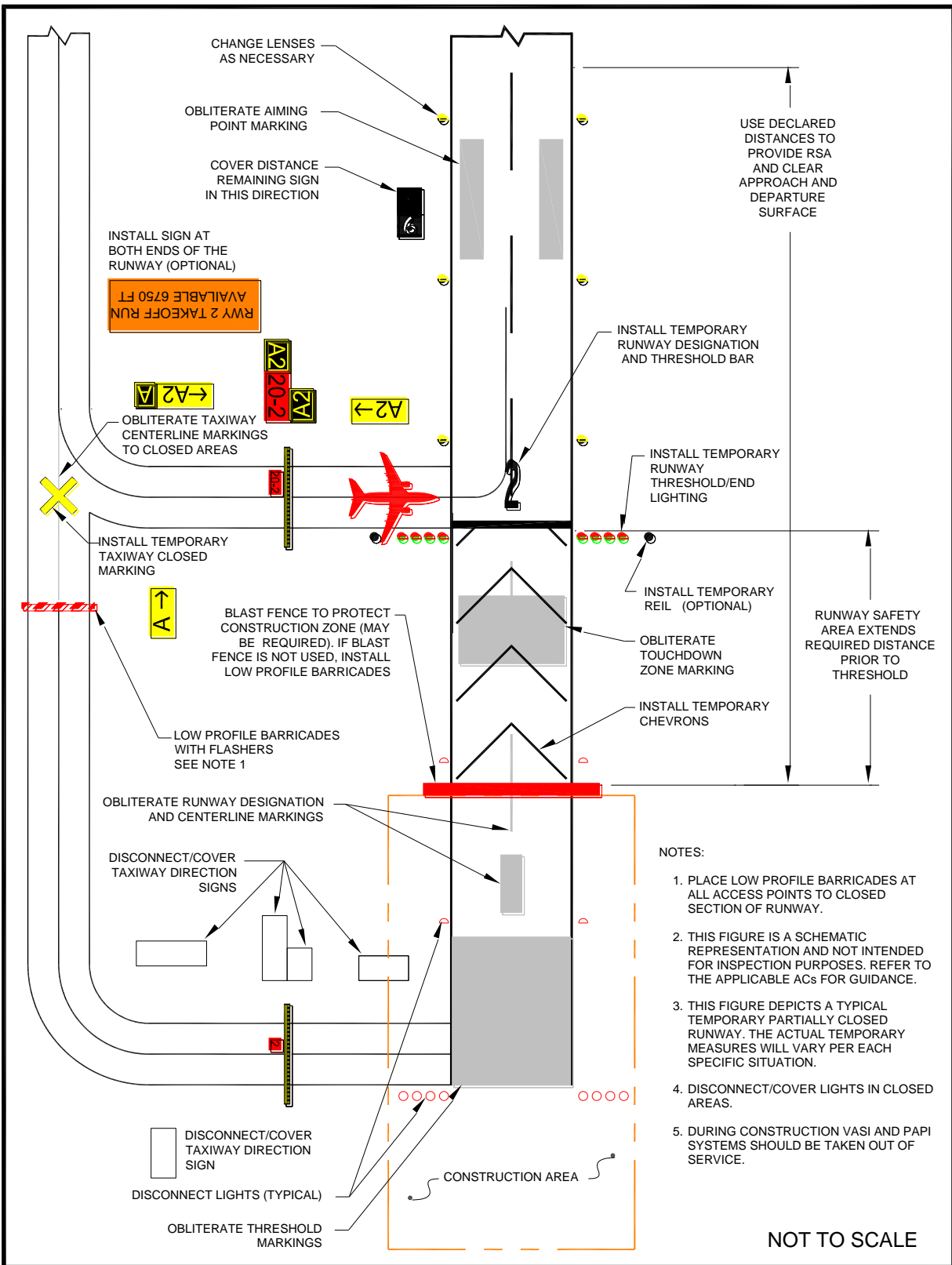
2.7.1.3 Closing of access routes used by airport and airline support vehicles.

2.7.1.4 Interruption of utilities, including water supplies for fire fighting.

2.7.1.5 Approach/departure surfaces affected by heights of objects.

2.7.1.6 Construction areas, storage areas, and access routes near runways, taxiways, aprons, or helipads.

**Figure 2-1. Temporary Partially Closed Runway**





### 2.7.2 Mitigation of Effects.

Establishment of specific procedures is necessary to maintain the safety and efficiency of airport operations. The CSPP must address:

- 2.7.2.1 Temporary changes to runway and/or taxi operations.
- 2.7.2.2 Detours for ARFF and other airport vehicles.
- 2.7.2.3 Maintenance of essential utilities.
- 2.7.2.4 Temporary changes to air traffic control procedures. Such changes must be coordinated with the ATO.

### 2.8 **Navigation Aid (NAVAID) Protection.**

Before commencing construction activity, parking vehicles, or storing construction equipment and materials near a NAVAID, coordinate with the appropriate FAA ATO/Technical Operations office to evaluate the effect of construction activity and the required distance and direction from the NAVAID. (See paragraph 2.13.5.3.) Construction activities, materials/equipment storage, and vehicle parking near electronic NAVAIDs require special consideration since they may interfere with signals essential to air navigation. If any NAVAID may be affected, the CSPP and SPCD must show an understanding of the “critical area” associated with each NAVAID and describe how it will be protected. Where applicable, the operational critical areas of NAVAIDs should be graphically delineated on the project drawings. Pay particular attention to stockpiling material, as well as to movement and parking of equipment that may interfere with line of sight from the ATCT or with electronic emissions. Interference from construction equipment and activities may require NAVAID shutdown or adjustment of instrument approach minimums for low visibility operations. This condition requires that a NOTAM be filed (see paragraph 2.13.2.) Construction activities and materials/equipment storage near a NAVAID must not obstruct access to the equipment and instruments for maintenance. Submittal of a 7460-1 form is required for construction vehicles operating near FAA NAVAIDs. (See paragraph 2.13.5.3.)

### 2.9 **Contractor Access.**

The CSPP must detail the areas to which the contractor must have access, and explain how contractor personnel will access those areas. Specifically address:

#### 2.9.1 Location of Stockpiled Construction Materials.

Stockpiled materials and equipment storage are not permitted within the RSA and OFZ, and if possible should not be permitted within the Object Free Area (OFA) of an operational runway. Stockpiling material in the OFA requires submittal of a 7460-1 form and justification provided to the appropriate FAA Airports Regional or District Office for approval. The airport operator must ensure that stockpiled materials and equipment adjacent to these areas are prominently marked and lighted during hours of restricted visibility or darkness. (See paragraph 2.18.2.) This includes determining and

verifying that materials are stabilized and stored at an approved location so as not to be a hazard to aircraft operations and to prevent attraction of wildlife and foreign object damage from blowing or tracked material. See paragraphs 2.10 and 2.11.

## 2.9.2 Vehicle and Pedestrian Operations.

The CSPP should include specific vehicle and pedestrian requirements. Vehicle and pedestrian access routes for airport construction projects must be controlled to prevent inadvertent or unauthorized entry of persons, vehicles, or animals onto the AOA. The airport operator should coordinate requirements for vehicle operations with airport tenants, contractors, and the FAA air traffic manager. In regard to vehicle and pedestrian operations, the CSPP should include the following, with associated training requirements:

### 2.9.2.1 **Construction Site Parking.**

Designate in advance vehicle parking areas for contractor employees to prevent any unauthorized entry of persons or vehicles onto the AOA. These areas should provide reasonable contractor employee access to the job site.

### 2.9.2.2 **Construction Equipment Parking.**

Contractor employees must park and service all construction vehicles in an area designated by the airport operator outside the OFZ and never in the safety area of an active runway or taxiway. Unless a complex setup procedure makes movement of specialized equipment infeasible, inactive equipment must not be parked on a closed taxiway or runway. If it is necessary to leave specialized equipment on a closed taxiway or runway at night, the equipment must be well lighted. Employees should also park construction vehicles outside the OFA when not in use by construction personnel (for example, overnight, on weekends, or during other periods when construction is not active). Parking areas must not obstruct the clear line of sight by the ATCT to any taxiways or runways under air traffic control nor obstruct any runway visual aids, signs, or navigation aids. The FAA must also study those areas to determine effects on airport design criteria, surfaces established by 14 CFR Part 77, Safe, Efficient Use, and Preservation of the Navigable Airspace (Part 77), and on NAVAIDs and Instrument Approach Procedures (IAP). See paragraph 2.13.1 for further information.

### 2.9.2.3 **Access and Haul Roads.**

Determine the construction contractor's access to the construction sites and haul roads. Do not permit the construction contractor to use any access or haul roads other than those approved. Access routes used by contractor vehicles must be clearly marked to prevent inadvertent entry to areas open to airport operations. Pay special attention to ensure that if construction traffic is to share or cross any ARFF routes that ARFF right of way is not impeded at any time, and that construction traffic on haul

roads does not interfere with NAVAIDs or approach surfaces of operational runways. Address whether access gates will be blocked or inoperative or if a rally point will be blocked or inaccessible.

- 2.9.2.4 Marking and lighting of vehicles in accordance with AC 150/5210-5, *Painting, Marking, and Lighting of Vehicles Used on an Airport*.
- 2.9.2.5 Description of proper vehicle operations on various areas under normal, lost communications, and emergency conditions.
- 2.9.2.6 Required escorts.
- 2.9.2.7 **Training Requirements for Vehicle Drivers to Ensure Compliance with the Airport Operator's Vehicle Rules and Regulations.**  
Specific training should be provided to vehicle operators, including those providing escorts. See AC 150/5210-20, *Ground Vehicle Operations on Airports*, for information on training and records maintenance requirements.
- 2.9.2.8 **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 the movement/position of all escorted vehicles at any given time. At non-towered airports, all aircraft movements and flight operations rely on aircraft operators to self-report their positions and intentions. However, there is no requirement for an aircraft to have radio communications. Because aircraft do not always broadcast their positions or intentions, visual checking, radio monitoring, and situational awareness of the surroundings is critical to safety.
- 2.9.2.9 **Two-Way Radio Communication Procedures.**
- 2.9.2.9.1 General.  
The airport operator must ensure that tenant and construction contractor personnel engaged in activities involving unescorted operation on aircraft movement areas observe the proper procedures for communications, including using appropriate radio frequencies at airports with and without ATCT. When operating vehicles on or near open runways or taxiways, construction personnel must understand the critical importance of maintaining radio contact, as directed by the airport operator, with:
1. Airport operations
  2. ATCT

3. Common Traffic Advisory Frequency (CTAF), which may include UNICOM, MULTICOM.
4. Automatic Terminal Information Service (ATIS). This frequency is useful for monitoring conditions on the airport. Local air traffic will broadcast information regarding construction related runway closures and “shortened” runways on the ATIS frequency.

2.9.2.9.2 Areas Requiring Two-Way Radio Communication with the ATCT.

Vehicular traffic crossing active movement areas must be controlled either by two-way radio with the ATCT, escort, flagman, signal light, or other means appropriate for the particular airport.

2.9.2.9.3 Frequencies to be Used.

The airport operator will specify the frequencies to be used by the contractor, which may include the CTAF for monitoring of aircraft operations. Frequencies may also be assigned by the airport operator for other communications, including any radio frequency in compliance with Federal Communications Commission requirements. At airports with an ATCT, the airport operator will specify the frequency assigned by the ATCT to be used between contractor vehicles and the ATCT.

2.9.2.9.4 Proper radio usage, including read back requirements.

2.9.2.9.5 Proper phraseology, including the International Phonetic Alphabet.

2.9.2.9.6 Light Gun Signals.

Even though radio communication is maintained, escort vehicle drivers must also familiarize themselves with ATCT light gun signals in the event of radio failure. See the FAA safety placard “Ground Vehicle Guide to Airport Signs and Markings.” This safety placard may be downloaded through the Runway Safety Program Web site at [http://www.faa.gov/airports/runway\\_safety/publications/](http://www.faa.gov/airports/runway_safety/publications/) (see “Signs & Markings Vehicle Dashboard Sticker”) or obtained from the FAA Airports Regional Office.

2.9.2.10 **Maintenance of the secured area of the airport, including:**

2.9.2.10.1 Fencing and Gates.

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. Temporary 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 Department of Transportation (DOT) document DOT/FAA/AR-



00/52, *Recommended Security Guidelines for Airport Planning and Construction*, provides more specific information on fencing. A copy of this document can be obtained from the Airport Consultants Council, Airports Council International, or American Association of Airport Executives.

2.9.2.10.2 Badging Requirements.

Airports subject to 49 CFR Part 1542, *Airport Security*, must meet standards for access control, movement of ground vehicles, and identification of construction contractor and tenant personnel.

2.10 **Wildlife Management.**

The CSPP and SPCD must be in accordance with the airport operator's wildlife hazard management plan, if applicable. See AC 150/5200-33, *Hazardous Wildlife Attractants On or Near Airports*, and CertAlert 98-05, *Grasses Attractive to Hazardous Wildlife*. Construction contractors must carefully control and continuously remove waste or loose materials that might attract wildlife. Contractor personnel must be aware of and avoid construction activities that can create wildlife hazards on airports, such as:

2.10.1 Trash.

Food scraps must be collected from construction personnel activity.

2.10.2 Standing Water.

2.10.3 Tall Grass and Seeds.

Requirements for turf establishment can be at odds with requirements for wildlife control. Grass seed is attractive to birds. Lower quality seed mixtures can contain seeds of plants (such as clover) that attract larger wildlife. Seeding should comply with the guidance in AC 150/5370-10, *Standards for Specifying Construction of Airports*, Item T-901, Seeding. Contact the local office of the United States Department of Agriculture Soil Conservation Service or the State University Agricultural Extension Service (County Agent or equivalent) for assistance and recommendations. These agencies can also provide liming and fertilizer recommendations.

2.10.4 Poorly Maintained Fencing and Gates.

See paragraph 2.9.2.10.1.

2.10.5 Disruption of Existing Wildlife Habitat.

While this will frequently be unavoidable due to the nature of the project, the CSPP should specify under what circumstances (location, wildlife type) contractor personnel should immediately notify the airport operator of wildlife sightings.

**2.11 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) or covers may be necessary to contain material that can be carried by wind into areas where aircraft operate. See AC 150/5210-24, *Foreign Object Debris (FOD) Management*.

**2.12 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. Transport and handling of other hazardous materials on an airport also requires special procedures. See AC 150/5320-15, *Management of Airport Industrial Waste*.

**2.13 Notification of Construction Activities.**

The CSPP and SPCD must detail procedures for the immediate notification of airport users and the FAA of any conditions adversely affecting the operational safety of the airport. It must address the notification actions described below, as applicable.

2.13.1 List of Responsible Representatives/points of contact for all involved parties, and procedures for contacting each of them, including after hours.

**2.13.2 NOTAMs.**

Only the airport operator may initiate or cancel NOTAMs on airport conditions, and is the only entity that can close or open a runway. The airport operator must coordinate the issuance, maintenance, and cancellation of NOTAMs about airport conditions resulting from construction activities with tenants and the local air traffic facility (control tower, approach control, or air traffic control center), and must either enter the NOTAM into NOTAM Manager, or 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 airport operator must file and maintain a list of authorized representatives with the FSS. Refer to AC 150/5200-28, *Notices to Airmen (NOTAMs) for Airport Operators*, for a sample NOTAM form. Only the FAA may issue or cancel NOTAMs on shutdown or irregular operation of FAA owned facilities. Any person having reason to believe that a NOTAM is missing, incomplete, or inaccurate must notify the airport operator. See paragraph 2.7.1.1 about issuing NOTAMs for partially closed runways versus runways with displaced thresholds.

2.13.3 Emergency notification procedures for medical, fire fighting, and police response.

2.13.4 Coordination with ARFF.

The CSPP must detail procedures for coordinating through the airport sponsor with ARFF personnel, mutual aid providers, and other emergency services if construction requires:

1. The deactivation and subsequent reactivation of water lines or fire hydrants, or
2. The rerouting, blocking and restoration of emergency access routes, or
3. The use of hazardous materials on the airfield.

2.13.5 Notification to the FAA.

2.13.5.1 **Part 77.**

Any person proposing construction or alteration of objects that affect navigable airspace, as defined in Part 77, must notify the FAA. This includes construction equipment and proposed parking areas for this equipment (i.e., cranes, graders, other equipment) on airports. FAA Form 7460-1, *Notice of Proposed Construction or Alteration*, can be used for this purpose and submitted to the appropriate FAA Airports Regional or District Office. See Appendix A to download the form. Further guidance is available on the FAA web site at [oeaaa.faa.gov](http://oeaaa.faa.gov).

2.13.5.2 **Part 157.**

With some exceptions, Title 14 CFR Part 157, *Notice of Construction, Alteration, Activation, and Deactivation of Airports*, requires that the airport operator notify the FAA in writing whenever a non-Federally funded project involves the construction of a new airport; the construction, realigning, altering, activating, or abandoning of a runway, landing strip, or associated taxiway; or the deactivation or abandoning of an entire airport. Notification involves submitting FAA Form 7480-1, *Notice of Landing Area Proposal*, to the nearest FAA Airports Regional or District Office. See Appendix A to download the form.

2.13.5.3 **NAVAIDs.**

For emergency (short-notice) notification about impacts to both airport owned and FAA owned NAVAIDs, contact: 866-432-2622.

2.13.5.3.1 Airport Owned/FAA Maintained.

If construction operations require a shutdown of 24 hours or greater in duration, or more than 4 hours daily on consecutive days, of a NAVAID owned by the airport but maintained by the FAA, provide a 45-day minimum notice to FAA ATO/Technical Operations prior to facility shutdown, using Strategic Event Coordination (SEC) Form 6000.26 contained within FAA Order 6000.15, *General Maintenance Handbook for National Airspace System (NAS) Facilities*.

#### 2.13.5.3.2 FAA Owned.

1. The airport operator must notify the appropriate FAA ATO Service Area Planning and Requirements (P&R) Group a minimum of 45 days prior to implementing an event that causes impacts to NAVAIDs, using SEC Form 6000.26.
2. Coordinate work for an FAA owned NAVAID shutdown with the local FAA ATO/Technical Operations office, including any necessary reimbursable agreements and flight checks. Detail procedures that address unanticipated utility outages and cable cuts that could impact FAA NAVAIDs. Refer to active Service Level Agreement with ATO for specifics.

### 2.14 **Inspection Requirements.**

#### 2.14.1 Daily Inspections.

Inspections should be conducted at least daily, but more frequently if necessary to ensure conformance with the CSPP. A sample checklist is provided in Appendix D, Construction Project Daily Safety Inspection Checklist. See also AC 150/5200-18, Airport Safety Self-Inspection. Airport operators holding a Part 139 certificate are required to conduct self-inspections during unusual conditions, such as construction activities, that may affect safe air carrier operations.

#### 2.14.2 Interim Inspections.

Inspections should be conducted of all areas to be (re)opened to aircraft traffic to ensure the proper operation of lights and signs, for correct markings, and absence of FOD. The contractor should conduct an inspection of the work area with airport operations personnel. The contractor should ensure that all construction materials have been secured, all pavement surfaces have been swept clean, all transition ramps have been properly constructed, and that surfaces have been appropriately marked for aircraft to operate safely. Only if all items on the list meet with the airport operator's approval should the air traffic control tower be notified to open the area to aircraft operations. The contractor should be required to retain a suitable workforce and the necessary equipment at the work area for any last minute cleanup that may be requested by the airport operator prior to opening the area.

#### 2.14.3 Final Inspections.

New runways and extended runway closures may require safety inspections at certificated airports prior to allowing air carrier service. Coordinate with the FAA Airport Certification Safety Inspector (ACSI) to determine if a final inspection will be necessary.

**2.15 Underground Utilities.**

The CSPP and/or SPCD must include procedures for locating and protecting existing underground utilities, cables, wires, pipelines, and other underground facilities in excavation areas. This may involve coordinating with public utilities and FAA ATO/Technical Operations. Note that “One Call” or “Miss Utility” services do not include FAA ATO/Technical Operations.

**2.16 Penalties.**

The CSPP should detail penalty provisions for noncompliance with airport rules and regulations and the safety plans (for example, if a vehicle is involved in a runway incursion). Such penalties typically include rescission of driving privileges or access to the AOA.

**2.17 Special Conditions.**

The CSPP must detail any special conditions that affect the operation of the airport and will require the activation of any special procedures (for example, low-visibility operations, snow removal, aircraft in distress, aircraft accident, security breach, Vehicle / Pedestrian Deviation (VPD) and other activities requiring construction suspension/resumption).

**2.18 Runway and Taxiway Visual Aids.**

This includes marking, lighting, signs, and visual NAVAIDs. The CSPP must ensure that areas where aircraft will be operating are clearly and visibly separated from construction areas, including closed runways. Throughout the duration of the construction project, verify that these areas remain clearly marked and visible at all times and that marking, lighting, signs, and visual NAVAIDs that are to continue to perform their functions during construction remain in place and operational. Visual NAVAIDs that are not serving their intended function during construction must be temporarily disabled, covered, or modified as necessary. The CSPP must address the following, as appropriate:

**2.18.1 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, and other wind currents and constructed of materials that will minimize damage to an aircraft in the event of inadvertent contact. Items used to secure such markings must be of a color similar to the marking.

**2.18.2 Markings.**

During the course of construction projects, temporary pavement markings are often required to allow for aircraft operations during or between work periods. During the design phase of the project, the designer should coordinate with the project manager,

airport operations, airport users, the FAA Airports project manager, and Airport Certification Safety Inspector for Part 139 airports to determine minimum temporary markings. The FAA Airports project manager will, wherever a runway is closed, coordinate with the appropriate FAA Flight Standards Office and disseminate findings to all parties. Where possible, the temporary markings on finish grade pavements should be placed to mirror the dimensions of the final markings. Markings must be in compliance with the standards of AC 150/5340-1, *Standards for Airport Markings*, except as noted herein. 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. (See paragraph 2.18.2.1.2.)

#### 2.18.2.1 **Closed Runways and Taxiways.**

##### 2.18.2.1.1 Permanently Closed Runways.

For runways, obliterate the threshold marking, runway designation marking, and touchdown zone markings, and place an X at each end and at 1,000-foot (300 m) intervals. For a multiple runway environment, if the lighted X on a designated number will be located in the RSA of an adjacent active runway, locate the lighted X farther down the closed runway to clear the RSA of the active runway. In addition, the closed runway numbers located in the RSA of an active runway must be marked with a flat yellow X.

##### 2.18.2.1.2 Temporarily Closed Runways.

For runways that have been temporarily closed, place an X at each end of the runway directly on or as near as practicable to the runway designation numbers. For a multiple runway environment, if the lighted X on a designated number will be located in the RSA of an adjacent active runway, locate the lighted X farther down the closed runway to clear the RSA of the active runway. In addition, the closed runway numbers located in the RSA of an active runway must be marked with a flat yellow X. See Figure 2-3. See also paragraph 2.18.3.3.

##### 2.18.2.1.3 Partially Closed Runways and Displaced Thresholds.

When threshold markings are needed to identify the temporary beginning of the runway that is available for landing, the markings must comply with AC 150/5340-1. An X is not used on a partially closed runway or a runway with a displaced threshold. See paragraph 2.7.1.1 for the difference between partially closed runways and runways with displaced thresholds. Because of the temporary nature of threshold displacement due to construction, it is not necessary to re-adjust the existing runway centerline markings to meet standard spacing for a runway with a visual approach. Some of the requirements below may be waived in the cases of low-activity airports and/or short duration changes that are measured in days rather than weeks. Consider whether the presence of an airport traffic

control tower allows for the development of special procedures. Contact the appropriate FAA Airports Regional or District Office for assistance.

**Figure 2-3. Markings for a Temporarily Closed Runway**

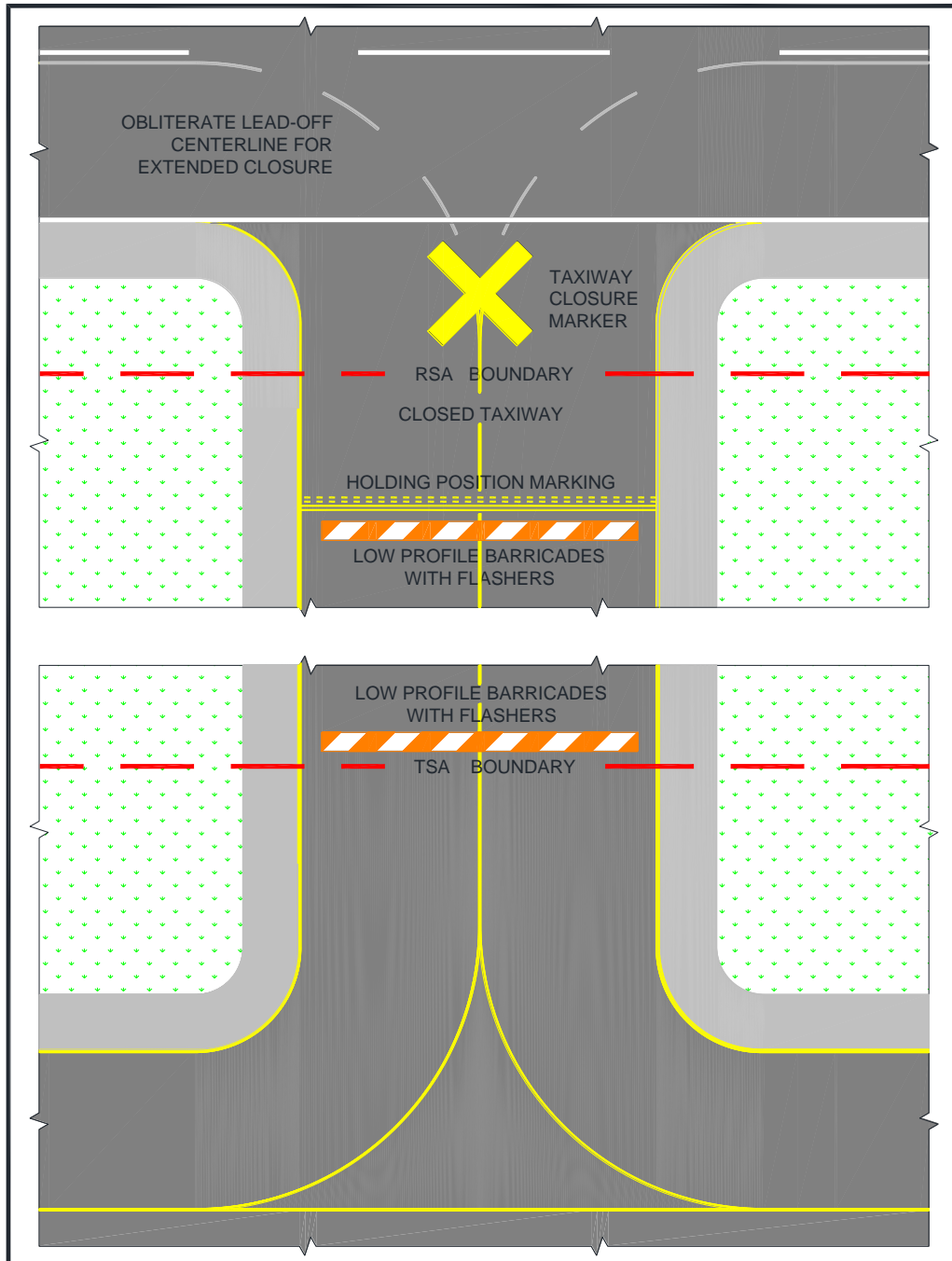


1. **Partially Closed Runways.** Pavement markings for temporary closed portions of the runway consist of a runway threshold bar, runway designation, and yellow chevrons to identify pavement areas that are unsuitable for takeoff or landing (see [AC 150/5340-1](#)). Obliterate or cover markings prior to the moved threshold. Existing touchdown zone markings beyond the moved threshold may remain in place. Obliterate aiming point markings. Issue appropriate NOTAMs regarding any nonstandard markings. See [Figure 2-4](#).
2. **Displaced Thresholds.** Pavement markings for a displaced threshold consist of a runway threshold bar, runway designation, and white arrowheads with and without arrow shafts. These markings are required to identify the portion of the runway before the displaced threshold to provide centerline guidance for pilots during approaches, takeoffs, and landing rollouts from the opposite direction. See [AC 150/5340-1](#). Obliterate markings prior to the displaced threshold. Existing touchdown zone markings beyond the displaced threshold may remain in place. Obliterate aiming point markings. Issue appropriate NOTAMs regarding any nonstandard markings. See [Figure 2-2](#).

2.18.2.1.4 Taxiways.

1. **Permanently Closed Taxiways.** *AC 150/5300-13 Airport Design*, notes that it is preferable to remove the pavement, but for pavement that is to remain, place an X at the entrance to both ends of the closed section. Obliterate taxiway centerline markings, including runway leadoff lines, leading to the closed taxiway. See [Figure 2-4](#).

**Figure 2-4. Temporary Taxiway Closure**





2. **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 and taxiway to taxiway turns, leading to the closed section. Always obliterate runway lead-off lines for high speed exits, regardless of the duration of the closure. 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. See Figure 2-4.

2.18.2.1.5 Temporarily Closed Airport.

When the airport is closed temporarily, mark all the runways as closed.

- 2.18.2.2 If unable to paint temporary markings on the pavement, construct them from any of the following materials: fabric, colored plastic, painted sheets of plywood, or similar materials. They must be properly configured and appropriately secured to prevent movement by prop wash, jet blast, or other wind currents. Items used to secure such markings must be of a color similar to the marking.

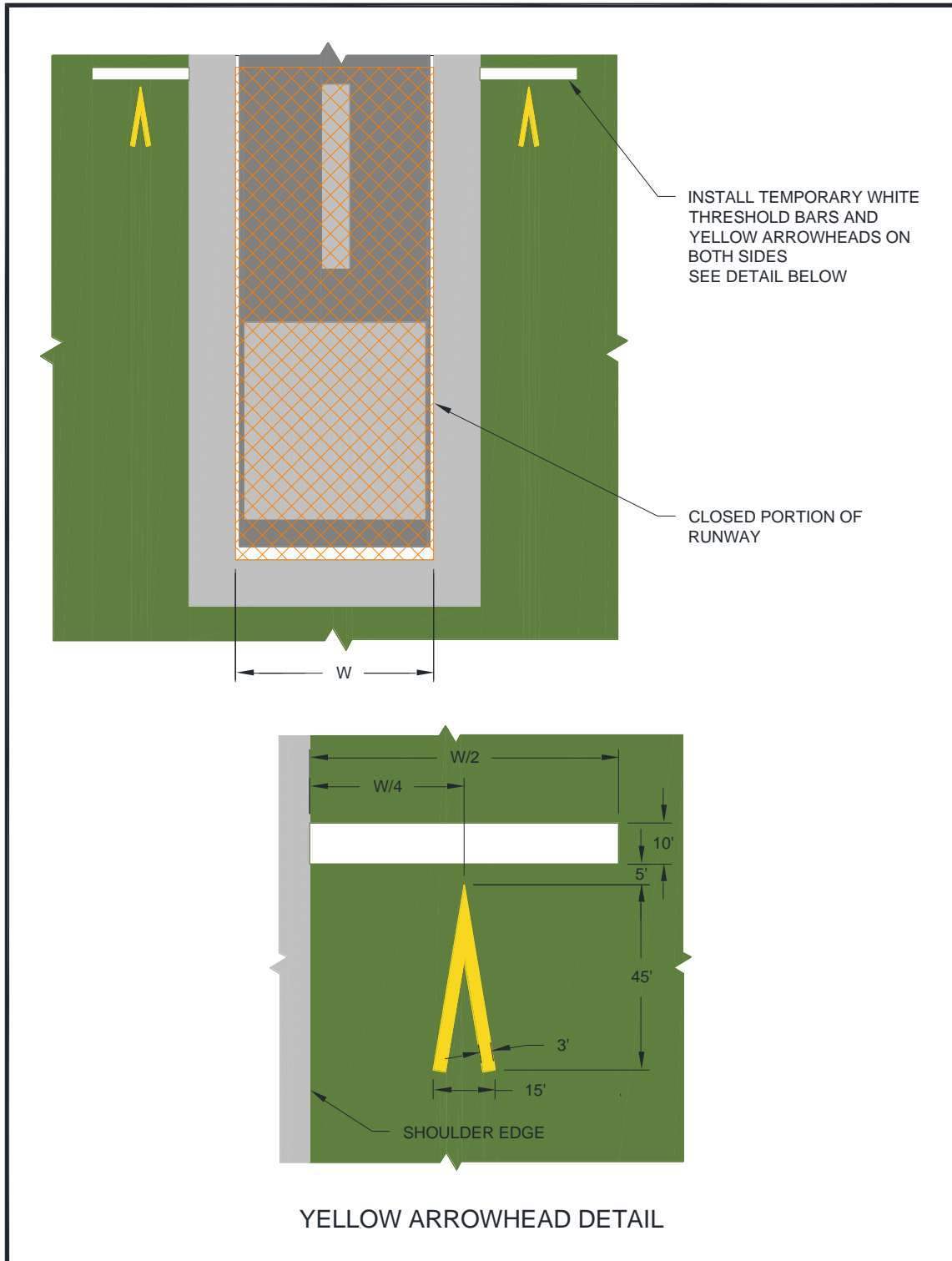
- 2.18.2.3 It may be necessary to remove or cover runway markings, including but not limited to, runway designation markings, threshold markings, centerline markings, edge stripes, touchdown zone markings and aiming point markings, depending on the length of construction and type of activity at the airport. When removing runway markings, apply the same treatment to areas between stripes or numbers, as the cleaned area will appear to pilots as a marking in the shape of the treated area.

- 2.18.2.4 If it is not possible to install threshold bars, chevrons, and arrows on the pavement, “temporary outboard white threshold bars and yellow arrowheads”, see Figure 2-5, may be used. Locate them outside of the runway pavement surface on both sides of the runway. The dimensions must be as shown in Figure 2-5. If the markings are not discernible on grass or snow, apply a black background with appropriate material over the ground to ensure they are clearly visible.

- 2.18.2.5 The application rate of paint to mark a short-term temporary runway and taxiway markings may deviate from the standard (see Item P-620, “Runway and Taxiway Painting,” in AC 150/5370-10), but the dimensions must meet the existing standards. When applying temporary markings at night, it is recommended that the fast curing, Type II paint be used to help offset the higher humidity and cooler temperatures often experienced at night. Diluting the paint will substantially increase cure time and is not recommended. Glass beads are not recommended for temporary markings. Striated markings may also be used for certain temporary markings. AC

150/5340-1, *Standards for Airport Markings*, has additional guidance on temporary markings.

**Figure 2-5. Temporary Outboard White Threshold Bars and Yellow Arrowheads**



### 2.18.3 Lighting and Visual NAVAIDs.

This paragraph refers to standard runway and taxiway lighting systems. See below for hazard lighting. Lighting installation must be in conformance with AC 150/5340-30, *Design and Installation Details for Airport Visual Aids*, and fixture design in conformance with AC 150/5345-50, *Specification for Portable Runway and Taxiway Lights*. When disconnecting runway and taxiway lighting fixtures, disconnect the associated isolation transformers. See AC 150/5340-26, *Maintenance of Airport Visual Aid Facilities*, for disconnect procedures and safety precautions. Alternately, cover the light fixture in such a way as to prevent light leakage. Avoid removing the lamp from energized fixtures because an excessive number of isolation transformers with open secondaries may damage the regulators and/or increase the current above its normal value. Secure, identify, and place any above ground temporary wiring in conduit to prevent electrocution and fire ignition sources. Maintain mandatory hold signs to operate normally in any situation where pilots or vehicle drivers could mistakenly be in that location. At towered airports certificated under Part 139, holding position signs are required to be illuminated on open taxiways crossing to closed or inactive runways. If the holding position sign is installed on the runway circuit for the closed runway, install a jumper to the taxiway circuit to provide power to the holding position sign for nighttime operations. Where it is not possible to maintain power to signs that would normally be operational, install barricades to exclude aircraft. Figure 2-1, Figure 2-2, Figure 2-3, and Figure 2-4 illustrate temporary changes to lighting and visual NAVAIDs.

#### 2.18.3.1 **Permanently Closed Runways and Taxiways.**

For runways and taxiways that have been permanently closed, disconnect the lighting circuits.

#### 2.18.3.2 **Temporarily Closed Runways and New Runways Not Yet Open to Air Traffic.**

If available, use a lighted X, both at night and during the day, placed at each end of the runway on or near the runway designation numbers facing the approach. (Note that the lighted X must be illuminated at all times that it is on a runway.) The use of a lighted X is required if night work requires runway lighting to be on. See AC 150/5345-55, *Specification for L-893, Lighted Visual Aid to Indicate Temporary Runway Closure*. For runways that have been temporarily closed, but for an extended period, and for those with pilot controlled lighting, disconnect the lighting circuits or secure switches to prevent inadvertent activation. For runways that will be opened periodically, coordinate procedures with the FAA air traffic manager or, at airports without an ATCT, the airport operator. Activate stop bars if available. Figure 2-6 shows a lighted X by day. Figure 2-7 shows a lighted X at night.

**Figure 2-6. Lighted X in Daytime****Figure 2-7. Lighted X at Night**

### 2.18.3.3 **Partially Closed Runways and Displaced Thresholds.**

When a runway is partially closed, a portion of the pavement is unavailable for any aircraft operation, meaning taxiing and landing or taking off in either direction. A displaced threshold, by contrast, is put in place to ensure obstacle clearance by landing aircraft. The pavement prior to the displaced threshold is available for takeoff in the direction of the displacement, and for landing and takeoff in the opposite direction. Misunderstanding this difference and issuance of a subsequently inaccurate NOTAM can result in a hazardous situation. For both partially

closed runways and displaced thresholds, approach lighting systems at the affected end must be placed out of service.

- 2.18.3.3.1 Partially Closed Runways.  
Disconnect edge and threshold lights on that part of the runway at and behind the threshold (that is, the portion of the runway that is closed). Alternately, cover the light fixtures in such a way as to prevent light leakage. See Figure 2-1.
- 2.18.3.3.2 Temporary Displaced Thresholds.  
Edge lighting in the area of the displacement emits red light in the direction of approach and yellow light (white for visual runways) in the opposite direction. If the displacement is 700 feet or less, blank out centerline lights in the direction of approach or place the centerline lights out of service. If the displacement is over 700 feet, place the centerline lights out of service. See AC 150/5340-30 for details on lighting displaced thresholds. See Figure 2-2.
- 2.18.3.3.3 Temporary runway thresholds and runway ends must be lighted if the runway is lighted and it is the intended threshold for night landings or instrument meteorological conditions.
- 2.18.3.3.4 A temporary threshold on an unlighted runway may be marked by retroreflective, elevated markers in addition to markings noted in paragraph 2.18.2.1.3. Markers seen by aircraft on approach are green. Markers at the rollout end of the runway are red. At certificated airports, temporary elevated threshold markers must be mounted with a frangible fitting (see 14 CFR Part 139.309). At non-certificated airports, the temporary elevated threshold markings may either be mounted with a frangible fitting or be flexible. See AC 150/5345-39, *Specification for L-853, Runway and Taxiway Retroreflective Markers*.
- 2.18.3.3.5 Temporary threshold lights and runway end lights and related visual NAVAIDs are installed outboard of the edges of the full-strength pavement only when they cannot be installed on the pavement. They are installed with bases at grade level or as low as possible, but not more than 3 inch (7.6 cm) above ground. (The standard above ground height for airport lighting fixtures is 14 inches (35 cm)). When any portion of a base is above grade, place properly compacted fill around the base to minimize the rate of gradient change so aircraft can, in an emergency, cross at normal landing or takeoff speeds without incurring significant damage. See AC 150/5370-10.
- 2.18.3.3.6 Maintain threshold and edge lighting color and spacing standards as described in AC 150/5340-30. Battery powered, solar, or portable lights that meet the criteria in AC 150/5345-50 may be used. These systems are intended primarily for visual flight rules (VFR) aircraft operations but may

be used for instrument flight rules (IFR) aircraft operations, upon individual approval from the Flight Standards Division of the applicable FAA Regional Office.

- 2.18.3.3.7 When runway thresholds are temporarily displaced, reconfigure yellow lenses (caution zone), as necessary, and place the centerline lights out of service.
- 2.18.3.3.8 Relocate the Visual Glide Slope Indicator (VGSI), such as Visual Approach Slope Indicator (VASI) and Precision Approach Path Indicator (PAPI); other airport lights, such as Runway End Identifier Lights (REIL); and approach lights to identify the temporary threshold. Another option is to disable the VGSI or any equipment that would give misleading indications to pilots as to the new threshold location. Installation of temporary visual aids may be necessary to provide adequate guidance to pilots on approach to the affected runway. If the FAA owns and operates the VGSI, coordinate its installation or disabling with the local ATO/Technical Operations Office. Relocation of such visual aids will depend on the duration of the project and the benefits gained from the relocation, as this can result in great expense. See FAA JO 6850.2, *Visual Guidance Lighting Systems*, for installation criteria for FAA owned and operated NAVAIDs.
- 2.18.3.3.9 Issue a NOTAM to inform pilots of temporary lighting conditions.

2.18.3.4 **Temporarily Closed Taxiways.**

If possible, deactivate the taxiway lighting circuits. When deactivation is not possible (for example other taxiways on the same circuit are to remain open), cover the light fixture in a way as to prevent light leakage.

2.18.4 Signs.

To the extent possible, signs must be in conformance with AC 150/5345-44, *Specification for Runway and Taxiway Signs*, and AC 150/5340-18, *Standard for Airport Sign Systems*.

2.18.4.1 **Existing Signs.**

Runway exit signs are to be covered for closed runway exits. Outbound destination signs are to be covered for closed runways. Any time a sign does not serve its normal function or would provide conflicting information, it must be covered or removed to prevent misdirecting pilots. Note that information signs identifying a crossing taxiway continue to perform their normal function even if the crossing taxiway is closed. For long term construction projects, consider relocating signs, especially runway distance remaining signs.

#### 2.18.4.2 **Temporary Signs.**

Orange construction signs comprise a message in black on an orange background. Orange construction signs may help pilots be aware of changed conditions. The airport operator may choose to introduce these signs as part of a movement area construction project to increase situational awareness when needed. Locate signs outside the taxiway safety limits and ahead of construction areas so pilots can take timely action. Use temporary signs judiciously, striking a balance between the need for information and the increase in pilot workload. When there is a concern of pilot “information overload,” the applicability of mandatory hold signs must take precedence over orange construction signs recommended during construction. Temporary signs must meet the standards for such signs in Engineering Brief 93, *Guidance for the Assembly and Installation of Temporary Orange Construction Signs*. Many criteria in AC 150/5345-44, *Specification for Runway and Taxiway Signs*, are referenced in the Engineering Brief. Permissible sign legends are:

1. CONSTRUCTION AHEAD,
2. CONSTRUCTION ON RAMP, and
3. RWY XX TAKEOFF RUN AVAILABLE XXX FT.

Phasing, supported by drawings and sign schedule, for the installation of orange construction signs must be included in the CSPP or SPCD.

##### 2.18.4.2.1 Takeoff Run Available (TORA) signs.

**Recommended:** Where a runway has been shortened for takeoff, install orange TORA signs well before the hold lines, such as on a parallel taxiway prior to a turn to a runway hold position. See EB 93 for sign size and location.

##### 2.18.4.2.2 Sign legends are shown in Figure F-1.

**Note:** See Figure E-1, Figure E-2, Figure E-3, Figure F-2, and Figure F-3 for examples of orange construction sign locations.

#### 2.19 **Marking and Signs for Access Routes.**

The CSPP should indicate that pavement markings and signs for construction personnel will conform to AC 150/5340-18 and, to the extent practicable, with the Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCD) and/or State highway specifications. Signs adjacent to areas used by aircraft must comply with the frangibility requirements of AC 150/5220-23, *Frangible Connections*, which may require modification to size and height guidance in the MUTCD.

## 2.20 **Hazard Marking, Lighting and Signing.**

2.20.1 Hazard marking, lighting, and signing prevent pilots from entering areas closed to aircraft, and prevent construction personnel from entering areas open to aircraft. The CSPP must specify prominent, comprehensible warning indicators for any area affected by construction that is normally accessible to aircraft, personnel, or vehicles. Hazard marking and lighting must also be specified to identify open manholes, small areas under repair, stockpiled material, waste areas, and areas subject to jet blast. Also consider less obvious construction-related hazards and include markings to identify FAA, airport, and National Weather Service facilities cables and power lines; instrument landing system (ILS) critical areas; airport surfaces, such as RSA, OFA, and OFZ; and other sensitive areas to make it easier for contractor personnel to avoid these areas.

### 2.20.2 Equipment.

#### 2.20.2.1 **Barricades.**

Low profile barricades, including traffic cones, (weighted or sturdily attached to the surface) are acceptable methods used to identify and define the limits of construction and hazardous areas on airports. Careful consideration must be given to selecting equipment that poses the least danger to aircraft but is sturdy enough to remain in place when subjected to typical winds, prop wash and jet blast. The spacing of barricades must be such that a breach is physically prevented barring a deliberate act. For example, if barricades are intended to exclude aircraft, gaps between barricades must be smaller than the wingspan of the smallest aircraft to be excluded; if barricades are intended to exclude vehicles, gaps between barricades must be smaller than the width of the excluded vehicles, generally 4 feet (1.2 meters). Provision must be made for ARFF access if necessary. If barricades are intended to exclude pedestrians, they must be continuously linked. Continuous linking may be accomplished through the use of ropes, securely attached to prevent FOD.

#### 2.20.2.2 **Lights.**

Lights must be red, either steady burning or flashing, and must meet the luminance requirements of the State Highway Department. Batteries powering lights will last longer if lights flash. Lights must be mounted on barricades and spaced at no more than 10 feet (3 meters). Lights must be operated between sunset and sunrise and during periods of low visibility whenever the airport is open for operations. They may be operated by photocell, but this may require that the contractor turn them on manually during periods of low visibility during daytime hours.

#### 2.20.2.3 **Supplement Barricades with Signs (for example) As Necessary.**

Examples are “No Entry” and “No Vehicles.” Be aware of the increased effects of wind and jet blast on barricades with attached signs.



#### 2.20.2.4 **Air Operations Area – General.**

Barricades are not permitted in any active safety area or on the runway side of a runway hold line. Within a runway or taxiway object free area, and on aprons, use orange traffic cones, flashing or steady burning red lights as noted above, highly reflective collapsible barricades marked with diagonal, alternating orange and white stripes; and/or signs to separate all construction/maintenance areas from the movement area. Barricades may be supplemented with alternating orange and white flags at least 20 by 20 inch (50 by 50 cm) square and securely fastened to eliminate FOD. All barricades adjacent to any open runway or taxiway / taxilane safety area, or apron must be as low as possible to the ground, and no more than 18 inches high, exclusive of supplementary lights and flags. Barricades must be of low mass; easily collapsible upon contact with an aircraft or any of its components; and weighted or sturdily attached to the surface to prevent displacement from prop wash, jet blast, wing vortex, and other surface wind currents. If affixed to the surface, they must be frangible at grade level or as low as possible, but not to exceed 3 inch (7.6 cm) above the ground. [Figure 2-8](#) and [Figure 2-9](#) show sample barricades with proper coloring and flags.

**Figure 2-8. Interlocking Barricades**



**Figure 2-9. Low Profile Barricades****2.20.2.5 Air Operations Area – Runway/Taxiway Intersections.**

Use highly reflective barricades with lights to close taxiways leading to closed runways. Evaluate all operating factors when determining how to mark temporary closures that can last from 10 to 15 minutes to a much longer period of time. However, even for closures of relatively short duration, close all taxiway/runway intersections with barricades. The use of traffic cones is appropriate for short duration closures.

**2.20.2.6 Air Operations Area – Other.**

Beyond runway and taxiway object free areas and aprons, barricades intended for construction vehicles and personnel may be many different shapes and made from various materials, including railroad ties, sawhorses, jersey barriers, or barrels.

**2.20.2.7 Maintenance.**

The construction specifications must include a provision requiring the contractor to have a person on call 24 hours a day for emergency maintenance of airport hazard lighting and barricades. The contractor must file the contact person's information with the airport operator. Lighting should be checked for proper operation at least once per day, preferably at dusk.

**2.21 Work Zone Lighting for Nighttime Construction.**

Lighting equipment must adequately illuminate the work area if the construction is to be performed during nighttime hours. Refer to [AC 150/5370-10](#) for minimum illumination levels for nighttime paving projects. Additionally, it is recommended that all support equipment, except haul trucks, be equipped with artificial illumination to safely

illuminate the area immediately surrounding their work areas. The lights should be positioned to provide the most natural color illumination and contrast with a minimum of shadows. The spacing must be determined by trial. Light towers should be positioned and adjusted to aim away from ATCT cabs and active runways to prevent blinding effects. Shielding may be necessary. Light towers should be removed from the construction site when the area is reopened to aircraft operations. Construction lighting units should be identified and generally located on the construction phasing plans in relationship to the ATCT and active runways and taxiways.

## 2.22 **Protection of Runway and Taxiway Safety Areas.**

Runway and taxiway safety areas, OFZs, OFAs, and approach surfaces are described in [AC 150/5300-13](#). Protection of these areas includes limitations on the location and height of equipment and stockpiled material. An FAA airspace study may be required. Coordinate with the appropriate FAA Airports Regional or District Office if there is any doubt as to requirements or dimensions (see paragraph [2.13.5](#)) as soon as the location and height of materials or equipment are known. The CSPP should include drawings showing all safety areas, object free areas, obstacle free zones and approach departure surfaces affected by construction.

### 2.22.1 Runway Safety Area (RSA).

A runway safety area is the defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway (see [AC 150/5300-13](#)). Construction activities within the existing RSA are subject to the following conditions:

- 2.22.1.1 No construction may occur within the existing RSA while the runway is open for aircraft operations. The RSA dimensions may be temporarily adjusted if the runway is restricted to aircraft operations requiring an RSA that is equal to the RSA width and length beyond the runway ends available during construction. (See [AC 150/5300-13](#)). The temporary use of declared distances and/or partial runway closures may provide the necessary RSA under certain circumstances. Coordinate with the appropriate FAA Airports Regional or District Office to have declared distances information published, and appropriate NOTAMs issued. See [AC 150/5300-13](#) for guidance on the use of declared distances.
- 2.22.1.2 The airport operator must coordinate the adjustment of RSA dimensions as permitted above with the appropriate FAA Airports Regional or District Office and the local FAA air traffic manager and issue a NOTAM.
- 2.22.1.3 The CSPP and SPCD must provide procedures for ensuring adequate distance for protection from blasting operations, if required by operational considerations.

#### 2.22.1.4 **Excavations.**

2.22.1.4.1 Open trenches or excavations are not permitted within the RSA while the runway is open. Backfill trenches before the runway is opened. If backfilling excavations before the runway must be opened is impracticable, cover the excavations appropriately. Covering for open trenches must be designed to allow the safe operation of the heaviest aircraft operating on the runway across the trench without damage to the aircraft.

2.22.1.4.2 Construction contractors must prominently mark open trenches and excavations at the construction site with red or orange flags, as approved by the airport operator, and light them with red lights during hours of restricted visibility or darkness.

#### 2.22.1.5 **Erosion Control.**

Soil erosion must be controlled to maintain RSA standards, that is, the RSA must be cleared and graded and have no potentially hazardous ruts, humps, depressions, or other surface variations, and capable, under dry conditions, of supporting snow removal equipment, aircraft rescue and fire fighting equipment, and the occasional passage of aircraft without causing structural damage to the aircraft.

#### 2.22.2 Runway Object Free Area (ROFA).

Construction, including excavations, may be permitted in the ROFA. However, equipment must be removed from the ROFA when not in use, and material should not be stockpiled in the ROFA if not necessary. Stockpiling material in the OFA requires submittal of a 7460-1 form and justification provided to the appropriate FAA Airports Regional or District Office for approval.

#### 2.22.3 Taxiway Safety Area (TSA).

2.22.3.1 A taxiway safety area is a defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an airplane unintentionally departing the taxiway. (See AC 150/5300-13.) Since the width of the TSA is equal to the wingspan of the design aircraft, no construction may occur within the TSA while the taxiway is open for aircraft operations. The TSA dimensions may be temporarily adjusted if the taxiway is restricted to aircraft operations requiring a TSA that is equal to the TSA width available during construction. Give special consideration to TSA dimensions at taxiway turns and intersections. (see AC 150/5300-13).

2.22.3.2 The airport operator must coordinate the adjustment of the TSA width as permitted above with the appropriate FAA Airports Regional or District Office and the FAA air traffic manager and issue a NOTAM.

2.22.3.3 The CSPP and SPCD must provide procedures for ensuring adequate distance for protection from blasting operations.

2.22.3.4 **Excavations.**

1. Curves. Open trenches or excavations are not permitted within the TSA while the taxiway is open. Trenches should be backfilled before the taxiway is opened. If backfilling excavations before the taxiway must be opened is impracticable, cover the excavations appropriately. Covering for open trenches must be designed to allow the safe operation of the heaviest aircraft operating on the taxiway across the trench without damage to the aircraft.
2. Straight Sections. Open trenches or excavations are not permitted within the TSA while the taxiway is open for unrestricted aircraft operations. Trenches should be backfilled before the taxiway is opened. If backfilling excavations before the taxiway must be opened is impracticable, cover the excavations to allow the safe passage of ARFF equipment and of the heaviest aircraft operating on the taxiway across the trench without causing damage to the equipment or aircraft. In rare circumstances where the section of taxiway is indispensable for aircraft movement, open trenches or excavations may be permitted in the TSA while the taxiway is open to aircraft operations, subject to the following restrictions:
  - a. Taxiing speed is limited to 10 mph.
  - b. Appropriate NOTAMs are issued.
  - c. Marking and lighting meeting the provisions of paragraphs 2.18 and 2.20 are implemented.
  - d. Low mass, low-profile lighted barricades are installed.
  - e. Appropriate temporary orange construction signs are installed.
3. Construction contractors must prominently mark open trenches and excavations at the construction site with red or orange flags, as approved by the airport operator, and light them with red lights during hours of restricted visibility or darkness.

2.22.3.5 **Erosion control.**

Soil erosion must be controlled to maintain TSA standards, that is, the TSA must be cleared and graded and have no potentially hazardous ruts, humps, depressions, or other surface variations, and capable, under dry conditions, of supporting snow removal equipment, aircraft rescue and firefighting equipment, and the occasional passage of aircraft without causing structural damage to the aircraft.

#### 2.22.4 Taxiway Object Free Area (TOFA).

Unlike the Runway Object Free Area, aircraft wings regularly penetrate the taxiway object free area during normal operations. Thus, the restrictions are more stringent. Except as provided below, no construction may occur within the taxiway object free area while the taxiway is open for aircraft operations.

- 2.22.4.1 The taxiway object free area dimensions may be temporarily adjusted if the taxiway is restricted to aircraft operations requiring a taxiway object free area that is equal to the taxiway object free area width available. Give special consideration to TOFA dimensions at taxiway turns and intersections.
- 2.22.4.2 Offset taxiway centerline and edge pavement markings (do not use glass beads) may be used as a temporary measure to provide the required taxiway object free area. Where offset taxiway pavement markings are provided, centerline lighting, centerline reflectors, or taxiway edge reflectors are required. Existing lighting that does not coincide with the temporary markings must be taken out of service.
- 2.22.4.3 Construction activity, including open excavations, may be accomplished without adjusting the width of the taxiway object free area, subject to the following restrictions:
  - 2.22.4.3.1 Taxiing speed is limited to 10 mph.
  - 2.22.4.3.2 NOTAMs issued advising taxiing pilots of hazard and recommending reduced taxiing speeds on the taxiway.
  - 2.22.4.3.3 Marking and lighting meeting the provisions of paragraphs 2.18 and 2.20 are implemented.
  - 2.22.4.3.4 If desired, appropriate orange construction signs are installed. See paragraph 2.18.4.2 and Appendix F.
  - 2.22.4.3.5 Five-foot clearance is maintained between equipment and materials and any part of an aircraft (includes wingtip overhang). If such clearance can only be maintained if an aircraft does not have full use of the entire taxiway width (with its main landing gear at the edge of the usable pavement), then it will be necessary to move personnel and equipment for the passage of that aircraft.
  - 2.22.4.3.6 Flaggers furnished by the contractor must be used to direct and control construction equipment and personnel to a pre-established setback distance for safe passage of aircraft, and airline and/or airport personnel. Flaggers must also be used to direct taxiing aircraft. Due to liability issues, the airport operator should require airlines to provide flaggers for directing taxiing aircraft.

### 2.22.5 Obstacle Free Zone (OFZ).

In general, personnel, material, and/or equipment may not penetrate the OFZ while the runway is open for aircraft operations. If a penetration to the OFZ is necessary, it may be possible to continue aircraft operations through operational restrictions. Coordinate with the FAA through the appropriate FAA Airports Regional or District Office.

### 2.22.6 Runway Approach/Departure Areas and Clearways.

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

2.22.6.1 Construction activity in a runway approach/departure area may result in the need to partially close a runway or displace the existing runway threshold. Partial runway closure, displacement of the runway threshold, as well as closure of the complete runway and other portions of the movement area also require coordination through the airport operator with the appropriate FAA air traffic manager (FSS if non-towered) and ATO/Technical Operations (for affected NAVAIDS) and airport users.

#### 2.22.6.2 **Caution About Partial Runway Closures.**

When filing a NOTAM for a partial runway closure, clearly state that the portion of pavement located prior to the threshold is not available for landing and departing traffic. In this case, the threshold has been moved for both landing and takeoff purposes (this is different than a displaced threshold). There may be situations where the portion of closed runway is available for taxiing only. If so, the NOTAM must reflect this condition).

#### 2.22.6.3 **Caution About Displaced Thresholds.**

Implementation of a displaced threshold affects runway length available for aircraft landing over the displacement. Depending on the reason for the displacement (to provide obstruction clearance or RSA), such a displacement may also require an adjustment in the landing distance available and accelerate-stop distance available in the opposite direction. If project scope includes personnel, equipment, excavation, or other work within the existing RSA of any usable runway end, do not implement a displaced threshold unless arrivals and departures toward the construction activity are prohibited. Instead, implement a partial closure.

### 2.23 **Other Limitations on Construction.**

The CSPP must specify any other limitations on construction, including but not limited to:

### 2.23.1 Prohibitions.

- 2.23.1.1 No use of tall equipment (cranes, concrete pumps, and so on) unless a 7460-1 determination letter is issued for such equipment.
- 2.23.1.2 No use of open flame welding or torches unless fire safety precautions are provided and the airport operator has approved their use.
- 2.23.1.3 No use of electrical blasting caps on or within 1,000 feet (300 meters) of the airport property. See AC 150/5370-10.

### 2.23.2 Restrictions.

- 2.23.2.1 Construction suspension required during specific airport operations.
- 2.23.2.2 Areas that cannot be worked on simultaneously.
- 2.23.2.3 Day or night construction restrictions.
- 2.23.2.4 Seasonal construction restrictions.
- 2.23.2.5 Temporary signs not approved by the airport operator.
- 2.23.2.6 Grades changes that could result in unplanned effects on NAVAIDs.



## CHAPTER 3. GUIDELINES FOR WRITING A CSPP

### 3.1 **General Requirements.**

The CSPP is a standalone document written to correspond with the subjects outlined in paragraph 2.4. The CSPP is organized by numbered sections corresponding to each subject listed in paragraph 2.4, and described in detail in paragraphs 2.5 - 2.23. Each section number and title in the CSPP matches the corresponding subject outlined in paragraph 2.4 (for example, 1. Coordination, 2. Phasing, 3. Areas and Operations Affected by the Construction Activity, and so on). With the exception of the project scope of work outlined in Section 2. Phasing, only subjects specific to operational safety during construction should be addressed.

### 3.2 **Applicability of Subjects.**

Each section should, to the extent practical, focus on the specific subject. Where an overlapping requirement spans several sections, the requirement should be explained in detail in the most applicable section. A reference to that section should be included in all other sections where the requirement may apply. For example, the requirement to protect existing underground FAA ILS cables during trenching operations could be considered FAA ATO coordination (Coordination, paragraph 2.5.3), an area and operation affected by the construction activity (Areas and Operations Affected by the Construction Activity, paragraph 2.7.1.4), a protection of a NAVAID (Protection of Navigational Aids (NAVAIDs), paragraph 2.8), or a notification to the FAA of construction activities (Notification of Construction Activities, paragraph 2.13.5.3.2). However, it is more specifically an underground utility requirement (Underground Utilities, paragraph 2.15). The procedure for protecting underground ILS cables during trenching operations should therefore be described in 2.4.2.11: “The contractor must coordinate with the local FAA System Support Center (SSC) to mark existing ILS cable routes along Runway 17-35. The ILS cables will be located by hand digging whenever the trenching operation moves within 10 feet of the cable markings.” All other applicable sections should include a reference to 2.4.2.11: “ILS cables shall be identified and protected as described in 2.4.2.11” or “See 2.4.2.11 for ILS cable identification and protection requirements.” Thus, the CSPP should be considered as a whole, with no need to duplicate responses to related issues.

### 3.3 **Graphical Representations.**

Construction safety drawings should be included in the CSPP as attachments. When other graphical representations will aid in supporting written statements, the drawings, diagrams, and/or photographs should also be attached to the CSPP. References should be made in the CSPP to each graphical attachment and may be made in multiple sections.

### 3.4 **Reference Documents.**

The CSPP must not incorporate a document by reference unless reproduction of the material in that document is prohibited. In that case, either copies of or a source for the referenced document must be provided to the contractor. Where this AC recommends references (e.g. as in paragraph 3.9) the intent is to include a reference to the corresponding section in the CSPP, not to this Advisory Circular.

### 3.5 **Restrictions.**

The CSPP should not be considered as a project design review document. The CSPP should also avoid mention of permanent (“as-built”) features such as pavements, markings, signs, and lighting, except when such features are intended to aid in maintaining operational safety during the construction.

### 3.6 **Coordination.**

Include in this section a detailed description of conferences and meetings to be held both before and during the project. Include appropriate information from AC 150/5370-12. Discuss coordination procedures and schedules for each required FAA ATO Technical Operations shutdown and restart and all required flight inspections.

### 3.7 **Phasing.**

Include in this section a detailed scope of work description for the project as a whole and each phase of work covered by the CSPP. This includes all locations and durations of the work proposed. Attach drawings to graphically support the written scope of work. Detail in this section the sequenced phases of the proposed construction. Include a reference to paragraph 3.8, as appropriate.

### 3.8 **Areas and Operations Affected by Construction.**

Focus in this section on identifying the areas and operations affected by the construction. Describe corresponding mitigation that is not covered in detail elsewhere in the CSPP. Include references to paragraphs below as appropriate. Attach drawings as necessary to graphically describe affected areas and mechanisms proposed. See Appendix F for sample operational effects tables and figures.

### 3.9 **NAVAID Protection.**

List in this section all NAVAID facilities that will be affected by the construction. Identify NAVAID facilities that will be placed out of service at any time prior to or during construction activities. Identify individuals responsible for coordinating each shutdown and when each facility will be out of service. Include a reference to paragraph 3.6 for FAA ATO NAVAID shutdown, restart, and flight inspection coordination. Outline in detail procedures to protect each NAVAID facility remaining in service from interference by construction activities. Include a reference to paragraph 3.14 for the

issuance of NOTAMs as required. Include a reference to paragraph 3.16 for the protection of underground cables and piping serving NAVAIDs. If temporary visual aids are proposed to replace or supplement existing facilities, include a reference to paragraph 3.19. Attach drawings to graphically indicate the affected NAVAIDs and the corresponding critical areas.

### 3.10 **Contractor Access.**

This will necessarily be the most extensive section of the CSPP. Provide sufficient detail so that a contractor not experienced in working on airports will understand the unique restrictions such work will require. Due to this extent, it should be broken down into subsections as described below:

#### 3.10.1 Location of Stockpiled Construction Materials.

Describe in this section specific locations for stockpiling material. Note any height restrictions on stockpiles. Include a reference to paragraph 3.21 for hazard marking and lighting devices used to identify stockpiles. Include a reference to paragraph 3.11 for provisions to prevent stockpile material from becoming wildlife attractants. Include a reference to paragraph 3.12 for provisions to prevent stockpile material from becoming FOD. Attach drawings to graphically indicate the stockpile locations.

#### 3.10.2 Vehicle and Pedestrian Operations.

While there are many items to be addressed in this major subsection of the CSPP, all are concerned with one main issue: keeping people and vehicles from areas of the airport where they don't belong. This includes preventing unauthorized entry to the AOA and preventing the improper movement of pedestrians or vehicles on the airport. In this section, focus on mechanisms to prevent construction vehicles and workers traveling to and from the worksite from unauthorized entry into movement areas. Specify locations of parking for both employee vehicles and construction equipment, and routes for access and haul roads. In most cases, this will best be accomplished by attaching a drawing. Quote from AC 150/5210-5 specific requirements for contractor vehicles rather than referring to the AC as a whole, and include special requirements for identifying HAZMAT vehicles. Quote from, rather than incorporate by reference, AC 150/5210-20 as appropriate to address the airport's rules for ground vehicle operations, including its training program. Discuss the airport's recordkeeping system listing authorized vehicle operators.

#### 3.10.3 Two-Way Radio Communications.

Include a special section to identify all individuals who are required to maintain communications with Air Traffic (AT) at airports with active towers, or monitor CTAF at airports without or with closed ATCT. Include training requirements for all individuals required to communicate with AT. Individuals required to monitor AT frequencies should also be identified. If construction employees are also required to communicate by radio with Airport Operations, this procedure should be described in detail. Usage of vehicle mounted radios and/or portable radios should be addressed. Communication procedures for the event of disabled radio communication (that is, light

signals, telephone numbers, others) must be included. All radio frequencies should be identified (Tower, Ground Control, CTAF, UNICOM, ATIS, and so on).

#### 3.10.4 Airport Security.

Address security as it applies to vehicle and pedestrian operations. Discuss TSA requirements, security badging requirements, perimeter fence integrity, gate security, and other needs. Attach drawings to graphically indicate secured and/or Security Identification Display Areas (SIDA), perimeter fencing, and available access points.

#### 3.11 **Wildlife Management.**

Discuss in this section wildlife management procedures. Describe the maintenance of existing wildlife mitigation devices, such as perimeter fences, and procedures to limit wildlife attractants. Include procedures to notify Airport Operations of wildlife encounters. Include a reference to paragraph 3.10 for security (wildlife) fence integrity maintenance as required.

#### 3.12 **FOD Management.**

In this section, discuss methods to control and monitor FOD: worksite housekeeping, ground vehicle tire inspections, runway sweeps, and so on. Include a reference to paragraph 3.15 for inspection requirements as required.

#### 3.13 **HAZMAT Management.**

Describe in this section HAZMAT management procedures: fuel deliveries, spill recovery procedures, Safety Data Sheet (SDS), Material Safety Data Sheet (MSDS) or Product Safety Data Sheet (PSDS) availability, and other considerations. Any specific airport HAZMAT restrictions should also be identified. Include a reference to paragraph 3.10 for HAZMAT vehicle identification requirements. Quote from, rather than incorporate by reference, AC 150/5320-15.

#### 3.14 **Notification of Construction Activities.**

List in this section the names and telephone numbers of points of contact for all parties affected by the construction project. We recommend a single list that includes all telephone numbers required under this section. Include emergency notification procedures for all representatives of all parties potentially impacted by the construction. Identify individual representatives – and at least one alternate – for each party. List both on-duty and off-duty contact information for each individual, including individuals responsible for emergency maintenance of airport construction hazard lighting and barricades. Describe procedures to coordinate immediate response to events that might adversely affect the operational safety of the airport (such as interrupted NAVAID service). Explain requirements for and the procedures for the issuance of Notices to Airmen (NOTAMs), notification to FAA required by 14 CFR Part 77 and Part 157 and in the event of affected NAVAIDs. For NOTAMs, identify an individual, and at least one alternate, responsible for issuing and cancelling each specific type of Notice to

Airmen (NOTAM) required. Detail notification methods for police, fire fighting, and medical emergencies. This may include 911, but should also include direct phone numbers of local police departments and nearby hospitals. Identify the E911 address of the airport and the emergency access route via haul roads to the construction site. Require the contractor to have this information available to all workers. The local Poison Control number should be listed. Procedures regarding notification of Airport Operations and/or the ARFF Department of such emergencies should be identified, as applicable. If airport radio communications are identified as a means of emergency notification, include a reference to paragraph 3.10. Differentiate between emergency and nonemergency notification of ARFF personnel, the latter including activities that affect ARFF water supplies and access roads. Identify the primary ARFF contact person and at least one alternate. If notification is to be made through Airport Operations, then detail this procedure. Include a method of confirmation from the ARFF department.

**3.15 Inspection Requirements.**

Describe in this section inspection requirements to ensure airfield safety compliance. Include a requirement for routine inspections by the resident engineer (RE) or other airport operator's representative and the construction contractors. If the engineering consultants and/or contractors have a Safety Officer who will conduct such inspections, identify this individual. Describe procedures for special inspections, such as those required to reopen areas for aircraft operations. Part 139 requires daily airfield inspections at certificated airports, but these may need to be more frequent when construction is in progress. Discuss the role of such inspections on areas under construction. Include a requirement to immediately remedy any deficiencies, whether caused by negligence, oversight, or project scope change.

**3.16 Underground Utilities.**

Explain how existing underground utilities will be located and protected. Identify each utility owner and include contact information for each company/agency in the master list. Address emergency response procedures for damaged or disrupted utilities. Include a reference to paragraph 3.14 for notification of utility owners of accidental utility disruption as required.

**3.17 Penalties.**

Describe in this section specific penalties imposed for noncompliance with airport rules and regulations, including the CSPP: SIDA violations, VPD, and others.

**3.18 Special Conditions.**

Identify any special conditions that may trigger specific safety mitigation actions outlined in this CSPP: low visibility operations, snow removal, aircraft in distress, aircraft accident, security breach, VPD, and other activities requiring construction suspension/resumption. Include a reference to paragraph 3.10 for compliance with airport safety and security measures and for radio communications as required. Include

a reference to paragraph 3.14 for emergency notification of all involved parties, including police/security, ARFF, and medical services.

**3.19 Runway and Taxiway Visual Aids.**

Include marking, lighting, signs, and visual NAVAIDS. Detail temporary runway and taxiway marking, lighting, signs, and visual NAVAIDS required for the construction. Discuss existing marking, lighting, signs, and visual NAVAIDS that are temporarily, altered, obliterated, or shut down. Consider non-federal facilities and address requirements for reimbursable agreements necessary for alteration of FAA facilities and for necessary flight checks. Identify temporary TORA signs or runway distance remaining signs if appropriate. Identify required temporary visual NAVAIDS such as REIL or PAPI. Quote from, rather than incorporate by reference, AC 150/5340-1, Standards for Airport Markings; AC 150/5340-18, Standards for Airport Sign Systems; and AC 150/5340-30, as required. Attach drawings to graphically indicate proposed marking, lighting, signs, and visual NAVAIDS.

**3.20 Marking and Signs for Access Routes.**

Detail plans for marking and signs for vehicle access routes. To the extent possible, signs should be in conformance with the Federal Highway Administration MUTCD and/or State highway specifications, not hand lettered. Detail any modifications to the guidance in the MUTCD necessary to meet frangibility/height requirements.

**3.21 Hazard Marking and Lighting.**

Specify all marking and lighting equipment, including when and where each type of device is to be used. Specify maximum gaps between barricades and the maximum spacing of hazard lighting. Identify one individual and at least one alternate responsible for maintenance of hazard marking and lighting equipment in the master telephone list. Include a reference to paragraph 3.14. Attach drawings to graphically indicate the placement of hazard marking and lighting equipment.

**3.22 Work Zone Lighting for Nighttime Construction.**

If work is to be conducted at night, specify all lighting equipment, including when and where each type of device is to be used. Indicate the direction lights are to be aimed and any directions that aiming of lights is prohibited. Specify any shielding necessary in instances where aiming is not sufficient to prevent interference with air traffic control and aircraft operations. Attach drawings to graphically indicate the placement and aiming of lighting equipment. Where the plan only indicates directions that aiming of lights is prohibited, the placement and positioning of portable lights must be proposed by the Contractor and approved by the airport operator's representative each time lights are relocated or repositioned.

**3.23 Protection of Runway and Taxiway Safety Areas.**

This section should focus exclusively on procedures for protecting all safety areas, including those altered by the construction: methods of demarcation, limit of access, movement within safety areas, stockpiling and trenching restrictions, and so on. Reference AC 150/5300-13, as required. Include a reference to paragraph 3.10 for procedures regarding vehicle and personnel movement within safety areas. Include a reference to paragraph 3.10 for material stockpile restrictions as required. Detail requirements for trenching, excavations, and backfill. Include a reference to paragraph 3.21 for hazard marking and lighting devices used to identify open excavations as required. If runway and taxiway closures are proposed to protect safety areas, or if temporary displaced thresholds and/or revised declared distances are used to provide the required Runway Safety Area, include a reference to paragraphs 3.14 and 3.19. Detail procedures for protecting the runway OFZ, runway OFA, taxiway OFA and runway approach surfaces including those altered by the construction: methods of demarcation, limit of cranes, storage of equipment, and so on. Quote from, rather than incorporate by reference, AC 150/5300-13, as required. Include a reference to paragraph 3.24 for height (i.e., crane) restrictions as required. One way to address the height of equipment that will move during the project is to establish a three-dimensional “box” within which equipment will be confined that can be studied as a single object. Attach drawings to graphically indicate the safety area, OFZ, and OFA boundaries.

**3.24 Other Limitations on Construction.**

This section should describe what limitations must be applied to each area of work and when each limitation will be applied: limitations due to airport operations, height (i.e., crane) restrictions, areas which cannot be worked at simultaneously, day/night work restrictions, winter construction, and other limitations. Include a reference to paragraph 3.7 for project phasing requirements based on construction limitations as required.

Page Intentionally Blank



**APPENDIX A. RELATED READING MATERIAL**

Obtain the latest version of the following free publications from the FAA on its Web site at <http://www.faa.gov/airports/>.

**Table A-1. FAA Publications**

<b>Number</b>	<b>Title and Description</b>
<u>AC 150/5200-28</u>	<i>Notices to Airmen (NOTAMs) for Airport Operators</i> Guidance for using the NOTAM System in airport reporting.
<u>AC 150/5200-30</u>	<i>Airport Field Condition Assessments and Winter Operations Safety</i> Guidance for airport owners/operators on the development of an acceptable airport snow and ice control program and on appropriate field condition reporting procedures.
<u>AC 150/5200-33</u>	<i>Hazardous Wildlife Attractants On or Near Airports</i> Guidance on locating certain land uses that might attract hazardous wildlife to public-use airports.
<u>AC 150/5210-5</u>	<i>Painting, Marking, and Lighting of Vehicles Used on an Airport</i> Guidance, specifications, and standards for painting, marking, and lighting vehicles operating in the airport air operations areas.
<u>AC 150/5210-20</u>	<i>Ground Vehicle Operations to include Taxiing or Towing an Aircraft on Airports</i> Guidance to airport operators on developing ground vehicle operation training programs.
<u>AC 150/5300-13</u>	<i>Airport Design</i> FAA standards and recommendations for airport design. Establishes approach visibility minimums as an airport design parameter, and contains the Object Free area and the obstacle free-zone criteria.
<u>AC 150/5210-24</u>	<i>Airport Foreign Object Debris (FOD) Management</i> Guidance for developing and managing an airport foreign object debris (FOD) program

Number	Title and Description
<u>AC 150/5320-15</u>	<p><i>Management of Airport Industrial Waste</i></p> <p>Basic information on the characteristics, management, and regulations of industrial wastes generated at airports. Guidance for developing a Storm Water Pollution Prevention Plan (SWPPP) that applies best management practices to eliminate, prevent, or reduce pollutants in storm water runoff with particular airport industrial activities.</p>
<u>AC 150/5340-1</u>	<p><i>Standards for Airport Markings</i></p> <p>FAA standards for the siting and installation of signs on airport runways and taxiways.</p>
<u>AC 150/5340-18</u>	<p><i>Standards for Airport Sign Systems</i></p> <p>FAA standards for the siting and installation of signs on airport runways and taxiways.</p>
<u>AC 150/5345-28</u>	<p><i>Precision Approach Path Indicator (PAPI) Systems</i></p> <p>FAA standards for PAPI systems, which provide pilots with visual glide slope guidance during approach for landing.</p>
<u>AC 150/5340-30</u>	<p><i>Design and Installation Details for Airport Visual Aids</i></p> <p>Guidance and recommendations on the installation of airport visual aids.</p>
<u>AC 150/5345-39</u>	<p><i>Specification for L-853, Runway and Taxiway Retroreflective Markers</i></p>
<u>AC 150/5345-44</u>	<p><i>Specification for Runway and Taxiway Signs</i></p> <p>FAA specifications for unlighted and lighted signs for taxiways and runways.</p>
<u>AC 150/5345-53</u>	<p><i>Airport Lighting Equipment Certification Program</i></p> <p>Details on the Airport Lighting Equipment Certification Program (ALECP).</p>
<u>AC 150/5345-50</u>	<p><i>Specification for Portable Runway and Taxiway Lights</i></p> <p>FAA standards for portable runway and taxiway lights and runway end identifier lights for temporary use to permit continued aircraft operations while all or part of a runway lighting system is inoperative.</p>
<u>AC 150/5345-55</u>	<p><i>Specification for L-893, Lighted Visual Aid to Indicate Temporary Runway Closure</i></p>

<b>Number</b>	<b>Title and Description</b>
<u>AC 150/5370-10</u>	<i>Standards for Specifying Construction of Airports</i> Standards for construction of airports, including earthwork, drainage, paving, turfing, lighting, and incidental construction.
<u>AC 150/5370-12</u>	<i>Quality Management for Federally Funded Airport Construction Projects</i>
EB 93	<i>Guidance for the Assembly and Installation of Temporary Orange Construction Signs</i>
FAA Order 5200.11	<u>FAA Airports (ARP) Safety Management System (SMS)</u> Basics for implementing SMS within ARP. Includes roles and responsibilities of ARP management and staff as well as other FAA lines of business that contribute to the ARP SMS.
FAA Certalert 98-05	<i>Grasses Attractive to Hazardous Wildlife</i> Guidance on grass management and seed selection.
FAA Form 7460-1	<u>Notice of Proposed Construction or Alteration</u>
FAA Form 7480-1	<u>Notice of Landing Area Proposal</u>
FAA Form 6000.26	National NAS Strategic Interruption Service Level Agreement, Strategic Events Coordination, Airport Sponsor Form

Obtain the latest version of the following free publications from the Electronic Code of Federal Regulations at <http://www.ecfr.gov/>.

**Table A-2. Code of Federal Regulation**

<b>Number</b>	<b>Title</b>
Title 14 CFR Part 77	Safe, Efficient Use and Preservation of the Navigable Airspace
Title 14 CFR Part 139	Certification of Airports
Title 49 CFR Part 1542	Airport Security

Obtain the latest version of the Manual on Uniform Traffic Control Devices from the Federal Highway Administration at <http://mutcd.fhwa.dot.gov/>.

Page Intentionally Blank

**APPENDIX B. TERMS AND ACRONYMS****Table B-1. Terms and Acronyms**

<b>Term</b>	<b>Definition</b>
Form 7460-1	Notice of Proposed Construction or Alteration. For on-airport projects, the form submitted to the FAA regional or airports division office as formal written notification of any kind of construction or alteration of objects that affect navigable airspace, as defined in 14 CFR Part 77, <i>Safe, Efficient Use, and Preservation of the Navigable Airspace</i> . (See guidance available on the FAA web site at <a href="https://oeaaa.faa.gov">https://oeaaa.faa.gov</a> .) The form may be downloaded at <a href="http://www.faa.gov/airports/resources/forms/">http://www.faa.gov/airports/resources/forms/</a> , or filed electronically at: <a href="https://oeaaa.faa.gov">https://oeaaa.faa.gov</a> .
Form 7480-1	Notice of Landing Area Proposal. Form submitted to the FAA Airports Regional Division Office or Airports District Office as formal written notification whenever a project without an airport layout plan on file with the FAA involves the construction of a new airport; the construction, realigning, altering, activating, or abandoning of a runway, landing strip, or associated taxiway; or the deactivation or abandoning of an entire airport The form may be downloaded at <a href="http://www.faa.gov/airports/resources/forms/">http://www.faa.gov/airports/resources/forms/</a> .
Form 6000-26	Airport Sponsor Strategic Event Submission Form
AC	Advisory Circular
ACSI	Airport Certification Safety Inspector
ADG	Airplane Design Group
AIP	Airport Improvement Program
ALECP	Airport Lighting Equipment Certification Program
ANG	Air National Guard
AOA	Air Operations Area, as defined in 14 CFR Part 107. Means a portion of an airport, specified in the airport security program, in which security measures are carried out. This area includes aircraft movement areas, aircraft parking areas, loading ramps, and safety areas, and any adjacent areas (such as general aviation areas) that are not separated by adequate security systems, measures, or procedures. This area does not include the secured area of the airport terminal building.
ARFF	Aircraft Rescue and Fire Fighting
ARP	FAA Office of Airports
ASDA	Accelerate-Stop Distance Available
AT	Air Traffic
ATCT	Airport Traffic Control Tower
ATIS	Automatic Terminal Information Service
ATO	Air Traffic Organization
Certificated Airport	An airport that has been issued an Airport Operating Certificate by the FAA under

<b>Term</b>	<b>Definition</b>
	the authority of 14 CFR Part 139, <i>Certification of Airports</i> .
CFR	Code of Federal Regulations
Construction	The presence of construction-related personnel, equipment, and materials in any location that could infringe upon the movement of aircraft.
CSPP	Construction Safety and Phasing Plan. The overall plan for safety and phasing of a construction project developed by the airport operator, or developed by the airport operator's consultant and approved by the airport operator. It is included in the invitation for bids and becomes part of the project specifications.
CTAF	Common Traffic Advisory Frequency
Displaced Threshold	A threshold that is located at a point on the runway other than the designated beginning of the runway. The portion of pavement behind a displaced threshold is available for takeoffs in either direction or landing from the opposite direction.
DOT	Department of Transportation
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FOD	Foreign Object Debris/Damage
FSS	Flight Service Station
GA	General Aviation
HAZMAT	Hazardous Materials
HMA	Hot Mix Asphalt
IAP	Instrument Approach Procedures
IFR	Instrument Flight Rules
ILS	Instrument Landing System
LDA	Landing Distance Available
LOC	Localizer antenna array
Movement Area	The runways, taxiways, and other areas of an airport that are used for taxiing or hover taxiing, air taxiing, takeoff, and landing of aircraft, exclusive of loading aprons and aircraft parking areas (reference 14 CFR Part 139).
MSDS	Material Safety Data Sheet
MUTCD	Manual on Uniform Traffic Control Devices
NAVAID	Navigation Aid
NAVAID Critical Area	An area of defined shape and size associated with a NAVAID that must remain clear and graded to avoid interference with the electronic signal.
Non-Movement Area	The area inside the airport security fence exclusive of the Movement Area. It is important to note that the non-movement area includes pavement traversed by aircraft.

Term	Definition
NOTAM	Notices to Airmen
Obstruction	Any object/obstacle exceeding the obstruction standards specified by 14 CFR Part 77, subpart C.
OCC	Operations Control Center
OE / AAA	Obstruction Evaluation / Airport Airspace Analysis
OFA	Object Free Area. An area on the ground centered on the runway, taxiway, or taxi lane centerline provided to enhance safety of aircraft operations by having the area free of objects except for those objects that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes. (See <a href="#">AC 150/5300-13</a> for additional guidance on OFA standards and wingtip clearance criteria.)
OFZ	Obstacle Free Zone. The airspace below 150 ft (45 m) above the established airport elevation and along the runway and extended runway centerline that is required to be clear of all objects, except for frangible visual NAVAIDs that need to be located in the OFZ because of their function, in order to provide clearance protection for aircraft landing or taking off from the runway and for missed approaches. The OFZ is subdivided as follows: Runway OFZ, Inner Approach OFZ, Inner Transitional OFZ, and Precision OFZ. Refer to <a href="#">AC 150/5300-13</a> for guidance on OFZ.
OSHA	Occupational Safety and Health Administration
OTS	Out of Service
P&R	Planning and Requirements Group
NPI	NAS Planning & Integration
PAPI	Precision Approach Path Indicator
PFC	Passenger Facility Charge
PLASI	Pulse Light Approach Slope Indicator
Project Proposal Summary	A clear and concise description of the proposed project or change that is the object of Safety Risk Management.
RA	Reimbursable Agreement
RE	Resident Engineer
REIL	Runway End Identifier Lights
RNAV	Area Navigation
ROFA	Runway Object Free Area
RSA	Runway Safety Area. A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway, in accordance with <a href="#">AC 150/5300-13</a> .
SDS	Safety Data Sheet
SIDA	Security Identification Display Area
SMS	Safety Management System

<b>Term</b>	<b>Definition</b>
SPCD	Safety Plan Compliance Document. Details developed and submitted by a contractor to the airport operator for approval providing details on how the performance of a construction project will comply with the CSPP.
SRM	Safety Risk Management
SSC	System Support Center
Taxiway Safety Area	A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an airplane unintentionally departing the taxiway, in accordance with <a href="#">AC 150/5300-13</a> .
TDG	Taxiway Design Group
Temporary	Any condition that is not intended to be permanent.
Temporary Runway End	The beginning of that portion of the runway available for landing and taking off in one direction, and for landing in the other direction. Note the difference from a displaced threshold.
Threshold	The beginning of that portion of the runway available for landing. In some instances, the landing threshold may be displaced.
TODA	Takeoff Distance Available
TOFA	Taxiway Object Free Area
TORA	Takeoff Run Available. The length of the runway less any length of runway unavailable and/or unsuitable for takeoff run computations. See <a href="#">AC 150/5300-13</a> for guidance on declared distances.
TSA	Taxiway Safety Area, or Transportation Security Administration
UNICOM	A radio communications system of a type used at small airports.
VASI	Visual Approach Slope Indicator
VGSI	Visual Glide Slope Indicator. A device that provides a visual glide slope indicator to landing pilots. These systems include precision approach path indicator (PAPI), visual approach slope indicator (VASI), and pulse light approach slope indicator (PLASI).
VFR	Visual Flight Rules
VOR	Very High Frequency Omnidirectional Radio Range
VPD	Vehicle / Pedestrian Deviation



**APPENDIX C. SAFETY AND PHASING PLAN CHECKLIST**

This appendix is keyed to Chapter 2. In the electronic version of this AC, clicking on the paragraph designation in the Reference column will access the applicable paragraph. There may be instances where the CSPP requires provisions that are not covered by the list in this appendix.

This checklist is intended as an aid, not a required submittal.

**Table C-1. CSPP Checklist**

Coordination	Reference	Addressed?			Remarks
		Yes	No	NA	
<b>General Considerations</b>					
Requirements for predesign, prebid, and preconstruction conferences to introduce the subject of airport operational safety during construction are specified.	<u>2.5</u>				
Operational safety is a standing agenda item for construction progress meetings.	<u>2.5</u>				
Scheduling of the construction phases is properly addressed.	<u>2.6</u>				
Any formal agreements are established.	<u>2.5.3</u>				
<b>Areas and Operations Affected by Construction Activity</b>					
Drawings showing affected areas are included.	<u>2.7.1</u>				
Closed or partially closed runways, taxiways, and aprons are depicted on drawings.	<u>2.7.1.1</u>				
Access routes used by ARFF vehicles affected by the project are addressed.	<u>2.7.1.2</u>				
Access routes used by airport and airline support vehicles affected by the project are addressed.	<u>2.7.1.3</u>				
Underground utilities, including water supplies for firefighting and drainage.	<u>2.7.1.4</u>				

Coordination	Reference	Addressed?			Remarks
		Yes	No	NA	
Approach/departure surfaces affected by heights of temporary objects are addressed.	<u>2.7.1.5</u>				
Construction areas, storage areas, and access routes near runways, taxiways, aprons, or helipads are properly depicted on drawings.	<u>2.7.1</u>				
Temporary changes to taxi operations are addressed.	<u>2.7.2.1</u>				
Detours for ARFF and other airport vehicles are identified.	<u>2.7.2.2</u>				
Maintenance of essential utilities and underground infrastructure is addressed.	<u>2.7.2.3</u>				
Temporary changes to air traffic control procedures are addressed.	<u>2.7.2.4</u>				
<b>NAVAIDs</b>					
Critical areas for NAVAIDs are depicted on drawings.	<u>2.8</u>				
Effects of construction activity on the performance of NAVAIDs, including unanticipated power outages, are addressed.	<u>2.8</u>				
Protection of NAVAID facilities is addressed.	<u>2.8</u>				
The required distance and direction from each NAVAID to any construction activity is depicted on drawings.	<u>2.8</u>				
Procedures for coordination with FAA ATO/Technical Operations, including identification of points of contact, are included.	<u>2.8, 2.13.1, 2.13.5.3.1, 2.18.1</u>				
<b>Contractor Access</b>					
The CSPP addresses areas to which contractor will have access and how	<u>2.9</u>				

Coordination	Reference	Addressed?			Remarks
		Yes	No	NA	
the areas will be accessed.					
The application of 49 CFR Part 1542 Airport Security, where appropriate, is addressed.	<u>2.9</u>				
The location of stockpiled construction materials is depicted on drawings.	<u>2.9.1</u>				
The requirement for stockpiles in the ROFA to be approved by FAA is included.	<u>2.9.1</u>				
Requirements for proper stockpiling of materials are included.	<u>2.9.1</u>				
Construction site parking is addressed.	<u>2.9.2.1</u>				
Construction equipment parking is addressed.	<u>2.9.2.2</u>				
Access and haul roads are addressed.	<u>2.9.2.3</u>				
A requirement for marking and lighting of vehicles to comply with <i>AC 150/5210-5, Painting, Marking and Lighting of Vehicles Used on an Airport</i> , is included.	<u>2.9.2.4</u>				
Proper vehicle operations, including requirements for escorts, are described.	<u>2.9.2.5, 2.9.2.6</u>				
Training requirements for vehicle drivers are addressed.	<u>2.9.2.7</u>				
Two-way radio communications procedures are described.	<u>2.9.2.9</u>				
Maintenance of the secured area of the airport is addressed.	<u>2.9.2.10</u>				
<b>Wildlife Management</b>					
The airport operator's wildlife management procedures are addressed.	<u>2.10</u>				

Coordination	Reference	Addressed?			Remarks
		Yes	No	NA	
<b>Foreign Object Debris Management</b>					
The airport operator's FOD management procedures are addressed.	<u>2.11</u>				
<b>Hazardous Materials Management</b>					
The airport operator's hazardous materials management procedures are addressed.	<u>2.12</u>				
<b>Notification of Construction Activities</b>					
Procedures for the immediate notification of airport user and local FAA of any conditions adversely affecting the operational safety of the airport are detailed.	<u>2.13</u>				
Maintenance of a list by the airport operator of the responsible representatives/points of contact for all involved parties and procedures for contacting them 24 hours a day, seven days a week is specified.	<u>2.13.1</u>				
A list of local ATO/Technical Operations personnel is included.	<u>2.13.1</u>				
A list of ATCT managers on duty is included.	<u>2.13.1</u>				
A list of authorized representatives to the OCC is included.	<u>2.13.2</u>				
Procedures for coordinating, issuing, maintaining and cancelling by the airport operator of NOTAMS about airport conditions resulting from construction are included.	<u>2.8, 2.13.2, 2.18.3.3.9</u>				
Provision of information on closed or hazardous conditions on airport movement areas by the airport operator to the OCC is specified.	<u>2.13.2</u>				
Emergency notification procedures for medical, fire fighting, and police	<u>2.13.3</u>				

Coordination	Reference	Addressed?			Remarks
		Yes	No	NA	
response are addressed.					
Coordination with ARFF personnel for non-emergency issues is addressed.	<u>2.13.4</u>				
Notification to the FAA under 14 CFR parts 77 and 157 is addressed.	<u>2.13.5</u>				
Reimbursable agreements for flight checks and/or design and construction for FAA owned NAVAIDs are addressed.	<u>2.13.5.3.2</u>				
<b>Inspection Requirements</b>					
Daily and interim inspections by both the airport operator and contractor are specified.	<u>2.14.1, 2.14.2</u>				
Final inspections at certificated airports are specified when required.	<u>2.14.3</u>				
<b>Underground Utilities</b>					
Procedures for protecting existing underground facilities in excavation areas are described.	<u>2.15</u>				
<b>Penalties</b>					
Penalty provisions for noncompliance with airport rules and regulations and the safety plans are detailed.	<u>2.16</u>				
<b>Special Conditions</b>					
Any special conditions that affect the operation of the airport or require the activation of any special procedures are addressed.	<u>2.17</u>				
<b>Runway and Taxiway Visual Aids - Marking, Lighting, Signs, and Visual NAVAIDs</b>					
The proper securing of temporary airport markings, lighting, signs, and visual NAVAIDs is addressed.	<u>2.18.1</u>				
Frangibility of airport markings, lighting, signs, and visual NAVAIDs is specified.	<u>2.18.1, 2.18.3, 2.18.4.2, 2.20.2.4</u>				

Coordination	Reference	Addressed?			Remarks
		Yes	No	NA	
The requirement for markings to be in compliance with <u>AC 150/5340-1</u> , <i>Standards for Airport Markings</i> , is specified.	<u>2.18.2</u>				
Detailed specifications for materials and methods for temporary markings are provided.	<u>2.18.2</u>				
The requirement for lighting to conform to <u>AC 150/5340-30</u> , <i>Design and Installation Details for Airport Visual Aids</i> ; <u>AC 150/5345-50</u> , <i>Specification for Portable Runway and Taxiway Lights</i> ; and <u>AC 150/5345-53</u> , <i>Airport Lighting Certification Program</i> , is specified.	<u>2.18.3</u>				
The use of a lighted X is specified where appropriate.	<u>2.18.2.1.2</u> , <u>2.18.3.2</u>				
The requirement for signs to conform to <u>AC 150/5345-44</u> , <i>Specification for Runway and Taxiway Signs</i> ; <u>AC 150/5340-18</u> , <i>Standards for Airport Sign Systems</i> ; and <u>AC 150/5345-53</u> , <i>Airport Lighting Certification Program</i> , is specified.	<u>2.18.4</u>				
<b>Marking and Signs For Access Routes</b>					
The CSPP specifies that pavement markings and signs intended for construction personnel should conform to <u>AC 150/5340-18</u> and, to the extent practicable, with the MUTCD and/or State highway specifications.	<u>2.18.4.2</u>				
<b>Hazard Marking and Lighting</b>					
Prominent, comprehensible warning indicators for any area affected by construction that is normally accessible to aircraft, personnel, or vehicles are specified.	<u>2.20.1</u>				

Coordination	Reference	Addressed?			Remarks
		Yes	No	NA	
Hazard marking and lighting are specified to identify open manholes, small areas under repair, stockpiled material, and waste areas.	<u>2.20.1</u>				
The CSPP considers less obvious construction-related hazards.	<u>2.20.1</u>				
Equipment that poses the least danger to aircraft but is sturdy enough to remain in place when subjected to typical winds, prop wash and jet blast is specified.	<u>2.20.2.1</u>				
The spacing of barricades is specified such that a breach is physically prevented barring a deliberate act.	<u>2.20.2.1</u>				
Red lights meeting the luminance requirements of the State Highway Department are specified.	<u>2.20.2.2</u>				
Barricades, temporary markers, and other objects placed and left in areas adjacent to any open runway, taxiway, taxi lane, or apron are specified to be as low as possible to the ground, and no more than 18 inch high.	<u>2.20.2.3</u>				
Barricades are specified to indicate construction locations in which no part of an aircraft may enter.	<u>2.20.2.3</u>				
Highly reflective barriers with lights are specified to barricade taxiways leading to closed runways.	<u>2.20.2.5</u>				
Markings for temporary closures are specified.	<u>2.20.2.5</u>				
The provision of a contractor's representative on call 24 hours a day for emergency maintenance of airport hazard lighting and barricades is specified.	<u>2.20.2.7</u>				

Coordination	Reference	Addressed?			Remarks
		Yes	No	NA	
<b>Work Zone Lighting for Nighttime Construction</b>					
If work is to be conducted at night, the CSPP identifies construction lighting units and their general locations and aiming in relationship to the ATCT and active runways and taxiways.	<u>2.21</u>				
<b>Protection of Runway and Taxiway Safety Areas</b>					
The CSPP clearly states that no construction may occur within a safety area while the associated runway or taxiway is open for aircraft operations.	<u>2.22.1.1,</u> <u>2.22.3.1</u>				
The CSPP specifies that the airport operator coordinates the adjustment of RSA or TSA dimensions with the ATCT and the appropriate FAA Airports Regional or District Office and issues a local NOTAM.	<u>2.22.1.2,</u> <u>2.22.3.2</u>				
Procedures for ensuring adequate distance for protection from blasting operations, if required by operational considerations, are detailed.	<u>2.22.3.3</u>				
The CSPP specifies that open trenches or excavations are not permitted within a safety area while the associated runway or taxiway is open, subject to approved exceptions.	<u>2.22.1.4</u>				
Appropriate covering of excavations in the RSA or TSA that cannot be backfilled before the associated runway or taxiway is open is detailed.	<u>2.22.1.4</u>				
The CSPP includes provisions for prominent marking of open trenches and excavations at the construction site.	<u>2.22.1.4</u>				
Grading and soil erosion control to maintain RSA/TSA standards are	<u>2.22.3.5</u>				



Coordination	Reference	Addressed?			Remarks
		Yes	No	NA	
addressed.					
The CSPP specifies that equipment is to be removed from the ROFA when not in use.	<u>2.22.2</u>				
The CSPP clearly states that no construction may occur within a taxiway safety area while the taxiway is open for aircraft operations.	<u>2.22.3</u>				
Appropriate details are specified for any construction work to be accomplished in a taxiway object free area.	<u>2.22.4</u>				
Measures to ensure that personnel, material, and/or equipment do not penetrate the OFZ or threshold siting surfaces while the runway is open for aircraft operations are included.	<u>2.22.4.3.6</u>				
Provisions for protection of runway approach/departure areas and clearways are included.	<u>2.22.6</u>				
<b>Other Limitations on Construction</b>					
The CSPP prohibits the use of open flame welding or torches unless adequate fire safety precautions are provided and the airport operator has approved their use.	<u>2.23.1.2</u>				
The CSPP prohibits the use of electrical blasting caps on or within 1,000 ft (300 m) of the airport property.	<u>2.23.1.3</u>				

**APPENDIX D. CONSTRUCTION PROJECT DAILY SAFETY INSPECTION CHECKLIST**

The situations identified below are potentially hazardous conditions that may occur during airport construction projects. Safety area encroachments, unauthorized and improper ground vehicle operations, and unmarked or uncovered holes and trenches near aircraft operating surfaces pose the most prevalent threats to airport operational safety during airport construction projects. The list below is one tool that the airport operator or contractor may use to aid in identifying and correcting potentially hazardous conditions. It should be customized as appropriate for each project including information such as the date, time and name of the person conducting the inspection.

**Table D-1. Potentially Hazardous Conditions**

<b>Item</b>	<b>Action Required (Describe)</b>	<b>No Action Required (Check)</b>
Excavation adjacent to runways, taxiways, and aprons improperly backfilled.		
Mounds of earth, construction materials, temporary structures, and other obstacles near any open runway, taxiway, or taxi lane; in the related Object Free area and aircraft approach or departure areas/zones; or obstructing any sign or marking.		
Runway resurfacing projects resulting in lips exceeding 3 inch (7.6 cm) from pavement edges and ends.		
Heavy equipment (stationary or mobile) operating or idle near AOA, in runway approaches and departures areas, or in OFZ.		
Equipment or material near NAVAIDs that may degrade or impair radiated signals and/or the monitoring of navigation and visual aids. Unauthorized or improper vehicle operations in localizer or glide slope critical areas, resulting in electronic interference and/or facility shutdown.		
Tall and especially relatively low visibility units (that is, equipment with slim profiles) — cranes, drills, and similar objects — located in critical areas, such as OFZ and		

<b>Item</b>	<b>Action Required (Describe)</b>	<b>No Action Required (Check)</b>
approach zones.		
Improperly positioned or malfunctioning lights or unlighted airport hazards, such as holes or excavations, on any apron, open taxiway, or open taxi lane or in a related safety, approach, or departure area.		
Obstacles, loose pavement, trash, and other debris on or near AOA. Construction debris (gravel, sand, mud, paving materials) on airport pavements may result in aircraft propeller, turbine engine, or tire damage. Also, loose materials may blow about, potentially causing personal injury or equipment damage.		
Inappropriate or poorly maintained fencing during construction intended to deter human and animal intrusions into the AOA. Fencing and other markings that are inadequate to separate construction areas from open AOA create aviation hazards.		
Improper or inadequate marking or lighting of runways (especially thresholds that have been displaced or runways that have been closed) and taxiways that could cause pilot confusion and provide a potential for a runway incursion. Inadequate or improper methods of marking, barricading, and lighting of temporarily closed portions of AOA create aviation hazards.		
Wildlife attractants — such as trash (food scraps not collected from construction personnel activity), grass seeds, tall grass, or standing water — on or near airports.		
Obliterated or faded temporary markings on active operational areas.		
Misleading or malfunctioning obstruction lights. Unlighted or unmarked obstructions in the approach to any open runway pose aviation hazards.		

<b>Item</b>	<b>Action Required (Describe)</b>	<b>No Action Required (Check)</b>
Failure to issue, update, or cancel NOTAMs about airport or runway closures or other construction related airport conditions.		
Failure to mark and identify utilities or power cables. Damage to utilities and power cables during construction activity can result in the loss of runway / taxiway lighting; loss of navigation, visual, or approach aids; disruption of weather reporting services; and/or loss of communications.		
Restrictions on ARFF access from fire stations to the runway / taxiway system or airport buildings.		
Lack of radio communications with construction vehicles in airport movement areas.		
Objects, regardless of whether they are marked or flagged, or activities anywhere on or near an airport that could be distracting, confusing, or alarming to pilots during aircraft operations.		
Water, snow, dirt, debris, or other contaminants that temporarily obscure or derogate the visibility of runway/taxiway marking, lighting, and pavement edges. Any condition or factor that obscures or diminishes the visibility of areas under construction.		
Spillage from vehicles (gasoline, diesel fuel, oil) on active pavement areas, such as runways, taxiways, aprons, and airport roadways.		
Failure to maintain drainage system integrity during construction (for example, no temporary drainage provided when working on a drainage system).		

<b>Item</b>	<b>Action Required (Describe)</b>	<b>No Action Required (Check)</b>
Failure to provide for proper electrical lockout and tagging procedures. At larger airports with multiple maintenance shifts/workers, construction contractors should make provisions for coordinating work on circuits.		
Failure to control dust. Consider limiting the amount of area from which the contractor is allowed to strip turf.		
Exposed wiring that creates an electrocution or fire ignition hazard. Identify and secure wiring, and place it in conduit or bury it.		
Site burning, which can cause possible obscuration.		
Construction work taking place outside of designated work areas and out of phase.		

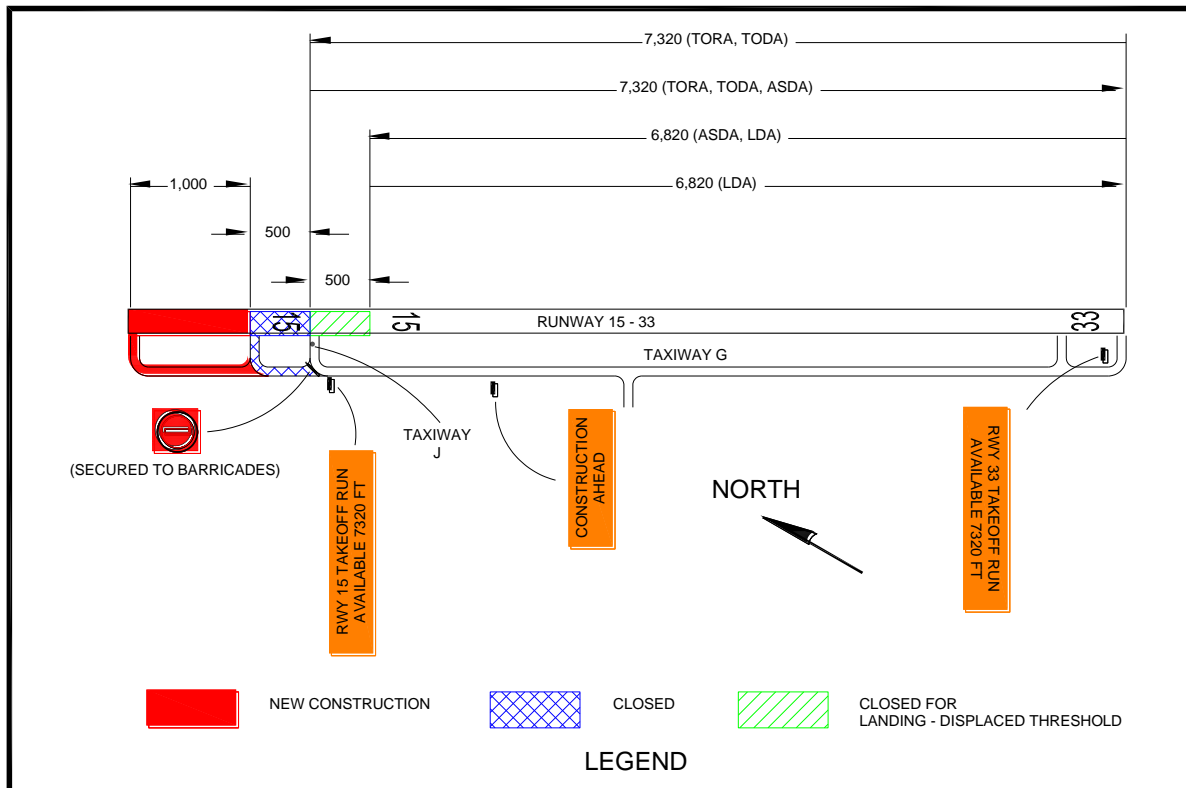
**APPENDIX E. SAMPLE OPERATIONAL EFFECTS TABLE**

**E.1 Project Description.**

Runway 15-33 is currently 7820 feet long, with a 500 foot stopway on the north end. This project will remove the stopway and extend the runway 1000 feet to the north and 500 feet to the south. Finally, the existing portion of the runway will be repaved. The runway 33 glide slope will be relocated. The new runway 33 localizer has already been installed by FAA Technical Operations and only needs to be switched on. Runway 15 is currently served only by a localizer, which will remain in operation as it will be beyond the future RSA. Appropriate NOTAMS will be issued throughout the project.

E.1.1 During Phase I, the runway 15 threshold will be displaced 1000 feet to keep construction equipment below the approach surface. The start of runway 15 takeoff and the departure end of runway 33 will also be moved 500 feet to protect workers from jet blast. Declared distances for runway 33 will be adjusted to provide the required RSA and applicable departure surface. Excavation near Taxiway G will require its ADG to be reduced from IV to III. See Figure E-1.

**Figure E-1. Phase I Example**

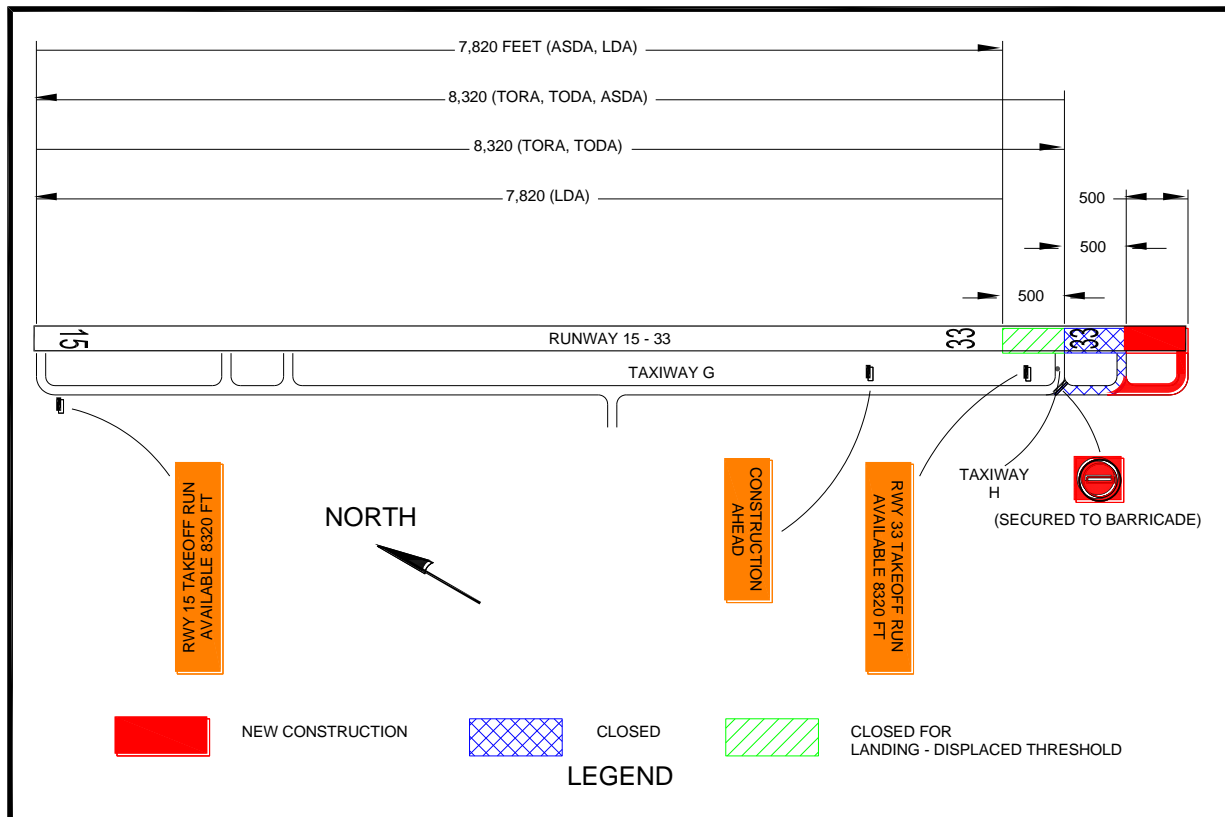


**Note 1:** Where hold signs are installed on both sides of a taxiway, install the TORA sign on the left side of the taxiway before the final turn to the runway intersection.

**Note 2:** Based on the declared distances for Runway 33 departures, the maximum equipment height in the construction area is 12.5 feet ( $500/40 = 12.5$ ).

E.2 During Phase II, the runway 33 threshold will be displaced 1000 feet to keep construction equipment below the approach surface. The start of runway 33 takeoff and the departure end of runway 15 will also be moved 500 feet to protect workers from jet blast. Declared distances for runway 15 will be adjusted to provide the required RSA and applicable departure surface. See Figure E-2.

**Figure E-2. Phase II Example**

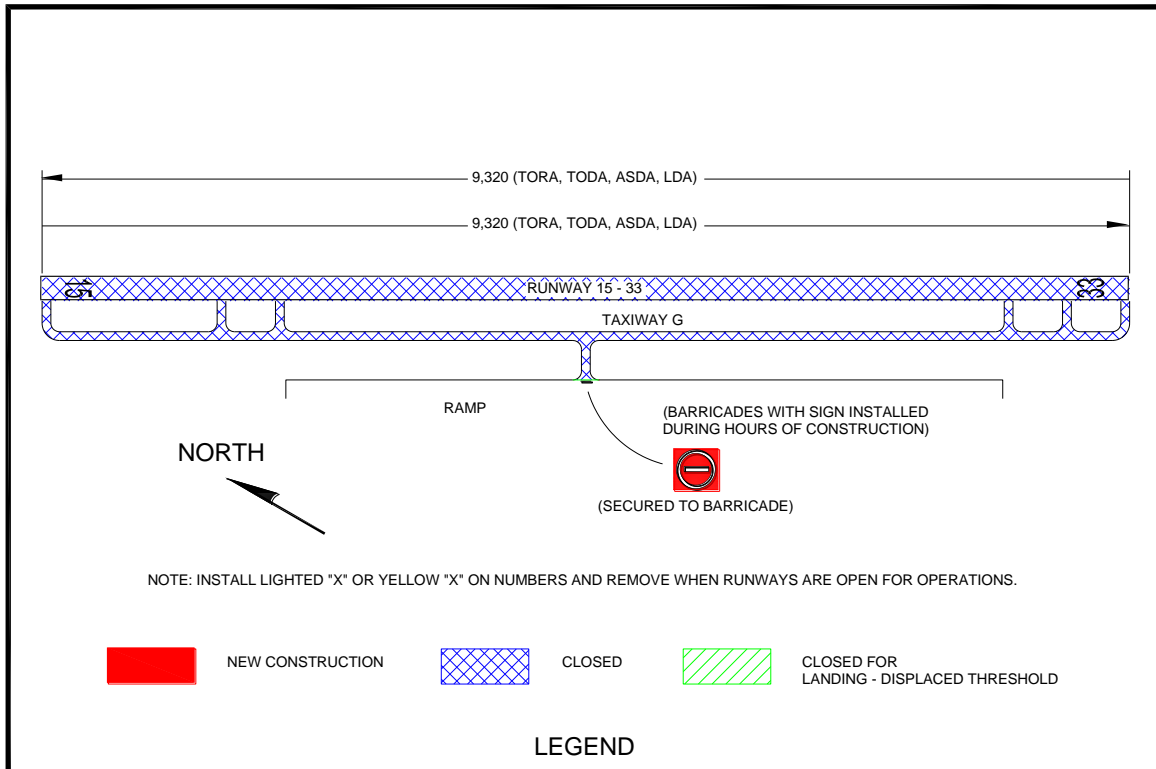


**Note 1:** Where hold signs are installed on both sides of a taxiway, install the TORA sign on the left side of the taxiway before the final turn to the runway intersection.

**Note 2:** Based on the declared distances for Runway 15 departures, the maximum equipment height in the construction area is 12.5 feet ( $500/40 = 12.5$ ).

- E.3 During Phase III, the existing portion of the runway will be repaved with Hot Mix Asphalt (HMA) and the runway 33 glide slope will be relocated. Construction will be accomplished between the hours of 8:00 pm and 5:00 am, during which the runway will be closed to operations.

**Figure E-3. Phase III Example**





**Table E-1. Operational Effects Table**

<b>Project</b>	<b>Runway 15-33 Extension and Repaving</b>			
<b>Phase</b>	<b>Normal (Existing)</b>	<b>Phase I: Extend Runway 15 End</b>	<b>Phase II: Extend Runway 33 End</b>	<b>Phase III: Repave Runway</b>
<b>Scope of Work</b>	N/A	Extend Runway 15-33 1,000 ft on north end with Hot Mix Asphaltic Concrete (HMA).	Extend Runway 15-33 500 ft on south end with Hot Mix Asphaltic Concrete (HMA).	Repave existing runway with HMA Relocate Runway 33 Glide Slope
<b>Effects of Construction Operations</b>	N/A	Existing North 500 ft closed	Existing South 500 ft closed	Runway closed between 8:00 pm and 5:00 am Edge lighting out of service
<b>Construction Phase</b>	N/A	Phase I (Anticipated)	Phase II (Anticipated)	Phase III (Anticipated)
<b>Runway 15 Average Aircraft Operations</b>	Carrier: 52 /day GA: 26 /day Military: 11 /day	Carrier: 40 /day GA: 26 /day Military: 0 /day	Carrier: 45 /day GA: 26 /day Military: 5 /day	Carrier: 45 / day GA: 20 / day Military: 0 /day
<b>Runway 33 Average Aircraft Operations</b>	Carrier: 40 /day GA: 18 /day Military: 10 /day	Carrier: 30 /day GA: 18 /day Military: 0 /day	Carrier: 25 /day GA: 18 /day Military: 5 /day	Carrier: 20 /day GA: 5 /day Military: 0 /day
<b>Runway 15-33 Aircraft Category</b>	C-IV	C-IV	C-IV	C-IV
<b>Runway 15 Approach Visibility Minimums</b>	1 mile	1 mile	1 mile	1 mile
<b>Runway 33 Approach Visibility Minimums</b>	¾ mile	¾ mile	¾ mile	1 mile

**Note:** Proper coordination with Flight Procedures group is necessary to maintain instrument approach procedures during construction.

<b>Project</b>		<b>Runway 15-33 Extension and Repaving</b>			
<b>Phase</b>		<b>Normal (Existing)</b>	<b>Phase I: Extend Runway 15 End</b>	<b>Phase II: Extend Runway 33 End</b>	<b>Phase III: Repave Runway</b>
<b>Runway 15 Declared Distances</b>	<b>TORA</b>	7,820	7,320	8,320	9,320
	<b>TODA</b>	7,820	7,320	8,320	9,320
	<b>ASDA</b>	7,820	7,320	7,820	9,320
	<b>LDA</b>	7,820	6,820	7,820	9,320
<b>Runway 33 Declared Distances</b>	<b>TORA</b>	7,820	7,320	8,320	9,320
	<b>TODA</b>	7,820	7,320	8,320	9,320
	<b>ASDA</b>	8,320	6,820	8,320	9,320
	<b>LDA</b>	7,820	6,820	7,820	9,320
<b>Runway 15 Approach Procedures</b>		LOC only	LOC only	LOC only	LOC only
		RNAV	RNAV	RNAV	RNAV
		VOR	VOR	VOR	VOR
<b>Runway 33 Approach Procedures</b>		ILS	ILS	ILS	LOC only
		RNAV	RNAV	RNAV	RNAV
		VOR	VOR	VOR	VOR
<b>Runway 15 NAVAIDs</b>		LOC	LOC	LOC	LOC
<b>Runway 33 NAVAIDs</b>		ILS, MALSR	ILS, MALSR	ILS, MALSR	LOC, MALSR
<b>Taxiway G ADG</b>		IV	III	IV	IV
<b>Taxiway G TDG</b>		4	4	4	4
<b>ATCT (hours open)</b>		24 hours	24 hours	24 hours	0500 - 2000
<b>ARFF Index</b>		D	D	D	D

<b>Project</b>	<b>Runway 15-33 Extension and Repaving</b>			
<b>Phase</b>	<b>Normal (Existing)</b>	<b>Phase I: Extend Runway 15 End</b>	<b>Phase II: Extend Runway 33 End</b>	<b>Phase III: Repave Runway</b>
<b>Special Conditions</b>	Air National Guard (ANG) military operations	All military aircraft relocated to alternate ANG Base	Some large military aircraft relocated to alternate ANG Base	All military aircraft relocated to alternate ANG Base
<b>Information for NOTAMs</b>		Refer above for applicable declared distances. Taxiway G limited to 118 ft wingspan	Refer above for applicable declared distances.	Refer above for applicable declared distances. Airport closed 2000 – 0500. Runway 15 glide slope OTS.

**Note:** This table is one example. It may be advantageous to develop a separate table for each project phase and/or to address the operational status of the associated NAVAIDs per construction phase.

Complete the following chart for each phase to determine the area that must be protected along the runway and taxiway edges:

**Table E-2. Runway and Taxiway Edge Protection**

<b>Runway/Taxiway</b>	<b>Aircraft Approach Category* A, B, C, or D</b>	<b>Airplane Design Group* I, II, III, or IV</b>	<b>Safety Area Width in Feet Divided by 2*</b>

\*See AC 150/5300-13 to complete the chart for a specific runway/taxiway.

Complete the following chart for each phase to determine the area that must be protected before the runway threshold:

**Table E-3. Protection Prior to Runway Threshold**

Runway End Number	Airplane Design Group* I, II, III, or IV	Aircraft Approach Category* A, B, C, or D	Minimum Safety Area Prior to the Threshold*	Minimum Distance to Threshold Based on Required Approach Slope*	
				ft	: 1
			ft	ft	: 1
			ft	ft	: 1
			ft	ft	: 1
			ft	ft	: 1

\*See AC 150/5300-13 to complete the chart for a specific runway.

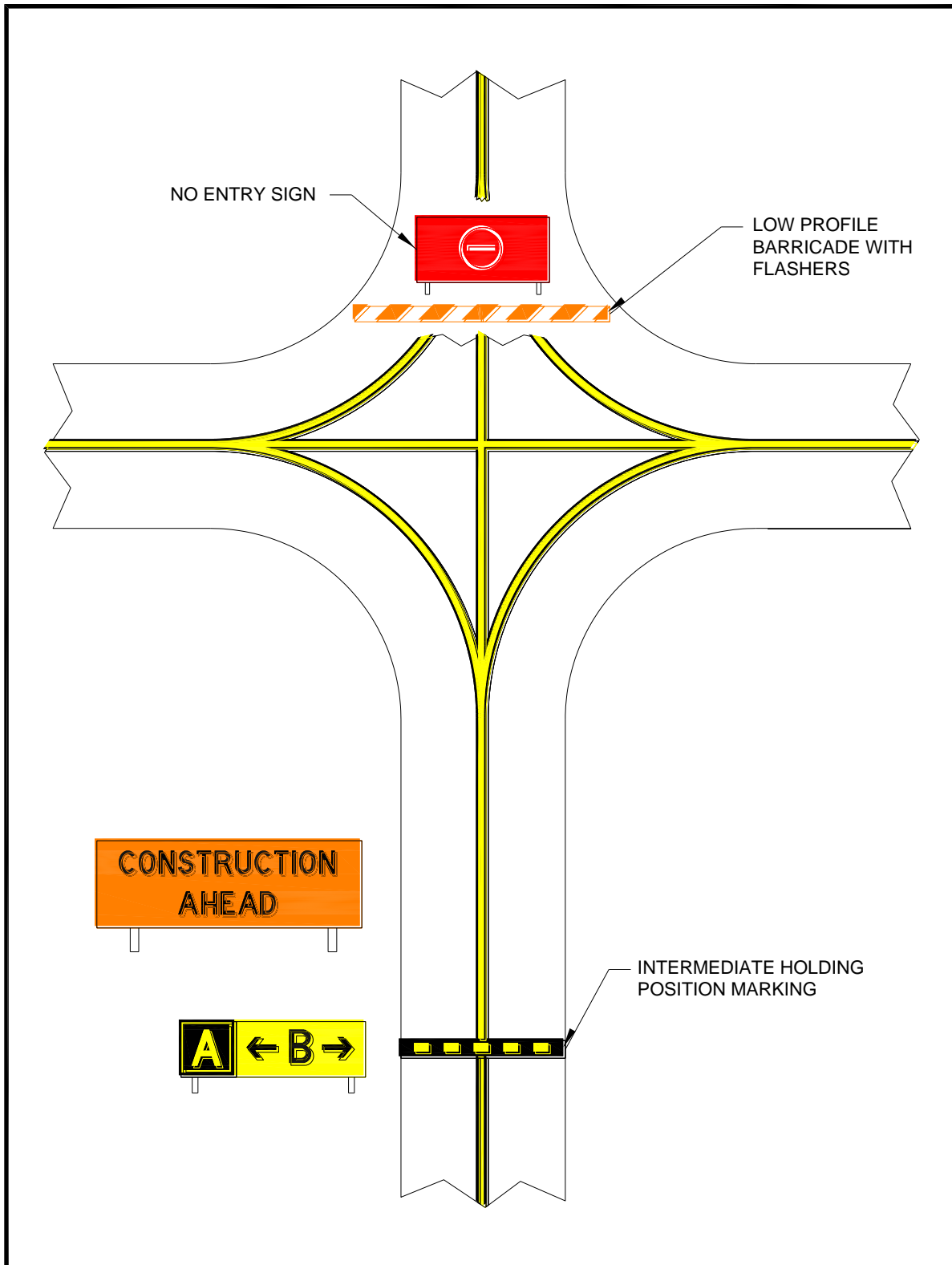
Page Intentionally Blank

**APPENDIX F. ORANGE CONSTRUCTION SIGNS**

**Figure F-1. Approved Sign Legends**

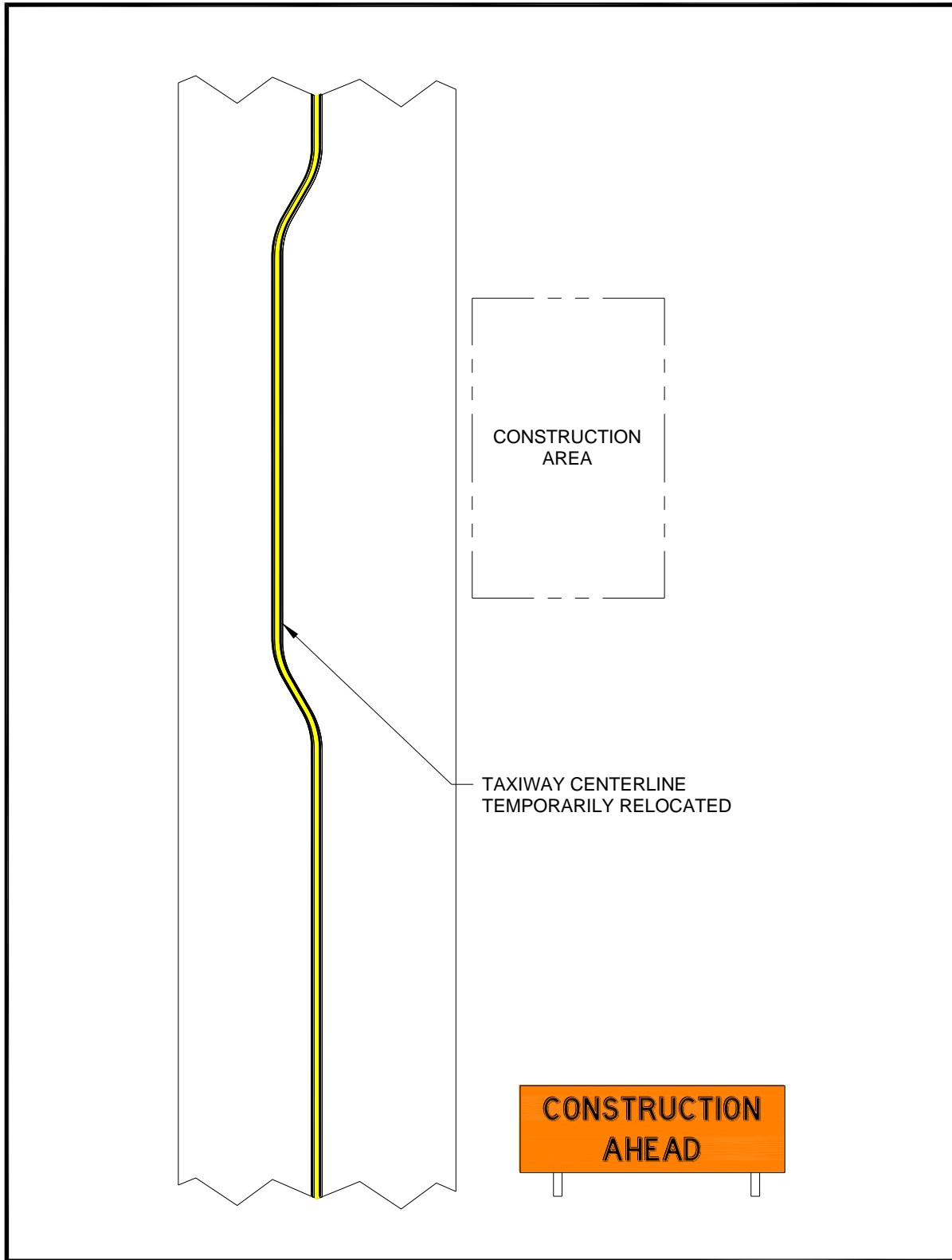


**Figure F-2. Orange Construction Sign Example 1**



**Note:** For proper placement of signs, refer to EB 93.

**Figure F-3. Orange Construction Sign Example 2**



**Note:** For proper placement of signs, refer to EB 93.



Page Intentionally Blank

## Advisory Circular Feedback

If you find an error in this AC, have recommendations for improving it, or have suggestions for new items/subjects to be added, you may let us know by (1) mailing this form to Manager, Airport Engineering Division, Federal Aviation Administration ATTN: AAS-100, 800 Independence Avenue SW, Washington DC 20591 or (2) faxing it to the attention of the Office of Airport Safety and Standards at (202) 267-5383.

Subject: AC 150/5370-2G

Date: \_\_\_\_\_

*Please check all appropriate line items:*

An error (procedural or typographical) has been noted in paragraph \_\_\_\_\_ on page \_\_\_\_\_.

Recommend paragraph \_\_\_\_\_ on page \_\_\_\_\_ be changed as follows:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

In a future change to this AC, please cover the following subject:  
*(Briefly describe what you want added.)*

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Other comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I would like to discuss the above. Please contact me at (phone number, email address).

\_\_\_\_\_

Submitted by: \_\_\_\_\_

Date: \_\_\_\_\_

Page Intentionally Blank

## **Appendix B**

Non-Disclosure Agreement  
Department of Homeland Security

**NON-DISCLOSURE AGREEMENT**

I, \_\_\_\_\_, an individual official, employee, consultant, or subcontractor of or to \_\_\_\_\_ (the Authorized Entity), intending to be legally bound, hereby consent to the terms in this Agreement in consideration of my being granted conditional access to certain information, specified below, that is owned by, produced by, or in the possession of the United States Government.

(Signer will acknowledge the category or categories of information that he or she may have access to, and the signer's willingness to comply with the standards for protection by placing his or her initials in front of the applicable category or categories.)

Initials:

**Protected Critical Infrastructure Information (PCII)**

I attest that I am familiar with, and I will comply with all requirements of the PCII program set out in the Critical Infrastructure Information Act of 2002 (CII Act) (Title II, Subtitle B, of the Homeland Security Act of 2002, Public Law 107-296, 196 Stat. 2135, 6 USC 101 et seq.), as amended, the implementing regulations thereto (6 CFR Part 29), as amended, and the applicable PCII Procedures Manual, as amended, and with any such requirements that may be officially communicated to me by the PCII Program Manager or the PCII Program Manager's designee.

Initials:

**Sensitive Security Information (SSI)**

I attest that I am familiar with, and I will comply with the standards for access, dissemination, handling, and safeguarding of SSI information as cited in this Agreement and in accordance with 49 CFR Part 1520, "Protection of Sensitive Security Information," "Policies and Procedures for Safeguarding and Control of SSI," as amended, and any supplementary guidance issued by an authorized official of the Department of Homeland Security.

Initials:

**Other Sensitive but Unclassified (SBU)**

As used in this Agreement, sensitive but unclassified information is an over-arching term that covers any information, not otherwise indicated above, which the loss of, misuse of, or unauthorized access to or modification of could adversely affect the national interest or the conduct of Federal programs, or the privacy to which individuals are entitled under Section 552a of Title 5, as amended, but which has not been specifically authorized under criteria established by an Executive Order or an Act of Congress to be kept secret in the interest of national defense or foreign policy. This includes information categorized by DHS or other government agencies as: For Official Use Only (FOUO); Official Use Only (OUO); Sensitive Homeland Security Information (SHSI); Limited Official Use (LOU); Law Enforcement Sensitive (LES); Safeguarding Information (SGI); Unclassified Controlled Nuclear Information (UCNI); and any other identifier used by other government agencies to categorize information as sensitive but unclassified.

I attest that I am familiar with, and I will comply with the standards for access, dissemination, handling, and safeguarding of the information to which I am granted access as cited in this Agreement and in accordance with the guidance provided to me relative to the specific category of information.

I understand and agree to the following terms and conditions of my access to the information indicated above:

1. I hereby acknowledge that I have received a security indoctrination concerning the nature and protection of information to which I have been provided conditional access, including the procedures to be followed in ascertaining whether other persons to whom I contemplate disclosing this information have been approved for access to it, and that I understand these procedures.
2. By being granted conditional access to the information indicated above, the United States Government has placed special confidence and trust in me and I am obligated to protect this information from unauthorized disclosure, in accordance with the terms of this Agreement and the laws, regulations, and directives applicable to the specific categories of information to which I am granted access.
3. I attest that I understand my responsibilities and that I am familiar with and will comply with the standards for protecting such information that I may have access to in accordance with the terms of this Agreement and the laws, regulations, and/or directives applicable to the specific categories of information to which I am granted access. I understand that the United States Government may conduct inspections, at any time or place, for the purpose of ensuring compliance with the conditions for access, dissemination, handling and safeguarding information under this Agreement.

---

4. I will not disclose or release any information provided to me pursuant to this Agreement without proper authority or authorization. Should situations arise that warrant the disclosure or release of such information I will do so only under approved circumstances and in accordance with the laws, regulations, or directives applicable to the specific categories of information. I will honor and comply with any and all dissemination restrictions cited or verbally relayed to me by the proper authority.

5. (a) For PCII - (1) Upon the completion of my engagement as an employee, consultant, or subcontractor under the contract, or the completion of my work on the PCII Program, whichever occurs first, I will surrender promptly to the PCII Program Manager or his designee, or to the appropriate PCII officer, PCII of any type whatsoever that is in my possession.

(2) If the Authorized Entity is a United States Government contractor performing services in support of the PCII Program, I will not request, obtain, maintain, or use PCII unless the PCII Program Manager or Program Manager's designee has first made in writing, with respect to the contractor, the certification as provided for in Section 29.8(c) of the implementing regulations to the CII Act, as amended.

(b) For SSI and SBU - I hereby agree that material which I have in my possession and containing information covered by this Agreement, will be handled and safeguarded in a manner that affords sufficient protection to prevent the unauthorized disclosure of or inadvertent access to such information, consistent with the laws, regulations, or directives applicable to the specific categories of information. I agree that I shall return all information to which I have had access or which is in my possession 1) upon demand by an authorized individual; and/or 2) upon the conclusion of my duties, association, or support to DHS; and/or 3) upon the determination that my official duties do not require further access to such information.

6. I hereby agree that I will not alter or remove markings, which indicate a category of information or require specific handling instructions, from any material I may come in contact with, in the case of SSI or SBU, unless such alteration or removal is consistent with the requirements set forth in the laws, regulations, or directives applicable to the specific category of information or, in the case of PCII, unless such alteration or removal is authorized by the PCII Program Manager or the PCII Program Manager's designee. I agree that if I use information from a sensitive document or other medium, I will carry forward any markings or other required restrictions to derivative products, and will protect them in the same matter as the original.

7. I hereby agree that I shall promptly report to the appropriate official, in accordance with the guidance issued for the applicable category of information, any loss, theft, misuse, misplacement, unauthorized disclosure, or other security violation, I have knowledge of and whether or not I am personally involved. I also understand that my anonymity will be kept to the extent possible when reporting security violations.

8. If I violate the terms and conditions of this Agreement, such violation may result in the cancellation of my conditional access to the information covered by this Agreement. This may serve as a basis for denying me conditional access to other types of information, to include classified national security information.

9. (a) With respect to SSI and SBU, I hereby assign to the United States Government all royalties, remunerations, and emoluments that have resulted, will result, or may result from any disclosure, publication, or revelation of the information not consistent with the terms of this Agreement.

(b) With respect to PCII I hereby assign to the entity owning the PCII and the United States Government, all royalties, remunerations, and emoluments that have resulted, will result, or may result from any disclosure, publication, or revelation of PCII not consistent with the terms of this Agreement.

10. This Agreement is made and intended for the benefit of the United States Government and may be enforced by the United States Government or the Authorized Entity. By granting me conditional access to information in this context, the United States Government and, with respect to PCII, the Authorized Entity, may seek any remedy available to it to enforce this Agreement including, but not limited to, application for a court order prohibiting disclosure of information in breach of this Agreement. I understand that if I violate the terms and conditions of this Agreement, I could be subjected to administrative, disciplinary, civil, or criminal action, as appropriate, under the laws, regulations, or directives applicable to the category of information involved and neither the United States Government nor the Authorized Entity have waived any statutory or common law evidentiary privileges or protections that they may assert in any administrative or court proceeding to protect any sensitive information to which I have been given conditional access under the terms of this Agreement.

11. Unless and until I am released in writing by an authorized representative of the Department of Homeland Security (if permissible for the particular category of information), I understand that all conditions and obligations imposed upon me by this Agreement apply during the time that I am granted conditional access, and at all times thereafter.

12. Each provision of this Agreement is severable. If a court should find any provision of this Agreement to be unenforceable, all other provisions shall remain in full force and effect.

13. My execution of this Agreement shall not nullify or affect in any manner any other secrecy or non-disclosure Agreement which I have executed or may execute with the United States Government or any of its departments or agencies.

14. These restrictions are consistent with and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by Executive Order No. 12958, as amended; Section 7211 of Title 5, United States Code (governing disclosures to Congress); Section 1034 of Title 10, United States Code, as amended by the Military Whistleblower Protection Act (governing disclosure to Congress by members of the military); Section 2302(b)(8) of Title 5, United States Code, as amended by the Whistleblower Protection Act (governing disclosures of illegality, waste, fraud, abuse or public health or safety threats); the Intelligence Identities Protection Act of 1982 (50 USC 421 et seq.) (governing disclosures that could expose confidential Government agents); and the statutes which protect against disclosure that may compromise the national security, including Sections 641, 793, 794, 798, and 952 of Title 18, United States Code, and Section 4(b) of the Subversive Activities Act of 1950 (50 USC 783(b)). The definitions, requirements, obligations, rights, sanctions, and liabilities created by said Executive Order and listed statutes are incorporated into this agreement and are controlling.

15. Signing this Agreement does not bar disclosures to Congress or to an authorized official of an executive agency or the Department of Justice that are essential to reporting a substantial violation of law.

16. I represent and warrant that I have the authority to enter into this Agreement.

17. I have read this Agreement carefully and my questions, if any, have been answered. I acknowledge that the briefing officer has made available to me any laws, regulations, or directives referenced in this document so that I may read them at this time, if I so choose.

DEPARTMENT OF HOMELAND SECURITY  
**NON-DISCLOSURE AGREEMENT**  
Acknowledgement

Typed/Printed Name:	Government/Department/Agency/Business Address	Telephone Number:
---------------------	---	-------------------

I make this Agreement in good faith, without mental reservation or purpose of evasion.

Signature:

**WITNESS:**

Typed/Printed Name:	Government/Department/Agency/Business Address	Telephone Number:
---------------------	---	-------------------

Signature: