

PW 14055

AS-NEEDED AVIATION DESIGN ENGINEERING SERVICES

AGREEMENT FOR CONSULTANT SERVICES

THIS AGREEMENT, made and entered into this 29th day of March, 2016

BY AND BETWEEN

COUNTY OF LOS ANGELES, State of
California, hereinafter referred to as County,

AND

AE CONSULTING, INC.
hereinafter referred to as Consultant,

The parties hereto do mutually agree as follows:

1. Definition

County means either County; County, as agent for such joint powers authority or nonprofit corporation as may be involved in the issuance of bonds, certificates of participation, or other evidences of indebtedness to finance the work contemplated herein; or said joint powers authority or nonprofit corporation.

2. Consultant's Services

The scope of work shall be as outlined in Attachment A, dated March 1, 2016. Consultant's proposal is incorporated herein as a part of this Contract. In the event that any conflict or inconsistency between this Contract and Consultant's proposal are found, such conflict or inconsistency shall be resolved by giving precedence first to the Contract and the attachments to the Contract.

No work shall commence on this project until a written Notice to Proceed is issued by County. County does not guarantee or promise that any work will be assigned to Consultant under this Contract until a written Notice to Proceed is issued by the County. Consultant is also referred herein as Contractor.

3. Consideration

In consideration of the performance by Consultant in a manner satisfactory to County of the services described in Paragraph 2 above, including receipt and acceptance of such work by Director of the County of Los Angeles Department of Public Works (hereinafter called Director), County agrees to pay Consultant a maximum not-to-exceed fee of Three Million Dollars (\$3,000,000) in the

manner set forth immediately below and according to the Schedule of Prices attached to this Agreement as Attachment C. County does not guarantee any work or services of any specific monetary amount under this Contract.

Consultant shall invoice County upon the completion of tasks, subtasks, deliverables, and other additional services specified in this Agreement, Scope of Work, and any change orders, as applicable, and which have been approved in writing by the County.

- a. Payments for the work accomplished shall be made upon verification and acceptance of such work by Director, as stated in Attachment A, dated March 1, 2016, up to a maximum contract amount of \$3,000,000. Invoices shall be accompanied by an analysis of work completed for the invoice period. This analysis shall be prepared in a format satisfactory to Director.
- b. Subject to the maximum not-to-exceed fee of \$3,000,000, supplemental services or additional work may be required at County's discretion, upon prior written authorization by Director, and will be based on Consultant's fee schedule attached to this Agreement as Attachment C.
- c. Consultant shall not proceed with additional services not set forth in the scope of work or perform services outside the Contract Term without an amendment to this Agreement as set forth in Paragraph 49. Consultant will not be paid for any expenditure beyond the Contract amount stipulated without an amendment to this Agreement.
- d. No Payment for Services Provided Following Expiration/Termination of Agreement:

Consultant shall have no claim against County for payment for any money or reimbursement, of any kind whatsoever, for any service provided by Consultant after the expiration or other termination of this Agreement. Should Consultant receive any such payment it shall immediately notify County and shall immediately repay all such funds to County. Payment by County for services rendered after expiration/termination of this Agreement shall not constitute a waiver of County's right to recover such payment from Consultant. This provision shall survive the expiration or other termination of this Agreement.

- e. If requested by the Contractor, the contract (hourly, daily, monthly, etc.) amount may, at the sole discretion of the County; be increased annually based on the most recently published percentage change in the U.S.

Department of Labor, Bureau of Labor Statistics' Consumer Price Index (CPI) for the Los Angeles-Riverside-Orange County Area for the 12-month period preceding the contract anniversary date, which shall be the effective date for any Cost of Living Adjustment (COLA). However, any increase shall not exceed the general salary movement granted to County employees as determined by the Chief Executive Officer as of each July 1 for the prior 12-month period. Furthermore, should fiscal circumstances ultimately prevent the Board from approving any increase in County employee salaries, no COLA will be granted. Upon approval of a COLA, a notification will be sent to the Contractor.

- f. Consultant will notify County when Contract amount has been incurred up to 75% of the Contract total.
- g. County reserves the right to supplement the maximum not-to-exceed Contract amount by up to twenty-five percent (25%).

4. Equipment and Supplies

Consultant agrees to furnish all necessary equipment and supplies used in the performance of the aforementioned services at Consultant's sole cost and expense.

5. County's Responsibility

County will make available drawings, specifications, and other records as available in County Department of Public Works' file. Notwithstanding the foregoing, County does not represent the accuracy of the content of said materials.

6. County's Representative

Director or Director's authorized representative shall represent County in all matters pertaining to the services to be rendered pursuant to this Agreement.

7. Term

The term of this Agreement shall be for a period of three years commencing on the date of full execution of the Contract. At the sole discretion of the County, this Agreement may be extended for two additional one-year terms, not to exceed a total contract period of five years. No work will proceed until a Notice to Proceed is issued by the County.

- b. The Consultant shall notify Public Works when this Contract is within six (6) months from the expiration of the term as provided for hereinabove. Upon occurrence of this event, the Consultant shall send written notification to Public Works at the address herein provided in Notices Paragraph.
- c. If the County authorizes the Consultant in writing to perform services on a given project prior to the stated expiration date, but thereafter such services are not completed by the stated expiration date, then the expiration of the Agreement shall be automatically extended solely to allow for the completion of such services. County may authorize unforeseen additional services and extend the contract expiration date as necessary to complete those services when the unforeseen additional services are directly related to the initial scope of work and are necessary for the completion of a given project.

8. Assignment and Delegation

- a. Consultant shall not assign its rights or delegate its duties under the Agreement, or both, whether in whole or in part, without the prior written consent of County, in its discretion, and any attempted assignment or delegation without such consent shall be null and void. For purposes of this paragraph, County consent shall require a written amendment to the Agreement, which is formally approved and executed by the parties. Any payments by County to any approved delegate or assignee on any claim under the Agreement shall be deductible, at County's sole discretion, against the claims which Consultant may have against County.
- b. Shareholders, partners, members, or other equity holders of Consultant may transfer, sell, exchange, assign, or divest themselves of any interest they may have therein. However, in the event any such sale, transfer, exchange, assignment, or divestment is effected in such a way as to give majority control of Consultant to any person(s), corporation, partnership, or legal entity other than the majority controlling interest therein at the time of execution of the Agreement, such disposition is an assignment requiring the prior written consent of County in accordance with applicable provisions of this Agreement.
- c. Any assumption, assignment, delegation, or takeover of any of the Consultant's duties, responsibilities, obligations, or performance of same by any entity other than the Consultant, whether through assignment, subcontract, delegation, merger, buyout, or any other mechanism, with or

without consideration for any reason whatsoever without County's express prior written approval, shall be a material breach of the Agreement which may result in the termination of the Agreement. In the event of such termination, County shall be entitled to pursue the same remedies against Consultant as it could pursue in the event of default by Consultant.

9. Authorization Warranty

The Consultant represents and warrants that the person executing this Contract for the Consultant is an authorized agent who has actual authority to bind the Consultant to each and every term, condition, and obligation of this Contract and that all requirements of the Consultant have been fulfilled to provide such actual authority.

10. Budget Reductions

In the event that the County's Board of Supervisors adopts, in any fiscal year, a County Budget which provides for reductions in the salaries and benefits paid to the majority of County employees and imposes similar reductions with respect to County contracts, the County reserves the right to reduce its payment obligation under this Contract correspondingly for that fiscal year and any subsequent fiscal year during the term of this Contract (including any extensions), and the services to be provided by the Consultant under this Contract shall also be reduced correspondingly. The County's notice to the Consultant regarding said reduction in payment obligation shall be provided within thirty (30) calendar days of the Board's approval of such actions. Except as set forth in the preceding sentence, the Consultant shall continue to provide all of the services set forth in this Contract.

11. Compliance with Applicable Law

- a. In the performance of this Contract, Consultant shall comply with all applicable Federal, State and local laws, rules, regulations, ordinances, directives, guidelines, policies and procedures, and all provisions required thereby to be included in this Contract are hereby incorporated herein by reference.
- b. Consultant shall indemnify, defend, and hold harmless County, its officers, employees, and agents, from and against any and all claims, demands, damages, liabilities, losses, costs, and expenses, including, without limitation, defense costs and legal, accounting and other expert, consulting or professional fees, arising from connected with, or related to

any failure by Consultant, its officers, employees, agents, or subconsultants, to comply with any such laws, rules, regulations, ordinances, directives, guidelines, policies, or procedures, as determined by County in its sole judgment. Any legal defense pursuant to Consultant's indemnification obligations under this Paragraph shall be conducted by Consultant and performed by counsel selected by Consultant and approved by County. Notwithstanding the preceding sentence, County shall have the right to participate in any such defense at its sole cost and expense, except that in the event Consultant fails to provide County with a full and adequate defense, as determined by County in its sole judgment, County shall be entitled to retain its own counsel, including, without limitation, County Counsel, and reimbursement from Consultant for all such costs and expenses incurred by County in doing so. Consultant shall not have the right to enter into any settlement, agree to any injunction or other equitable relief, or make any admission, in each case, on behalf of County without County's prior written approval.

12. Compliance with Civil Rights Laws

The Consultant hereby assures that it will comply with Subchapter VI of the Civil Rights Act of 1964, 42 USC Sections 2000 (e) (1) through 2000 (e) (17), to the end that no person shall, on the grounds of race, creed, color, sex, religion, ancestry, age, condition of physical handicap, marital status, political affiliation, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under this Contract or under any project, program, or activity supported by this Contract. The Consultant shall comply with Consultant's EEO Certification.

13. Compliance with Jury Service Program

This Contract is subject to provisions of the County's ordinance entitled Contractor Employee Jury Service (Jury Service Program) as codified in Sections 2.203.010 through 2.203.090 of the Los Angeles County Code, incorporated by reference and made a part of this Agreement.

- a. Unless Consultant, also referred herein as Contractor, has demonstrated to the County's satisfaction either that Contractor is not a Contractor as defined under the Jury Service Program (Section 2.203.020 of the County Code) or that Contractor qualifies for an exception to the Jury Service Program (Section 2.203.070 of the County Code), Consultant shall have and adhere to a written policy that provides that its employees shall

receive from the Contractor, on an annual basis, no less than five days of regular pay for actual jury service. The policy may provide that employees deposit any fees received for such jury service with the Contractor or that the Contractor deduct from the employee's regular pay the fees received for jury service.

- b. For purposes of this Section, Contractor means a person, partnership, corporation or other entity which has a Contract with the County or a subcontract with a County Contractor and has received or will receive an aggregate sum of \$50,000 or more in any 12-month period under one or more County contracts or subcontracts. Employee means any California resident who is a full time employee of Contractor. Full time means 40 hours or more worked per week, or a lesser number of hours if: 1) the lesser number is a recognized industry standard as determined by the County, or 2) Contractor has a long-standing practice that defines the lesser number of hours as full-time. Full-time employees providing short-term, temporary services of 90 days or less within a 12-month period are not considered full-time for purposes of the Jury Service Program. If Contractor uses any subcontractor to perform services for the County under the Contract, the subcontractor shall also be subject to the provisions of this Paragraph. The provisions of this Section shall be inserted into any such subcontract Agreement and a copy of the Jury Service Program shall be attached to the Agreement.
- c. If Consultant is not required to comply with the Jury Service Program when the Contract commences, Contractor shall have a continuing obligation to review the applicability of its exception status from the Jury Service Program, and Contractor shall immediately notify County if Contractor at any time either comes within the Jury Service Program's definition of Contractor or if Contractor no longer qualifies for an exception to the Program. In either event, Contractor shall immediately implement a written policy consistent with the Jury Service Program. The County may also require, at any time during the Agreement and at its sole discretion, that Contractor demonstrate to the County's satisfaction that Contractor either continues to remain outside the Jury Service Program's definition of Contractor and/or that Contractor continues to qualify for an exception to the Program.

- d. Contractor's violation of this Paragraph of the Agreement may constitute a material breach of the Agreement. In the event of such material breach, County may, in its sole discretion, terminate the Contractor and/or bar Contractor from the award of future County contracts for a period of time consistent with the seriousness of the breach.

14. Confidentiality

Consultant shall maintain the confidentiality of all records and information, proprietary information, software codes, trade secrets, confidential information, etc., whether of County or third parties, in accordance with all applicable Federal, State, and local laws, rules, regulations, ordinances, directives, guidelines, policies and procedures relating to confidentiality, including, without limitation, County policies concerning information technology security and the protection of confidential records and information.

Consultant shall indemnify, defend, and hold harmless County, its officers, employees, and agents, from and against any and all claims, demands, damages, liabilities, losses, costs and expenses, including without limitation, defense costs and legal accounting and other expert, consulting, or professional fees, arising from, connected with, or related to any failure by Consultant, its officers, employees, agents, or subconsultants, to comply with this Paragraph, as determined by County in its sole judgment. Any legal defense pursuant to Consultant's indemnification obligations under this Paragraph shall be conducted by Consultant and performed by counsel selected by Consultant and approved by County. Notwithstanding the preceding sentence, County shall have the right to participate in any such defense at its sole cost and expense, except that in the event Consultant fails to provide County with a full and adequate defense, as determined by County in its sole judgment, County shall be entitled to retain its own counsel, including, without limitation, County Counsel, and reimbursement from Consultant for all such costs and expenses incurred by County in doing so. Consultant shall not have the right to enter into any settlement, agree to any injunction, or make any admission, in each case, on behalf of County without County's prior written approval.

15. Conflict of Interest

No County employee in a position to influence the award of this Agreement or any competing Agreement, and no spouse or economic dependent of such employee, shall be employed in any capacity by Consultant herein, or have any other direct or indirect financial interest in this Agreement. No officer or employee of the Consultant who may financially benefit from the performance of

work hereunder shall in any way participate in the County's approval, or ongoing evaluation, of such work, or in any way attempt to unlawfully influence the County's approval or ongoing evaluation of such work.

The Consultant shall comply with all conflict of interest laws, ordinances, and regulations now in effect or hereafter to be enacted during the term of this Agreement. The Consultant warrants that it is not now aware of any facts that create a conflict of interest. If the Consultant hereafter becomes aware of any facts that might reasonably be expected to create a conflict of interest, it shall immediately make full written disclosure of such facts to the County. Full written disclosure shall include, but is not limited to, identification of all persons implicated and a complete description of all relevant circumstances. Failure to comply with the provisions of this Paragraph shall be a material breach of this Agreement.

16. Consideration of Hiring County Employees Targeted for Layoff/or Re-Employment List

Should the Consultant require additional or replacement personnel after the effective date of this Contract to perform the services set forth herein, the Consultant shall give first consideration for such employment openings to qualified, permanent County employees who are targeted for layoff or qualified, former County employees who are on a re-employment list during the life of this Contract.

17. Consideration of Hiring GAIN/GROW Program Participants

Should the Consultant require additional or replacement personnel after the effective date of this Contract, the Consultant shall give consideration for any such employment openings to participants in the County's Department of Public Social Services Greater Avenues for Independence (GAIN) Program or General Relief Opportunity for Work (GROW) Program who meet the Consultant's minimum qualifications for the open position. For this purpose, consideration shall mean that the Consultant will interview qualified candidates. The County will refer GAIN/GROW participants by job category to the Consultant. Consultant shall report all job openings with job requirements to: GAINGROW@dpss.lacounty.gov to obtain a list of qualified GAIN/GROW job candidates. In the event that both laid-off County employees and GAIN/GROW participants are available for hiring, County employees shall be given first priority.

18. Contractor Employee Criminal Background Investigation

Each of the Contractor's and subcontractor's staff performing services under the Contract who is in a designated sensitive position, as determined by the County in County's sole discretion, may undergo and pass a background investigation to the satisfaction of County as a condition of beginning and continuing to perform services under this Contract. Such background investigation must be obtained through fingerprints submitted to the California Department of Justice to include State and local level review, which may include, but shall not be limited to, criminal conviction information. The fees associated with the background investigation shall be at the expense of the Contractor, regardless less if the member of Contractor's staff passes or fails the background investigation.

19. Consultant Responsibility and Debarment

- a. A responsible Consultant is a Contractor who has demonstrated the attribute of trustworthiness, as well as quality, fitness, capacity, and experience to satisfactorily perform the Contract. It is the County's policy to conduct business only with responsible Contractors. Contractor is a Contractor who has demonstrated the attribute of trustworthiness, as well as quality, fitness, capacity, and experience to satisfactorily perform the Contract. It is the County's policy to conduct business only with responsible Contractors.
- b. The Contractor is hereby notified that, in accordance with Chapter 2.202 of the County Code, if the County acquires information concerning the performance of the Contractor on this or other Contracts which indicates that the Contractor is not responsible, the County may, in addition to other remedies provided in the Contract, debar the Contractor from bidding or proposing on, or being awarded, and/or performing work on County Contracts for a specified period of time, which generally will not exceed five years but may exceed five years or be permanent if warranted by the circumstances, and terminate any or all existing Contracts the Contractor may have with the County.
- c. The County may debar a Contractor if the Board of Supervisors finds, in its discretion, that the Contractor has done any of the following: (1) violated a term of a Contract with the County or a nonprofit corporation created by the County (2) committed an act or omission which negatively reflects on the Contractor's quality, fitness or capacity to perform a Contract with the County, any other public entity, or a nonprofit corporation created by the County, or engaged in a pattern or practice which

negatively reflects on same; (3) committed an act or offense which indicates a lack of business integrity or business honesty, or (4) made or submitted a false claim against the County or any other public entity.

- d. If there is evidence that the Contractor may be subject to debarment, the Department will notify the Contractor in writing of the evidence which is the basis for the proposed debarment and will advise the Contractor of the scheduled date for a debarment hearing before the Contractor Hearing Board.
- e. The Contractor Hearing Board will conduct a hearing where evidence on the proposed debarment is presented. The Contractor and/or the Contractor's representative shall be given an opportunity to submit evidence at that hearing. After the hearing, the Contractor Hearing Board shall prepare a tentative proposed decision, which shall contain a recommendation regarding whether the Contractor should be debarred, and, if so, the appropriate length of time of the debarment. The Contractor and the Department shall be provided an opportunity to object to the tentative proposed decision prior to its presentation to the Board of Supervisors.
- f. After consideration of any objections, or if no objections are submitted a record of the hearing, the proposed decision and any other recommendation of the Contractor Hearing Board shall be presented to the Board of Supervisors. The Board of Supervisors shall have the right to modify, deny or adopt the proposed decision and recommendation of the Hearing Board.
- g. If the Contractor has been debarred for a period longer than five years, that Contractor may, after the debarment has been in effect for at least five years, submit a written request for review of the debarment determination to reduce the period of debarment or terminate the debarment. The County may, in its discretion, reduce the period of debarment or terminate the debarment if it finds that the Contractor has adequately demonstrated one or more of the following: (1) elimination of the grounds for which the debarment was imposed; (2) a bona fide change in ownership or management; (3) material evidence discovered after debarment was imposed; or (4) any other reason that is in the best interests of the County.

- h. The Contractor Hearing Board will consider a request for review of a debarment determination only where (1) the Contractor has been debarred for a period longer than five years; (2) the debarment has been in effect for at least five years; and (3) the request is in writing, states one or more of the grounds for reduction of the debarment period or termination of the debarment, and includes supporting documentation. Upon receiving an appropriate request, the Contractor Hearing Board will provide notice of the hearing on the request. At the hearing, the Contractor Hearing Board shall conduct a hearing where evidence on the proposed reduction of debarment period or termination is presented. This hearing shall be conducted and the request for review decided by the Contractor Hearing Board pursuant to the same procedures as for a debarment hearing.

The Contractor Hearing Board's proposed decision shall contain a recommendation on the request to reduce the period of debarment or terminate the debarment. The Contractor Hearing Board shall present its proposed decision and recommendation to the Board of Supervisors. The Board of Supervisors shall have the right to modify, deny, or adopt the proposed decision and recommendation of the Contractor Hearing Board.

- i. These terms shall also apply to subcontractors of County Contractors.

20. Consultant's Acknowledgement of County's Commitment to the Safely Surrendered Baby Law

The Consultant acknowledges that the County places a high priority on the implementation of the Safely Surrendered Baby Law. The Consultant understands that it is the County's policy to encourage all County Consultants to voluntarily post the County's "Safely Surrendered Baby Law" poster in a prominent position at the Consultant's place of business. The Consultant will also encourage its subconsultants, if any, to post this poster in a prominent position in the subconsultant's place of business. The County's Department of Children and Family Services will supply the Consultant with the poster to be used. Information on how to receive the poster can be found on the Internet at www.babysafela.org.

21. Contractor's Warranty of Adherence to County's Child Support Compliance Program

Contractor acknowledges that County has established a goal of ensuring that all individuals who benefit financially from County through Contract are in compliance with their court-ordered child, family, and spousal support obligations in order to mitigate the economic burden otherwise imposed upon County and its taxpayers.

As required by County's Child Support Compliance Program (County Code Chapter 2.200) and without limiting Contractor's duty under this Contract to comply with all applicable provisions of law, Contractor warrants that it is now in compliance and shall during the term of this Contract maintain compliance with employment and wage reporting requirements as required by the Federal Social Security Act (42 USC Section 653a) and California Unemployment Insurance Code Section 1088.5 and shall implement all lawfully served Wage and Earnings Withholding Orders or District Attorney Notices of Wage and Earnings Assignment for Child or Spousal Support, pursuant to Code of Civil Procedure Section 706.031 and Family Code Section 5246(b).

Failure of Contractor to maintain compliance with these requirements shall constitute a default by Contractor under this Contract.

22. County's Quality Assurance Plan

County, or its agent, will evaluate Consultant's performance under this Agreement on not less than an annual basis. Such evaluation will include assessing Consultant's compliance with all Contract terms and performance standards. Consultant deficiencies which County determines are severe or continuing, and that may place performance of the Agreement in jeopardy if not corrected, will be reported to the Board of Supervisors. The report will include improvement/corrective action measures taken by County and Consultant. If improvement does not occur consistent with the corrective action measures, County may terminate this Agreement or impose other penalties as specified in this Agreement.

23. County Rights

The County may employ, either during or after performance of this Contract, any right of recovery the County may have against the Consultant by any means it deems appropriate including, but not limited to, set-off, action at law or in equity, withholding, recoupment, or counterclaim. The rights and remedies of the County under this contract are in addition to any right or remedy provided by California law.

24. Damage to County Facilities, Buildings, Grounds

- a. When applicable, the Consultant shall repair, or cause to be repaired, at its own cost, any and all damage to County facilities, buildings, or grounds caused by the Consultant or employees or agents of the Consultant. Such repairs shall be made immediately after the Consultant has become aware of such damage, but in no event later than thirty (30) days after the occurrence.
- b. If the Consultant fails to make timely repairs, County may make any necessary repairs. All costs incurred by County, as determined by County, for such repairs shall be repaid by the Consultant by cash payment upon demand.

25. Employment Eligibility Verification

Consultant warrants that it fully complies with all Federal statutes and regulations regarding employment of aliens and others, and that all its employees performing services hereunder meet the citizenship or alien status requirements contained in Federal statutes and regulations. Consultant shall obtain, from all covered employees performing services hereunder, all verifications and other documentation of employment eligibility status required by Federal statutes and regulations as they currently exist and as they may be hereafter amended. Consultant shall retain such documentation for all covered employees for the period prescribed by law. Consultant shall indemnify, defend, and hold harmless County, its officers, and employees from employer sanctions and any other liability which may be assessed against Consultant or County in connection with any alleged violation of Federal statutes or regulations pertaining to the eligibility for employment of persons performing services under this Agreement.

26. Facsimile/Electronic Representations

The County and the Consultant hereby agree to regard facsimile/electronic representations of original signatures of authorized officers of each party, when appearing in appropriate places on the amendments prepared, and received via communications facilities, as legally sufficient evidence that such original signatures have been affixed to amendments to this Contract, such that the parties need not follow up facsimile/electronic transmissions of such documents with subsequent (non-facsimile/electronic) transmission of "original" versions of such documents.

27. Fair Labor Standards

Consultant shall comply with all applicable provisions of the Federal Fair Labor Standards Act, and shall indemnify, defend, and hold harmless County, its agents, officers, and employees from any and all liability including, but not limited to, wages, overtime pay, liquidated damages, penalties, court costs, attorneys' fees arising under any wage and hour law including, but not limited to, the Federal Fair Labor Standards Act for services performed by Consultant's employees for which County may be found jointly or solely liable.

28. Force Majeure

- a. Neither party shall be liable for such party's failure to perform its obligations under and in accordance with this Contract, if such failure arises out of fires, floods, epidemics, quarantine restrictions, other natural occurrences, strikes, lockouts (other than a lockout by such party or any of such party's subconsultants), freight embargoes, or other similar events to those described above, but in every such case the failure to perform must be totally beyond the control and without any fault or negligence of such party (such events are referred to in this Paragraph as "force majeure events").
- b. Notwithstanding the foregoing, a default by a subconsultant of Consultant shall not constitute a force majeure event, unless such default arises out of causes beyond the control of both Consultant and such subconsultant, and without any fault or negligence of either of them. In such case, Consultant shall not be liable for failure to perform, unless the goods or services to be furnished by the subconsultant were obtainable from other sources in sufficient time to permit Consultant to meet the required performance schedule. As used in this subparagraph, the term "subconsultant" and "subconsultants" mean subconsultants at any tier.

- c. In the event Consultant's failure to perform arises out of a force majeure event, Consultant agrees to use commercially reasonable best efforts to obtain goods or services from other sources, if applicable, and to otherwise mitigate the damages and reduce the delay caused by such force majeure event.

29. Governing Law, Jurisdiction, and Venue

This Contract shall be governed by, and construed in accordance with, the laws of the State of California. The Consultant agrees and consents to the exclusive jurisdiction of the courts of the State of California for all purposes regarding this Contract and further agrees and consents that venue of any action brought hereunder shall be exclusively in the County of Los Angeles.

30. Independent Consultant Status

This Agreement is by and between County of Los Angeles and is not intended, and shall not be construed, to create the relationship of agent, servant, employee, partnership, joint venture, or association, as between County and Consultant. The employees and agents of one party shall not be, or be construed to be, the employees or agents of the other party for any purpose whatsoever.

The Consultant shall be solely liable and responsible for providing to, or on behalf of, all persons performing work pursuant to this Contract all compensation and benefits. The County shall have no liability or responsibility for the payment of any salaries, wages, unemployment benefits, disability benefits, Federal, State, or local taxes, or other compensation, benefits, or taxes for any personnel provided by or on behalf of the Consultant. Consultant understands and agrees that all persons furnishing services to County pursuant to this Agreement are, for purposes of Workers' Compensation liability, employees solely of Consultant and not of County.

Consultant shall bear the sole responsibility and liability for furnishing workers' compensation benefits to any person for injuries arising from, or connected with services performed on behalf of Consultant pursuant to this Agreement.

31. Indemnification and Insurance

The Indemnification and Insurance Provisions are set forth in Attachment D of this Agreement.

32. Liquidated Damages

- a. If, in the judgment of the Director, or his/her designee, the Consultant is deemed to be non-compliant with the terms and obligations assumed hereby, the Director, or his/her designee, at his/her option, in addition to, or in lieu of, other remedies provided herein, may withhold the entire monthly payment or deduct pro rata from the Consultant's invoice for work not performed. A description of the work not performed and the amount to be withheld or deducted from payments to the Consultant from the County, will be forwarded to the Consultant by the Director, or his/her designee, in a written notice describing the reasons for said action.
- b. If the Director or his/her designee, determines that there are deficiencies in the performance of this Contract that the Director, or his/her designee, deems are correctable by the Consultant over a certain time span, the Director, or his/her designee, will provide a written notice to the Consultant to correct the deficiency within specified time frames. Should the Consultant fail to correct deficiencies within said time frame, the Director, or his/her designee, may: (a) Deduct from the Consultant's payment, pro rata, those applicable portions of the Monthly Contract Sum; and/or (b) Deduct liquidated damages. The parties agree that it will be impracticable or extremely difficult to fix the extent of actual damages resulting from the failure of the Consultant to correct a deficiency within the specified time frame. The parties hereby agree that under the current circumstances a reasonable estimate of such damages is One Hundred Dollars (\$100) per day per infraction, and that the Consultant shall be liable to the County for liquidated damages in said amount. Said amount shall be deducted from the County's payment to the Consultant; and/or (c) Upon giving five (5) days' notice to the Consultant for failure to correct the deficiencies, the County may correct any and all deficiencies and the total costs incurred by the County for completion of the work by an alternate source, whether it be County forces or separate private Consultant will be deducted and forfeited from the payment to the Consultant, will be deducted and forfeited from the payment to the Consultant from the County, as determined by the County.
- c. The action noted in this Paragraph shall not be construed as a penalty, but as adjustment of payment to the Consultant to recover the County cost due to the failure of the Consultant to complete or comply with the provisions of this Contract.

- d. This Paragraph shall not, in any manner, restrict or limit the County's right to damages for any breach of this Contract provided by law or as specified in Paragraph b above, and shall not, in any manner, restrict or limit the County's right to terminate this Contract as agreed to herein.

33. Most Favored Public Entity

If the Consultant's prices decline, or should the Consultant at any time during the term of this Contract provide the same goods or services under similar quantity and delivery conditions to the State of California or any county, municipality, or district of the State at prices below those set forth in this Contract, then such lower prices shall immediately be extended to the County.

34. Nondiscrimination and Affirmative Action

- a. The Consultant certifies and agrees that all persons employed by it, its affiliates, subsidiaries, or holding companies are and shall be treated equally without regard to or because of race, color, religion, ancestry, national origin, sex, age, physical or mental disability, marital status, or political affiliation, in compliance with all applicable Federal and State anti-discrimination laws and regulations.
- b. The Consultant shall certify to, and comply with, the provisions of Consultant's EEO Certification.
- c. The Consultant shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to race, color, religion, ancestry, national origin, sex, age, physical or mental disability, marital status, or political affiliation, in compliance with all applicable Federal and State anti-discrimination laws and regulations. Such action shall include, but is not limited to: employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.
- d. The Consultant certifies and agrees that it will deal with its subconsultants, bidders, or vendors without regard to or because of race, color, religion, ancestry, national origin, sex, age, physical or mental disability, marital status, or political affiliation.

- e. The Consultant certifies and agrees that it, its affiliates, subsidiaries, or holding companies shall comply with all applicable Federal and State laws and regulations to the end that no person shall, on the grounds of race, color, religion, ancestry, national origin, sex, age, physical or mental disability, marital status, or political affiliation, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under this Contract or under any project, program, or activity supported by this Contract.
- f. The Consultant shall allow County representatives access to the Consultant's employment records during regular business hours to verify compliance with the provisions of this Paragraph when so requested by the County.
- g. If the County finds that any provisions of this Paragraph have been violated, such violation shall constitute a material breach of this Contract upon which the County may terminate or suspend this Contract. While the County reserves the right to determine independently that the anti-discrimination provisions of this Contract have been violated, in addition, a determination by the California Fair Employment and Housing Commission or the Federal Equal Employment Opportunity Commission that the Consultant has violated Federal or State anti-discrimination laws or regulations shall constitute a finding by the County that the Consultant has violated the anti-discrimination provisions of this Contract.
- h. The parties agree that in the event the Consultant violates any of the anti-discrimination provisions of this Contract, the County shall, at its sole option, be entitled to the sum of Five Hundred Dollars (\$500) for each such violation pursuant to California Civil Code Section 1671 as liquidated damages in lieu of terminating or suspending this Contract.

35. Non Exclusivity

Nothing herein is intended nor shall be construed as creating any exclusive arrangement with the Consultant. This Contract shall not restrict Department from acquiring similar, equal or like goods and/or services from other entities or sources.

36. Notice of Delays

Except as otherwise provided under this Contract, when either party has knowledge that any actual or potential situation is delaying or threatens to delay the timely performance of this Contract, that party shall, within one (1) business day, give notice thereof, including all relevant information with respect thereto, to the other party.

37. Notice of Disputes

The Consultant shall bring to the attention of the County's Project Manager and/or County's Project Director any dispute between the County and the Consultant regarding the performance of services as stated in this Contract. If the County's Project Manager or County's Project Director is not able to resolve the dispute, the Director of Public Works, or his/her designee shall resolve it.

38. Notice to Employees Regarding the Federal Earned Income Credit

Consultant shall notify its employees, and shall require each subconsultant to notify its employees, that they may be eligible for the Federal Earned Income Credit under the Federal income tax laws. Such notice shall be provided in accordance with the requirement set forth in Internal Revenue Service Notice 1015.

39. Notice to Employees Regarding the Safely Surrendered Baby Law

The Consultant shall notify and provide to its employees, and shall require each subconsultant to notify and provide to its employees, a fact sheet regarding the Safely Surrendered Baby Law, its implementation in Los Angeles County and how to safely surrender a baby. The fact sheet is available on the Internet at www.babysafela.org for printing purposes.

The Consultant acknowledges that the County places a high priority on the implementation of the Safely Surrendered Baby Law. The Consultant understands that it is the County's policy to encourage all County Consultants to voluntarily post the County's, A Safely Surrendered Baby Law poster, in a prominent position at the Consultant's place of business. The County's Department of Children and Family Services will supply the Consultant with the poster to be used.

40. Notices

Any notice required or desired to be given pursuant to this Agreement shall be given in writing and addressed as follows:

COUNTY

Department of Public Works
Architectural Engineering Division
Contracts & Operations, 8th Floor
900 South Fremont Avenue
Alhambra, CA 91803
(626) 458-2566

CONSULTANT

AE Consulting, Inc.
143 Yorba Street
Tustin, CA 92780
(714) 573-0214

The address for notice may be changed by giving notice pursuant to this paragraph.

41. Ownership of County Materials

- a. Consultant and County agree that all materials, including but not limited to, designs, specifications, techniques, plans, reports, deliverables, data, photographs, diagrams, maps, images, graphics, text, videos, advertising, software, source codes, website plans and designs, interactive media, drafts, working papers, outlines, sketches, summaries, edited and/or unedited versions of deliverables, and any other materials or information developed under this Agreement and any and all Intellectual Property rights to these materials, including any copyrights, trademarks, service marks, trade secrets, trade names, unpatented inventions, patent applications, patents, design rights, domain name rights, know-how, and any other proprietary rights and derivatives thereof, are and/or shall be the sole property of County (hereafter collectively, "County Materials"). Consultant hereby assigns and transfers to County all Consultant's right, title and interest in and to all such County Materials developed under this Agreement.

Notwithstanding such County ownership in the County Materials, Consultant may retain possession of working papers and materials prepared by Consultant under this Contract. During and for a minimum of five years subsequent to the term of this Contract, County shall have the right to inspect any and all such working papers and materials, make copies thereof and use the working papers and materials and the information contained therein.

- b. Consultant shall execute all documents requested by County and shall perform all other acts requested by County to assign and transfer to, and vest in County, all Consultant's right, title and interest in and to the County Materials, including, but not limited to, any and all copyrights, trademarks, service marks, trade names, unpatented inventions, patent applications, patents, design rights, domain name rights, know-how, and any other proprietary rights and derivatives thereof resulting from this Contract. County shall have the right to register all applicable copyrights, trademarks and patents in the name of the County of Los Angeles. Further, County shall have the right to assign, license, or otherwise transfer any and all County rights, title and interest, including, but not limited to copyrights, trademarks, and patents, in and to the County Materials.
- c. Consultant represents and warrants that the County Materials prepared herein under this Agreement, are the original work of Consultant and do not infringe upon any intellectual Property or proprietary rights of third parties. For those portions of the County Materials that are not the original work of Consultant, Consultant represents and warrants that it has secured all appropriate licenses, rights, and/or permission from appropriate third parties to include such materials in the County Materials.

Consultant shall defend, indemnify and hold County harmless against any claims by third parties based on infringement of copyright, patent, trade secret, trademark, or any other claimed Intellectual Property or proprietary right, arising from County's use of County Materials created and/or prepared by Consultant. Consultant will also indemnify and defend at its sole expense, any action brought against County based on a claim that County Materials furnished hereunder by Consultant and used within the scope of this Agreement infringe any copyright, patent, trade secret, trademark, or any other claimed Intellectual Property or proprietary right of third parties, and Consultant will pay any costs, damages and attorney's fees incurred by County. County will notify Consultant promptly and in writing of any such action or claim and will permit Consultant to fully participate in the defense thereof.

- d. Consultant shall affix the following notice to all County Materials: "© Copyright 2015 (or such other appropriate date of first publication), County of Los Angeles. All Rights Reserved." Consultant shall affix such notice on the title page of all images, photographs, documents and writings, and otherwise as County may direct.

- e. County shall also have the sole right to control the preparation, modification, and revisions to, all acknowledgment and/or attribution language for all County Materials resulting from this Agreement. County will however, honor requests by Consultant seeking removal of all acknowledgment and/or attribution language relating to the Consultant, should Consultant no longer wish to receive attribution for its work on the County Materials.
- i. If directed to do so by County, Consultant will place the County name and County logo on County Materials developed under this Agreement. Consultant may not, however, use the County name and County logo on any other materials prepared or developed by Consultant that falls outside the scope of this Agreement.

42. Prohibition Against Inducement or Persuasion

Notwithstanding the above, the Consultant and the County agree that, during the term of this Contract and for a period of one year thereafter, neither party shall in any way intentionally induce or persuade any employee of one party to become a employee or agent of the other party. No bar exists against any hiring action initiated through a public announcement.

43. Prohibition from Involvement in Future Solicitation(s) Bidding Process

Neither Consultant nor any subsidiary of or subcontractor to Contractor shall participate in any way in any future solicitation conducted by County that includes or is based upon any solicitation document that is developed as a result of the services rendered by Consultant under this Agreement. As this prohibition applies to subcontractors of the Consultant, Consultant shall notify any subcontractors providing services under this Agreement of this prohibition before they commence work under this Agreement. Any response to a solicitation submitted by Consultant or by any subsidiary of or subcontractor to Consultant in violation of this provision shall be rejected by County. This provision shall survive the expiration or other termination of this Agreement.

Consultant understands and agrees that neither it nor its subsidiaries shall be involved in any way in the bidding process on any Request for Proposals (RFP) developed or prepared by or with the assistance of Consultant's services rendered pursuant to this Agreement, either as a prime Consultant or subconsultant, or as a Consultant to any other prime Consultant or subconsultant. Any such involvement by Consultant shall result in the rejection by the County of the bid by the prime Consultant in question.

44. Public Records Act

- a. Any documents submitted by the Consultant; all information obtained in connection with the County's right to audit and inspect the Consultant's documents, books, and accounting records pursuant to Record Retention and Inspection/Audit Settlement Paragraph of this Contract, as well as those documents which were required to be submitted in response to the RFP used in the solicitation process for this Contract, become the exclusive property of the County. All such documents become a matter of public record and shall be regarded as public records. Exceptions will be those elements in the California Government Code Section 6250 et seq. (Public Records Act) and which are marked "trade secret," "confidential," or "proprietary." The County shall not in any way be liable or responsible for the disclosure of any such records including, without limitation those so marked, if disclosure is required by law, or by an order issued by a court of competent jurisdiction.
- b. In the event the County is required to defend an action on a Public Records Act request for any of the aforementioned documents, information, books, records, and/or contents of a proposal marked "trade secret," "confidential," or "proprietary," the Consultant agrees to defend and indemnify the County from all costs and expenses, including reasonable attorney's fees, in action or liability arising under the Public Records Act.

45. Publicity

- a. The Consultant shall not disclose any details in connection with this Contract to any person or entity except as may be otherwise provided hereunder or required by law. However, in recognizing the Consultant's need to identify its services and related clients to sustain itself, the County shall not inhibit the Consultant from publishing its role under this Contract within the following conditions:
 - i. The Consultant shall develop all publicity material in a professional manner; and
 - ii. During the term of this Contract, the Consultant shall not, and shall not authorize another to, publish or disseminate any commercial advertisements, press releases, feature articles, or other materials using the name of the County without the prior written consent of the County's Project Director. The County shall not unreasonably withhold written consent.

- b. The Consultant may, without the prior written consent of County, indicate in its proposals and sales materials that it has been awarded this Contract with the County of Los Angeles, provided that the requirements of this Paragraph shall apply.

46. Record Retention and Inspection/Audit Settlement

The Consultant shall maintain accurate and complete financial records of its activities and operations relating to this Contract in accordance with generally accepted accounting principles. The Consultant shall also maintain accurate and complete employment and other records relating to its performance of this Contract. The Consultant agrees that the County, or its authorized representatives, shall have access to and the right to examine, audit, excerpt, copy, or transcribe any pertinent transaction, activity, or record relating to this Contract. All such material, including, but not limited to, all financial records, bank statements, cancelled checks or other proof of payment, timecards, sign-in/sign-out sheets and other time and employment records, and proprietary data and information, shall be kept and maintained by the Consultant and shall be made available to the County during the term of this Contract and for a period of five (5) years thereafter unless the County's written permission is given to dispose of any such material prior to such time. All such material shall be maintained by the Consultant at a location in Los Angeles County, provided that if any such material is located outside Los Angeles County, then, at the County's option, the Consultant shall pay the County for travel, per diem, and other costs incurred by the County to examine, audit, excerpt, copy, or transcribe such material at such other location.

- a. In the event that an audit of the Consultant is conducted specifically regarding this Contract by any Federal or State auditor, or by any auditor or accountant employed by the Consultant or otherwise, then the Consultant shall file a copy of such audit report with the County's Auditor-Controller within thirty (30) days of the Consultant's receipt thereof, unless otherwise provided by applicable Federal or State law or under this Contract. Subject to applicable law, the County shall make a reasonable effort to maintain the confidentiality of such audit report(s).
- b. Failure on the part of the Consultant to comply with any of the provisions of this Paragraph shall constitute a material breach of this Contract upon which the County may terminate or suspend this Contract.
- c. If, at any time during the term of this Contract or within five (5) years after the expiration or termination of this Contract, representatives of the County conduct an audit of the Consultant regarding the work performed under this Contract, and if such audit finds that the County's dollar liability for any such work is less than payments made by the County to the Consultant, then the difference shall be either: a) repaid by the Consultant

to the County by cash payment upon demand or b) at the sole option of the County's Auditor-Controller, deducted from any amounts due to the Consultant from the County, whether under this Contract or otherwise. If such audit finds that the County's dollar liability for such work is more than the payments made by the County to the Consultant, then the difference shall be paid to the Consultant by the County by cash payment, provided that in no event shall the County's maximum obligation for this Contract exceed the funds appropriated by the County for the purpose of this Contract.

47. Recycled Bond Paper

Consistent with the Board of Supervisors' policy to reduce the amount of solid waste deposited at the County landfills, the Consultant agrees to use recycled-content paper to the maximum extent possible on the Contract.

48. Subcontracting

- a. The requirements of this Contract may not be subcontracted by the Consultant without the advance approval of the County. Subconsultants listed in the Consultant's Proposals are approved by County, unless otherwise indicated by County. Any attempt by the Consultant to subcontract without the prior consent of the County may be deemed a material breach of this Contract.
- b. If the Consultant desires to subcontract, the Consultant shall provide the following information promptly at the County's request.
 - A description of the work to be performed by the Subconsultant;
 - A draft copy of the proposed subcontract; and
 - Other pertinent information and/or certifications requested by the County.
- c. The Consultant shall indemnify and hold the County harmless with respect to the activities of each and every Subconsultant in the same manner and to the same degree as if such Subconsultant(s) were the Consultant employees.
- d. The County does not have contractual privity with the subconsultant. The Consultant shall remain fully responsible for all performances required of it under this Contract, including those that the Consultant has determined to subcontract. Consultant shall remain fully responsible for services rendered by any subconsultant pursuant to a subcontract between the Consultant and subconsultant.

- e. The Consultant shall be solely liable and responsible for all payments or other compensation to all Subconsultants and their officers, employees, agents, and successors in interest arising through services performed hereunder, notwithstanding the County's consent to subcontract.
- f. The Consultant shall obtain certificates of insurance, which establish that the Subconsultant maintains all the programs of insurance required by the County from each approved Subconsultant. The Consultant shall ensure delivery of all such documents to:

Department of Public Works
Architectural Engineering Division
Contracts & Operations, 8th Floor
900 South Fremont Avenue
Alhambra, CA 91803
(626) 458-2566

Before any Subconsultant employee may perform any work hereunder.

49. Supplemental/Amendment

- a. For any change which affects the scope of work, Term, Contract Sum, payments, or any term or condition included under this Contract, a Supplement or an Amendment shall be prepared and executed by the Consultant and by Director.
- b. The County's Board of Supervisors or Chief Executive Officer or designee may require the addition and/or change of certain terms and conditions in the Contract during term of this Contract. The County reserves the right to add and/or change such provisions as required by the County's Board of Supervisors or Chief Executive Officer. To implement such changes, a Supplement or an Amendment to the Contract shall be prepared and executed by the Consultant and by the Director.
- c. The County, at its sole discretion, may authorize extensions of time as defined in Paragraph 7, Term. The Consultant agrees that such extensions of time shall not change any other term or condition of this Contract during the period of such extensions. To implement an extension of time, a Notice to the Consultant will be prepared by County unless the term extension is applied automatically in accordance with Paragraph 7c.

50. Termination for Breach of Warranty to Maintain Compliance with County's Child Support Compliance Program

Failure of the Contractor to maintain compliance with the requirements set forth in Contractor's Warranty of Adherence to County's Child Support Compliance Program Paragraph, shall constitute default under this Contract. Without limiting the rights and remedies available to the County under any other provision of this Contract, failure of the Contractor to cure such default within ninety (90) calendar days of written notice shall be grounds upon which the County may terminate this Contract pursuant to Termination for Default and pursue debarment of the Contractor, pursuant to County Code Chapter 2.202.

51. Termination for Breach of Warranty to Maintain Compliance with County's Defaulted Property Tax Reduction Program

Failure of Contractor to maintain compliance with the requirements set forth in "Contractor's Warranty of Compliance with County's Defaulted Property Tax Reduction Program" shall constitute default under this Contract. Without limiting the rights and remedies available to County under any other provision of this Contract, failure of Contractor to cure such default within 10 days of notice shall be grounds upon which County may terminate this Contract and/or pursue debarment of Contractor, pursuant to County Code Chapter 2.206.

52. Termination for Convenience

- a. This Contract may be terminated, in whole or in part, when such action is deemed by the County, in its sole discretion, to be in its best interest. Termination of work hereunder shall be effected by notice of termination to the Consultant specifying the extent to which performance of work is terminated and the date upon which such termination becomes effective. The date upon which such termination becomes effective shall be no less than three (3) days after the notice is sent.
- b. After receipt of a notice of termination and except as otherwise directed by the County, the Consultant shall 1) stop work under this Contract on the date and to the extent specified in such notice, and 2) complete performance of such part of the work as shall not have been terminated by such notice.
- c. All material including books, records, documents, or other evidence bearing on the costs and expenses of the Consultant under this Contract shall be maintained by the Consultant in accordance with Record Retention and Inspection/Audit Settlement Paragraph.
- d. County shall not incur any liability to County, other than payment for work already performed, up to the date of termination.

53. Termination for Default

- a. The County may, by written notice to the Consultant, terminate the whole or any part of this Contract, if, in the judgment of County's Project Director.
- Consultant has materially breached this Contract; or
 - Consultant fails to timely provide and/or satisfactorily perform any task, deliverable, service, or other work required either under this Contract; or
 - Consultant fails to demonstrate a high probability of timely fulfillment of performance requirements under this Contract, or of any obligations of this Contract and in either case, fails to demonstrate convincing progress toward a cure within five (5) working days (or such longer period as the County may authorize in writing) after receipt of written notice from the County specifying such failure.
- b. In the event that the County terminates this Contract in whole or in part as provided in this Paragraph, the County may procure, upon such terms and in such manner as the County may deem appropriate, goods and services similar to those so terminated. The Consultant shall be liable to the County for any and all excess costs incurred by the County, as determined by the County, for such similar goods and services. The Consultant shall continue the performance of this Contract to the extent not terminated under the provisions of this subparagraph.
- c. Except with respect to defaults of any Subconsultant, the Consultant shall not be liable for any such excess costs of the type identified in above subparagraph if its failure to perform this Contract arises out of causes beyond the control and without the fault or negligence of the Consultant. Such causes may include, but are not limited to: acts of God or of the public enemy, acts of the County in either its sovereign or contractual capacity, acts of Federal or State governments in their sovereign capacities, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather; but in every case, the failure to perform must be beyond the control and without the fault or negligence of the Consultant. If the failure to perform is caused by the default of a Subconsultant, and if such default arises out of causes beyond the control of both the Consultant and Subconsultant, and without the fault or negligence of either of them, the Consultant shall not be liable for any such excess costs for failure to perform, unless the goods or services to be furnished by the Subconsultant were obtainable from other sources in sufficient time to permit the Consultant to meet the required performance schedule. As used in this Paragraph, the term "Subconsultant(s)" means Subconsultant(s) at any tier.

- d. If, after the County has given notice of termination under the provisions of this Paragraph, it is determined by the County that the Consultant was not in default under the provisions of this Paragraph, or that the default was excusable under the provisions of Paragraph, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to Termination for Convenience Paragraph.
- f. The rights and remedies of the County provided in this Paragraph shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

54. Termination for Improper Consideration

County may, by written notice to Consultant, immediately terminate the right of Consultant to proceed under this Agreement if it is found that consideration, in any form, was offered or given by Consultant, either directly or through an intermediary, to any County officer, employee, or agent with the intent of securing the Agreement or securing favorable treatment with respect to the award, amendment, or extension of the Agreement or the making of any determinations with respect to Consultant's performance pursuant to the Agreement. In the event of such termination, County shall be entitled to pursue the same remedies against Consultant as it could pursue in the event of default by Consultant.

Consultant shall immediately report any attempt by a County officer or employee to solicit such improper consideration. The report shall be made either to County manager charged with the supervision of the employee or to County Auditor-Controller's Employee Fraud Hotline at (213) 974-0914 or (800) 544-6861.

Among other items, such improper consideration may take the form of cash, discounts, service, the provision of travel or entertainment, or tangible gifts.

55. Termination for Insolvency

- a. The County may terminate this Contract forthwith in the event of the occurrence of any of the following: 1) Insolvency of the Consultant. The Consultant shall be deemed to be insolvent if it has ceased to pay its debts for at least sixty (60) days in the ordinary course of business or cannot pay its debts as they become due, whether or not a petition has been filed under the Federal Bankruptcy Code and whether or not the Consultant is insolvent within the meaning of the Federal Bankruptcy Code; 2) The filing of a voluntary or involuntary petition regarding the Consultant under the Federal Bankruptcy Code; 3) The appointment of a Receiver or Trustee for the Consultant; or 4) The execution by the Consultant of a general assignment for the benefit of creditors.

- b. The rights and remedies of the County provided in this Paragraph shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

56. Termination for Non-Adherence of County Lobbyist Ordinance

The Contractor, and each County Lobbyist or County Lobbying firm as defined in County Code Section 2.160.010 retained by the Contractor, shall fully comply with the County Lobbyist Ordinance, County Code Chapter 2.160. Failure on the part of the Contractor or any County Lobbyist or County Lobbying firm retained by the Contractor to fully comply with the County's Lobbyist Ordinance shall constitute a material breach of this Contract, upon which the County may in its sole discretion, immediately terminate or suspend this Contract.

57. Termination for Non-Appropriation of Funds

Notwithstanding any other provision of this Contract, the County shall not be obligated for the Consultant's performance hereunder or by any provision of this Contract during any of the County's future fiscal years unless and until the County's Board of Supervisors appropriates funds for this Contract in the County's Budget for each such future fiscal year. In the event that funds are not appropriated for this Contract, then this Contract shall terminate as of June 30 of the last fiscal year for which funds were appropriated. The County shall notify the Consultant in writing of any such non-allocation of funds at the earliest possible date.

58. Time Off for Voting

The Consultant shall notify its employees, and shall require each subconsultant to notify and provide to its employees, information regarding the time off for voting law (Elections Code Section 14000). Not less than 10 days before every statewide election, every Consultant and subconsultant shall keep posted conspicuously at the place of work, if practicable, or elsewhere where it can be seen as employees come or go to their place of work, a notice setting forth the provisions of Section 14000.

59. Warranty of Compliance with County's Defaulted Property Tax Reduction Program

Contractor acknowledges that County has established a goal of ensuring that all individuals and businesses that benefit financially from County through Contract are current in paying their property tax obligations (secured and unsecured roll) in order to mitigate the economic burden otherwise imposed upon County and its taxpayers.

Unless Contractor qualifies for an exemption or exclusion, Contractor warrants and certifies that to the best of its knowledge it is now in compliance, and during the term of this Contract will maintain compliance, with Los Angeles County Code Chapter 2.206.

60. Validity

If any provision of this Contract or the application thereof to any person or circumstance is held invalid, the remainder of this Contract and the application of such provision to other persons or circumstances shall not be affected thereby.

61. Waiver

No waiver by the County of any breach of any provision of this Contract shall constitute a waiver of any other breach or of such provision. Failure of the County to enforce at any time, or from time to time, any provision of this Contract shall not be construed as a waiver thereof. The rights and remedies set forth in this Paragraph shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

62. Warranty Against Contingent Fees

- a. The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure this Contract upon any Contract or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business.
- b. For breach of this warranty, the County shall have the right to terminate this Contract and, at its sole discretion, deduct from the Contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

63. Prevailing Wage Requirements

This work includes prevailing wage and non-prevailing wage work.

a. Prevailing Wages

When applicable, the services provided in this Contract constitute "public works" as defined in California Labor Code 1720, and are therefore subject to payment of prevailing wages, compliance monitoring and enforcement by the Department of Industrial Relations (DIR).

The Director of the DIR has established the general prevailing rate of per diem wages for each craft, classification, type of worker, or mechanic needed to execute public works and improvements. The current general prevailing wage rate determinations are available at www.dir.ca.gov/dlsr/pwd/index.htm. The Contractor is required to pay its agents and employees the applicable, current prevailing wage rate and is responsible for selecting the classification of workers required to perform this service.

The Contractor agrees to comply with the provisions of Section 1775 of the California Labor Code relating to the payment of prevailing wages, the utilization of apprentices in accordance to Labor Code 1777.5, and the assessment of penalties determined by the California Labor Commissioner. Pursuant to Section 1773.2 of the California Labor Code, copies of the prevailing rate of per diem wages are on file at the County Department of Public Works, Construction Division, and will be made available for inspection by request to the Contract Administrator. Future effective wage rates will be on file with the Department of Industrial Relations. The new wage rates shall become effective on the day following the expiration date of the current determinations and apply to the Contract in the same manner as if they had been included or referenced in the Contract.

b. Work Records

The Contractor shall comply with the requirements of Section 1812 of the Labor Code. The Contractor shall maintain an accurate written record of all employees working on the project each calendar day. The record shall include each employee's name, Social Security number, job classification, and the actual number of hours worked.

c. Posting of Notices

The Contractor shall comply with the provisions of Section 1773.2 of the Labor Code. The Contractor shall post a copy of the prevailing wage rates at the worksite and comply with applicable law including posting of jobsite notices required by 8 California Code Reg. §16451(d):

"This public works project is subject to monitoring and investigative activities by the Compliance Monitoring Unit (CMU) of the Division of Labor Standards Enforcement, Department of Industrial Relations, State of California. This Notice is intended to provide information to all workers employed in the execution of the Contract for public work and to all contractors and other persons having access to the jobsite to enable the CMU to ensure compliance with and enforcement of prevailing wage laws on public works projects.

The prevailing wage laws require that all workers be paid at least the minimum hourly wage as determined by the Director of Industrial Relations for the specific classification (or type of work) performed by workers on the project. These rates are listed on a separate jobsite posting of minimum prevailing rates required to be maintained by the public entity, which awarded the public works Contract. Complaints concerning nonpayment of the required minimum wage rates to workers on this project may be filed with the CMU at any office of the Division of Labor Standards Enforcement (DLSE).

Local Office Telephone Number:

*Division of Labor Standards Enforcement Office
320 West Fourth Street, Suite 450
Los Angeles, CA 90013
(213) 620-6330*

Complaints should be filed in writing immediately upon discovery of any violations of the prevailing wage laws due to the short period of time following the completion of the project that the CMU may take legal action against those responsible.

Complaints should contain details about the violations alleged (for example, wrong rate paid, not all hours paid, overtime rate not paid for hours worked in excess of 8 hours per day or 40 hours per week, etc.) as well as the name of the employer, the public entity which awarded the public works Contract, and the location and name of the project.

For general information concerning the prevailing wage laws and how to file a complaint concerning any violation of these prevailing wage laws, you may contact any DLSE office. Complaint forms are also available at the Department of Industrial Relations website found at <http://www.dir.ca.gov/Public-Works/PublicWorks.html>.

d. **Certified Payroll Records**

The Contractor shall comply with the requirements of Section 1776 of the Labor Code. Contractor and Subcontractors, if any, must furnish certified payroll records directly to the Labor Commissioner (aka Division of Labor Standards Enforcement) in a format prescribed by the Labor Commissioner.

- e. When requested by the County, electronic certified payroll records must be submitted to the County, through an online system designated by the County.

FEDERAL PROVISIONS – ARTICLES 64 TO 73

All contracts and subcontracts that result from this solicitation must incorporate the following provisions (Articles 64 to 73) by reference, with the same force and effect as if given in full text. The contractor (including all subcontractors) must insert these contract provisions in each contract and subcontract, and further require that the clauses be included in all subcontracts. The contractor (or subcontractor) must incorporate applicable requirements of these contract provisions by reference for work done under any purchase orders, rental agreements and other agreements for supplies or services.

64. General Civil Rights Provisions

The contractor agrees that it will comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or handicap be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision binds the contractors from the bid solicitations period through the completion of the contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

This provision also obligates the tenant/concessionaire/lessee or its transferee for the period during which Federal assistance is extended to the airport through the Airport Improvement Program, except where Federal assistance is to provide, or is in the form of personal property; real property or interest therein; structures or improvements thereon.

In these cases the provision obligates the party or any transferee for the longer of the following periods:

- (a) The period during which the property is used by the Sponsor (County of Los Angeles) or any transferee for a purpose for which Federal assistance is extended, or for another purpose involving the provision of similar services or benefits, or
- (b) The period during which the Sponsor (County of Los Angeles) or any transferee retains ownership or possession of the property.

Title VI – Compliance with Nondiscrimination Requirements

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Statutes and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 Code of Federal Regulations (CFR) Part 21.
3. **Solicitations for Subcontractors, including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor to the contractor's obligations under this contract and the Acts and the Regulations relative to non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Sponsor (County of Los Angeles) or the FAA to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Sponsor (County of Los Angeles) or the FAA, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the non-discrimination provisions of this contract, the Sponsor (County of Los Angeles) will impose such contract sanctions as it or the FAA may determine to be appropriate, including, but not limited to:
 - a. Withholding payments to the contractor under the contract until the contractor complies; and/or

- b. Canceling, terminating, or suspending a contract, in whole or in part.

6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Sponsor (County of Los Angeles) or the FAA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Sponsor (County of Los Angeles) to enter into any litigation to protect the interests of the Sponsor (County of Los Angeles). In addition, the contractor may request the United States to enter into the litigation to protect the interest of the United States.

65. **Airport and Airway Improvement Act of 1982**

Prohibits discrimination based on race, creed, color, national origin, or sex.

66. **Disadvantaged Business Enterprises**

Contract Assurance (§ 26.13) – The contractor 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 Department of Transportation (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.

Prompt Payment (§ 26.29). The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than (specify number) days from the receipt of each payment the prime contractor receives from the County. The prime contractor agrees further to return retainage payments to each subcontractor within (specify the same number as above) days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the County. This clause applies to both Disadvantaged Business Enterprise (DBE) and non-DBE subcontractors.

67. Lobbying and Influencing Federal Employees

The bidder or offeror certifies by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the bidder or offeror, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

68. Access to Records and Reports

The contractor must maintain an acceptable cost accounting system. The contractor agrees to provide the Sponsor (County of Los Angeles), the FAA, and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers, and records of the contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

69. Breach of Contract Terms

Any violation or breach of terms of this contract on the part of the contractor or its subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement. The duties and obligations imposed by the contract documents and the rights and remedies available thereunder are in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

70. Rights to Inventions

All rights to inventions and materials generated under this contract are subject to requirements and regulations issued by the FAA and the Sponsor (County of Los Angeles) of the Federal grant under which this contract is executed.

71. Trade Restriction Clause

The contractor or subcontractor, by submission of an offer and/or execution of a contract, certifies that it:

- a. Is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR);
- b. Has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;
- c. Has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list;

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a contractor or subcontractor who is unable to certify to the above. If the contractor knowingly procures or subcontracts for the supply of any product or service of a foreign country on said list for use on the project, the FAA may direct through the Sponsor (County of Los Angeles) cancellation of the contract at no cost to the government.

Further, the contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in each contract and in all lower tier subcontractors. The contractor may rely on the

certification of a prospective subcontractor unless it has knowledge that the certification is erroneous.

The contractor shall provide immediate written notice to the sponsor if the contractor learns that its certification or that of a contractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The subcontractor agrees to provide written notice to the contractor of at any time it learns that its certification was erroneous by reason of changed circumstances.

This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the contractor or subcontractor knowingly rendered an erroneous certification, the FAA may direct through the Sponsor (County of Los Angeles) cancellation of the contract or subcontract for default at no cost to the government.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

72. Termination of Contract

- a. The Sponsor (County of Los Angeles) may, by written notice, terminate this contract in whole or in part at any time, either for the Sponsor's (County of Los Angeles) convenience or because of failure to fulfill the contract obligations. Upon receipt of such notice services must be immediately discontinued (unless the notice directs otherwise) and all materials as may have been accumulated in performing this contract, whether completed or in progress, delivered to the Sponsor (County of Los Angeles).
- b. If the termination is for the convenience of the Sponsor (County of Los Angeles), an equitable adjustment in the contract price will be made, but no amount will be allowed for anticipated profit on unperformed services.
- c. If the termination is due to failure to fulfill the contractor's obligations, the Sponsor (County of Los Angeles) may take over the work and prosecute the same to completion by contract or otherwise. In such case, the contractor is liable to the Sponsor for any additional cost occasioned to the Sponsor (County of Los Angeles) thereby.

- d. If, after notice of termination for failure to fulfill contract obligations, it is determined that the contractor had not so failed, the termination will be deemed to have been effected for the convenience of the Sponsor (County of Angeles). In such event, adjustment in the contract price will be made as provided in Paragraph 2 of this clause.
- e. The rights and remedies of the sponsor provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

74. Entire Agreement

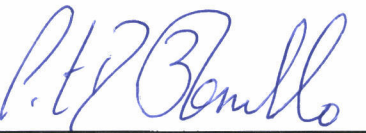
This Contract constitutes the entire Agreement between County and Consultant and may be modified only by further written Agreement between the parties hereto.


IN WITNESS WHEREOF, the County has, by order of its Board of Supervisors, caused these presents to be subscribed by the Director of the Department of Public Works, and the Consultant has hereunto subscribed its corporate name and affixed its corporate seal by its duly authorized officers the day, month, and year herein first above written.

COUNTY OF LOS ANGELES

AE CONSULTING, INC.

By 
Deputy Director
Department of Public Works

By 
President

By 
Secretary

APPROVED AS TO FORM:

MARY WICKHAM
County Counsel

By 
Deputy County Counsel

P:\aepub\CONTRACTS\Kathleen\Aviation\Engineering Services Agreement AE Consulting.docx

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)

County of ORANGE)

On 3/2/16 before me, HAYLEY A ZAYDEL, NOTARY PUBLIC,
Date Here Insert Name and Title of the Officer

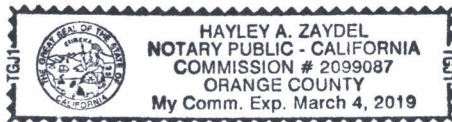
personally appeared JENNIFER G. BONELLO +
Name(s) of Signer(s)

PETER D. BONELLO

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is(are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Signature Hayley A Zaydel
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: AGREE FOR CONSULTANT SERVICES Document Date: _____

Number of Pages: 41 Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

☐ Corporate Officer — Title(s): _____

☐ Partner — ☐ Limited ☐ General

☐ Individual ☐ Attorney in Fact

☐ Trustee ☐ Guardian or Conservator

☐ Other: _____

Signer Is Representing: _____

Signer's Name: _____

☐ Corporate Officer — Title(s): _____

☐ Partner — ☐ Limited ☐ General

☐ Individual ☐ Attorney in Fact

☐ Trustee ☐ Guardian or Conservator

☐ Other: _____

Signer Is Representing: _____

ATTACHMENT A – MARCH 1, 2016

AS-NEEDED AVIATION DESIGN ENGINEERING SERVICES

SCOPE OF SERVICES

The services to be rendered by the Consultant shall include all services as described in their proposal, except to the extent they are inconsistent with this attachment and the terms of this Agreement, and shall consist of all such services as are customarily rendered when providing professional services of this type.

All five of the County's airports are eligible for Federal airport funding assistance. The Federal Aviation Administration (FAA) participates in and supports the County's program for improving the airports. Services will be sought in accordance with the FAA Advisory Circular 150/5100-14E, "Architectural, Engineering, and Planning Consultant Services for Airport Grant Projects" (Attachment E). All work shall comply with pertinent Federal, State, City, and County guidelines, policies, and procedures. All consultant work shall be performed in accordance with the FAA's policies and guidelines.

Eligible projects include those improvements related to enhancing airport safety, capacity, and environmental concerns. The County may use Federal funds for design engineering services on most airfield capital improvements or repairs, except those for terminals, hangars, and non-aviation development. Professional services that are necessary for eligible projects include the following: planning, surveying, design, runway, taxiway, and apron pavement maintenance. Consultant shall be capable of providing all the following services through the use of their staff or subconsultants if necessary.

2.1 General Aviation Design Engineering Services

The general aviation design engineering services to be performed by the Consultant shall include, but not be necessarily limited to, the following items of work as they would apply to various airport projects: pavement rehabilitation, new construction drainage study, development of taxiway intersections, airfield lighting and signage, and architectural, civil, geotechnical, structural, mechanical, and electrical engineering. In addition, there may be some services outside those normally considered basic as described below. The basic services are usually conducted, in but are not limited to, the four distinct and sequential phases summarized below:

2.2 Preliminary Phase

This phase involves those activities required for defining the scope of a project and establishing preliminary requirements. Some examples of activities within this phase of a project include, but are not limited to:

- a. Conferring with the sponsor on project requirements, finances, schedules, early phases of the project, and other pertinent matters and meeting with FAA and other concerned agencies and parties on matters affecting the project.**
- b. Planning, procuring, and/or preparing necessary surveys, geotechnical engineering investigations, field investigations, and architectural and engineering studies required for preliminary design considerations.**
- c. Developing design schematics, sketches, environmental and aesthetic considerations, project recommendations, and preliminary layouts and cost estimates.**

2.3 Design Phase

This phase includes all activities required to undertake and accomplish a full and complete project design. Examples include, but are not limited to, those below:

- a. Conducting and attending meetings and design conferences to obtain information and to coordinate or resolve design matters.**
- b. Collecting engineering data and undertaking field investigations, performing geotechnical engineering studies; and performing architectural, engineering, and special environmental studies.**
- c. Preparing necessary engineering reports and recommendations.**
- d. Preparing detailed plans, specifications, cost estimates, and design/construction schedules.**
- e. Preparing construction safety plans.**

- f. Printing and providing necessary copies of engineering drawings and contract specifications.

2.4 Bidding and Negotiation Phase

These activities are sometimes considered part of the construction phase and typically involve assisting the sponsor in advertising and securing bids, negotiating for services, analyzing bid results, furnishing recommendations on the award of contracts, and preparing contract documents.

2.5 Construction Phase

This phase includes all basic services rendered after the award of a construction contract, including, but not limited to:

- a. Providing consultation and advice to the sponsor during all phases of construction.
- b. Representing the sponsor at preconstruction conferences.
- c. Inspecting work in progress periodically and providing appropriate reports to the sponsor.
- d. Reviewing and approving shop and erection drawings submitted by contractors for compliance and design concept/drawings.
- e. Reviewing, analyzing, and approving laboratory and mill test reports of materials and equipment.
- f. Preparing and negotiating change orders and supplemental agreements.
- g. Observing or reviewing performance tests required by specifications.
- h. Determining amounts owed to contractors and assisting sponsors in the preparation of payment requests for amounts reimbursable from grant projects.
- i. Making final inspections and submitting punch-lists and a report of the completed project to the sponsor.
- j. Reviewing operations and maintenance manual.



U.S. Department
of Transportation
**Federal Aviation
Administration**

Advisory Circular

Subject: Architectural, Engineering, and Planning
Consultant Services for Airport Grant Projects

Date: 9/30/2014

AC No: 150/5100-14E

Initiated By: AAS-100

1 Purpose.

This advisory circular (AC) provides guidance for airport sponsors in the selection and engagement of architectural, engineering, and planning consultants. It also discusses services that normally would be included in an airport grant project, types of contracts for these services, contract format and provisions, and guidelines for determining the reasonableness of consultant fees.

2 Cancellation.

This AC cancels AC 150/5100-14D, *Architectural, Engineering, and Planning Consultant Services for Airport Grant Projects*, dated August 30, 2005.

3 Application.

A Sponsor is required to award each contract, or sub-contract for program management, construction management, planning studies, feasibility studies, architectural services, preliminary engineering, design, engineering, surveying, mapping or related services with respect to the project in the same manner as a contract for architectural and engineering services is negotiated under Title IX of the Federal Property and Administrative Services Act of 1949 (40 U.S.C. Chapter 11, Selection of Architects and Engineers), or an equivalent qualifications-based requirement prescribed for or by the sponsor of the airport. See 49 U.S.C. § 47107(a) (17) and the grant assurances.

Title 2 of the Code of Federal Regulations (C.F.R.), part 200, establishes uniform administrative rules for Federal grants. The FAA prepared this guidance to assist Sponsor compliance with the procurement requirements of §§200.317-200.326.

This AC does not apply to airport projects that are fully funded with passenger facility charge (PFC) funds.

4 Principal Changes.

The AC incorporates the following principal changes:

1. Clarified Independent Fee Estimates processes.
2. Clarified multiple consultant selection process.
3. Added "Specific Rates of Compensation" method of contracting.
4. Revised and expanded discussion of Alternative Project Delivery Methods, moved to Appendix G.
5. Updated the advisory circular format to the decimal numbering system.
6. The Office of Management and Budget published the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards; Final Rule, in 78 Federal Register Notice 78590, December 26, 2013. This final guidance contains the administrative requirements formerly contained in (A-110 and A-102), cost principles (A-21, A-87, and A-22), and audit requirements (A-50, A-89, and A-133) for federal awards. As of December 26, 2014, a Sponsor must implement applicable the requirements of 2 CFR §200 to remain allowable for federal assistance.



Michael J. O'Donnell
Director of Airport Safety and Standards

CONTENTS

Paragraph	Page
CHAPTER 1. INTRODUCTION	1-1
1.1 Overview.....	1-1
1.2 Definitions.....	1-1
1.3 Referenced Documents.....	1-1
1.4 Types of Consultant Services.....	1-1
1.5 Special Services.	1-4
CHAPTER 2. PROCEDURES FOR SELECTION OF CONSULTANTS.....	2-1
2.1 General.....	2-1
2.2 Procurement Standards.	2-1
2.3 Qualifications Based Selection Procedures.....	2-2
2.4 Other Services.	2-3
2.5 Selecting Organization.	2-4
2.6 Policy for Selection.....	2-5
2.7 Selection Criteria.	2-6
2.8 Selection Procedures.....	2-7
2.9 Alternate Selection Procedures.	2-11
2.10 Selection Procedures for Environmental Impact Statement (EIS) Preparation.	2-12
2.11 Scope of Services.	2-13
2.12 Independent Fee Estimate.....	2-14
2.13 Negotiations.	2-15
2.14 Sponsor Force Account Projects.	2-16
CHAPTER 3. CONTRACT FORMAT AND PROVISIONS.....	3-1
3.1 General.....	3-1
3.2 Contract Format.	3-1
3.3 Division of Responsibility and Authority.	3-1
3.4 Mandatory Contract Provisions.....	3-2
3.5 Time Overruns Beyond Control of the Consultant.....	3-3
3.6 Ownership of Drawings and Contract Documents.	3-3
3.7 Contract Checklist.	3-3
3.8 FAA Contract Review.	3-4

CONTENTS

Paragraph	Page
3.9 FAA Contract Approval.	3-5
CHAPTER 4. METHODS OF CONTRACTING AND ALLOWABLE COSTS	4-1
4.1 General.	4-1
4.2 Direct Personal Services.	4-1
4.3 Retainer.	4-3
4.4 Cost-Plus-a-Fixed-Fee (Not to Exceed (NTE)).	4-4
4.5 Fixed Lump-Sum Payment.	4-5
4.6 Cost-Plus-a-Percentage-of-Cost.	4-5
4.7 Specific Rates of Compensation (Not to Exceed (NTE)).	4-6
4.8 Phasing of Work.	4-6
4.9 Allowable Costs.	4-7
4.10 Non-Allowable Costs.	4-8
4.11 Fixed Fee.	4-8
APPENDIX A. DEFINITIONS	A-1
APPENDIX B. BIBLIOGRAPHY	B-1
APPENDIX C. SCOPE OF SERVICES SAMPLES	C-1
APPENDIX D. CONSULTANT SERVICES FEE/COSTS SAMPLE	D-1
APPENDIX E. DETAILED FEE/COST ANALYSIS SAMPLE	E-1
APPENDIX F. RECORD OF NEGOTIATIONS SAMPLE	F-1
APPENDIX G. ALTERNATIVE PROJECT DELIVERY SYSTEMS	G-1

CHAPTER 1. INTRODUCTION

1.1 Overview.

This advisory circular (AC) provides guidance for airport sponsors in the selection and engagement of architectural, engineering, and planning consultants. This AC discusses services normally included in an airport grant project, types of contracts for these services, contract format, and guidelines for determining the reasonableness of consultant fees.

1.2 Definitions.

Definitions of the terms used in this AC are listed in Appendix A.

1.3 Referenced Documents.

Documents and regulations referenced throughout this circular are listed in Appendix B.

1.4 Types of Consultant Services.

There are two separate and distinct categories of consultant services that are utilized for projects conducted under airport grant programs. The first category involves planning services. The second involves Architectural/ Engineering (A/E) services for the design and construction administration/inspection of airport projects. These two categories of consultant services are discussed below.

1.4.1 Aviation Planning Services.

This category includes studies under the broad headings of airport system and master planning, airport noise compatibility planning and environmental assessments and related studies. These studies include, but are not limited to, the following activities:

1. Design study to establish the framework and detailed work program.
2. Airport data collection and facility inventories.
3. Aeronautical activity forecasts and demand/capacity analyses.
4. Facility requirements determination.
5. Airfield modeling for capacity and delay.
6. Airport layout and terminal area plan development.
7. Airport noise studies under 14 CFR Parts 150 and 161.
8. Compatible land-use planning in the vicinity of airports.
9. Airport site selection studies.
10. Airport development schedules and cost estimates.
11. Airport financial planning and benefit cost analysis.

12. Participation in public information and community involvement programs and/or public hearings relating to airport development and planning projects.
13. Environmental Assessments (EA), Environmental Impact Statements (EIS), and other studies in accordance with FAA Orders 5050.4 and 1050.1.
14. Airspace analysis.
15. GIS data collection, entry, and analysis and other electronic graphical/mapping efforts.

1.4.2 Architectural/Engineering Services for Airport Development Projects.

This category includes the basic A/E services normally required for airport development projects. It involves services generally of an architectural, civil, geotechnical, structural, mechanical, and electrical engineering nature. In addition, there may be some services outside those normally considered basic that are discussed in paragraph 1.5. The basic services are usually conducted in, but are not limited to, the four distinct and sequential phases summarized below:

1.4.2.1 Preliminary Phase.

This phase involves those activities required for defining the scope of a project and establishing preliminary requirements. Some examples of activities within this phase of a project include, but are not limited to:

1. Coordinating with the sponsor on project scope requirements, finances, schedules, operational safety and phasing considerations, site access and other pertinent matters.
2. As applicable, coordinating project with local FAA personnel and other interested stakeholders to identify potential impacts to their operations.
3. Planning, procuring, and/or preparing necessary surveys, geotechnical engineering investigations, field investigations, and architectural and engineering studies required for design considerations.
4. Developing design schematics, sketches, environmental and aesthetic considerations, project recommendations, and preliminary layouts and cost estimates.
5. Preparing project design criteria and other bridging documents commonly used for alternative project delivery methods such as design-build contracting.

1.4.2.2 Design Phase.

This phase includes all activities required to undertake and accomplish a full and complete project design. Examples include, but are not limited to, those below:

1. Conducting and attending meetings and design conferences to obtain information and to coordinate or resolve design matters.

2. Collecting engineering data and undertaking field investigations; performing geotechnical engineering studies; and performing architectural, engineering, and special environmental studies.
3. Preparing necessary engineering reports and recommendations.
4. Preparing detailed plans, specifications, cost estimates, and design/construction schedules.
5. Preparing Construction Safety and Phasing Plan (CSPP).
6. Printing and providing necessary copies of engineering drawings and contract specifications.

1.4.2.3 Bidding and Negotiation Phase.

These activities are sometimes considered part of the construction phase. They involve assisting the sponsor in advertising and securing bids, negotiating for services, analyzing bid results, furnishing recommendations on the award of contracts, and preparing contract documents.

1.4.2.4 Construction Phase.

This phase may include all basic services rendered after the award of a construction contract, including, but not limited to, the following activities:

1. Providing consultation and advice to the sponsor during all phases of construction.
2. Representing the sponsor at preconstruction conferences.
3. Inspecting work in progress periodically and providing appropriate reports to the sponsor.
4. Reviewing and approving shop and erection drawings submitted by contractors for compliance with design concept/drawings.
5. Reviewing, analyzing, and accepting laboratory and mill test reports of materials and equipment.
6. Assisting in the negotiation of change orders and supplemental agreements.
7. Observing or reviewing performance tests required by specifications.
8. Determining amounts owed to contractors and assisting sponsors in the preparation of payment requests for amounts reimbursable from grant projects.
9. Making final inspections and submitting punch-lists and a report of the completed project to the sponsor.
10. Reviewing operations and maintenance manuals.

1.4.2.5 Project Closeout Phase.

This phase includes all basic services rendered after the completion of a construction contract, including, but not limited to, the following activities:

1. Making final inspections and submitting punch-lists and a report of the completed project to the sponsor.
2. Providing record drawings.
3. Preparing summary of material testing report
4. Preparing summary of project change orders
5. Preparing grant amendment request and associated justification, if applicable.
6. Preparing final project reports including financial summary.
7. Obtaining release of liens from all contractors.

1.5 Special Services.

1.5.1 The development of some projects may involve activities or studies outside the scope of the basic design services routinely performed by the consultant. These special services may vary greatly in scope, complexity, and timing and may involve a number of different disciplines and fields of expertise.

1.5.2 Consultants performing special services may be employed directly by the sponsor to implement one or more phases of a project or may be employed by the principal consultant via a subcontract agreement. In certain instances, these services may be performed by the principal consultant. Some examples of special services that might be employed for airport projects include, but are not limited to, the following:

1. Soil investigations, including core sampling, laboratory tests, related analyses, and reports.
2. Detailed mill, shop, and/or laboratory inspections of materials and equipment.
3. Land surveys and topographic maps.
4. Field and/or construction surveys.
5. Photogrammetry surveys.
6. Onsite construction inspection and/or management involving the services of a full-time resident engineer(s), inspector(s), or manager(s) during the construction or installation phase of a project. This differs from the periodic inspection responsibilities included as part of the basic services.
7. Special environmental studies and analyses.
8. Expert witness testimony in litigation involving specific projects.
9. Project feasibility studies.

10. Public information and community involvement surveys, studies, and activities.
11. Preparation of record drawings.
12. Assisting the sponsor in the preparation of necessary applications for local, State, and Federal grants.
13. Preparation of or updating of the airport layout plan.
14. Preparation of property maps.
15. Preparation of quality control plan.
16. Preparation of final report.

Page Intentionally Blank

CHAPTER 2. PROCEDURES FOR SELECTION OF CONSULTANTS

2.1 General.

The procedures included in this chapter provide guidance for sponsors in the selection and engagement of architectural, engineering, environmental, and planning consultants on projects funded wholly or in part under Federal airport grant programs. Adherence to these procedures will assure a sponsor of compliance with the requirements of 49 USC § 47107(a) (17) and 2 CFR §200.320, as amended.

2.1.1 49 USC § 47107(a) (17) states: "Each contract and subcontract for program management, construction management, planning studies, feasibility studies, architectural services, preliminary engineering, design engineering, surveying, mapping, and related services will be awarded in the same way that a contract for architectural and engineering services is negotiated under Chapter 11 of Title 40 or an equivalent qualifications based requirement prescribed for or by the sponsor." In addition to the services described in this statute, the professional and incidental services listed under A/E Services in Appendix A, must also be procured using qualifications based procedures.

2.1.2 2 CFR § 200.320 establishes that procurement by competitive proposal, where price is not a factor, may only be used for procurement of architectural/engineering (A/E) services. It may not be used for other services even though an A/E firm may be a potential source to perform the service. If a conflict exists between 49 USC § 47107(a) (17) and 2 CFR 200, the statute will prevail.

2.1.3 Title IX of the Federal Property and Administrative Services Act of 1949 requires that qualifications based selection procedures be used for the selection of firms to perform architectural and engineering services. Qualifications based procedures require that a contract for A/E services be awarded pursuant to a fair and open selection process based on the qualifications of the firms. The fees for such services are established following selection of a firm through a negotiation process to determine a fair and reasonable price.

2.2 Procurement Standards.

2.2.1 The selection of qualified consultants must be made on the basis of fair negotiations and equitable fees and through selection procedures that are professionally acceptable, ensure maximum open and free competition, and avoid any suggestion of unfair or unethical conduct.

2.2.2 Consultants employed for work on projects involving airport grants must be responsible and possess the ability to perform successfully under the terms and conditions of the proposed procurement. Consideration should be given to such matters as integrity, record of past performance, extent of experience with the type of services required by the sponsor, technical resources, and accessibility to other necessary resources.

2.2.3 The Sponsor's procurement action must be void of individual and organizational conflicts of interests both real and/or perceived.

2.2.3.1 Individual conflicts of interest may exist whenever a Sponsor's employee, officer, agent or family member thereof has a financial or other interest in the firms competing for the work.

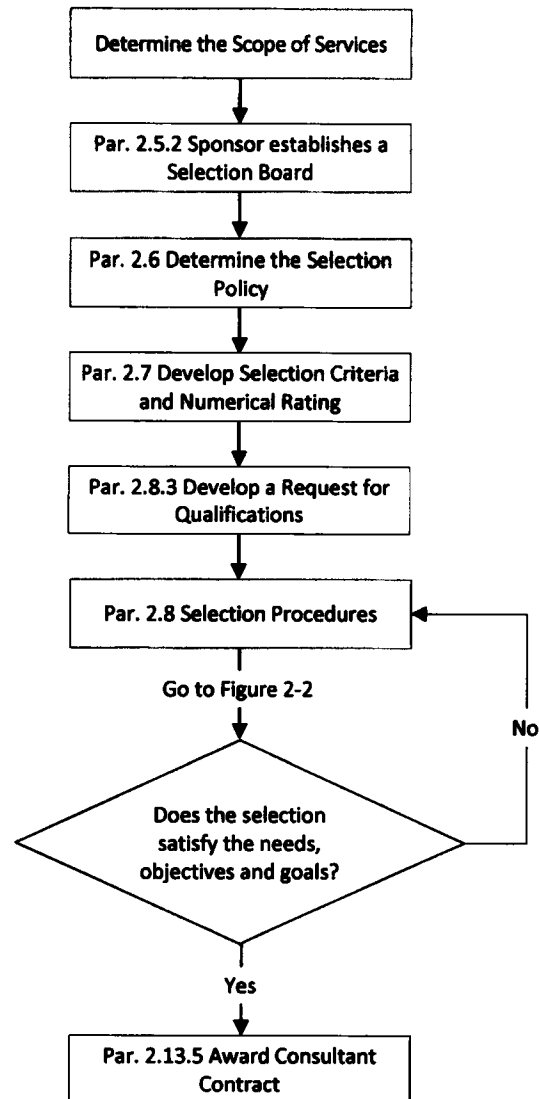
2.2.3.2 Organizational conflicts of interest may exist when there is a lack of impartiality, impaired objectivity or an unfair advantage with one or more of the firms competing for the work.

2.2.4 Sponsors must maintain sufficient records, made available at the FAA's request, to detail the significant history of their procurement action. This includes the rationale for the procurement method; the selection considerations; contract type and basis for contract price.

2.2.5 Per § 200.319, all procurement transactions must be conducted in a manner providing full and open competition. To ensure objective contractor performance and eliminate unfair competitive advantage, entities that develop or draft specifications, requirements, statements of work, and invitations for bids or requests for proposals must be excluded from competing for such procurements.

2.3 Qualifications Based Selection Procedures.

Consultants must be selected on the basis of their qualifications and experience, with fees determined through negotiations following selection. The qualifications of consultants are evaluated and the best qualified consultant is selected, subject to a mutual understanding of the scope of services and negotiation of a fair and reasonable fee. Figure 2-1 is an overview of the recommended Qualifications Based Consultant Selection process.

Figure 2-1. Qualifications Based Selection Process

2.4 Other Services.

- 2.4.1 Where services are to be performed in conjunction with the architectural, planning, environmental, or engineering services, they must be contracted for in the course of procuring the A/E services.
- 2.4.2 Where services such as feasibility studies, construction management, program management and other services as defined in 49 USC § 47107(a) (17) and A/E services as defined in Appendix A are to be performed, they must be procured using qualifications based procedures.

- 2.4.3 Where services are to be performed that are not in conjunction with A/E services and do not require performance by a licensed architect or engineer, the services should be acquired using local procurement procedures. An example of this type of special service would be soil borings, whereby the boring layout plan and interpretations of tests are not performed by the boring contractor. Soil borings conducted as part of a geotechnical engineering investigation or for which an independent engineer is responsible must be procured either in the course of procuring A/E services or by using qualifications based procedures.
- 2.4.4 Where services are to be performed in assisting the FAA in preparing an Environmental Impact Statement (EIS), they must be procured using qualifications based selection procedures (see paragraph 2.10).
- 2.4.5 Where a sponsor decides to utilize an Alternative Project Delivery System (APDS) such as design-build (DB) or construction manager-at-risk (CMAR), the Sponsor may use the competitive proposal approach (as defined in 2 CFR §200.320) for selection provided price and other factors such as qualifications, skill, experience, and design approach are considered when selecting a firm to perform this service. The selection of an A/E services firm is the only instance where prices must be excluded as a consideration under a competitive proposal selection. Please reference Appendix G, Alternative Project Delivery Systems, of this Advisory Circular for guidance in procuring these types of services.
- 2.5 Selecting Organization.**
- 2.5.1 Within the sponsor's organization, an administrative policy should be established for designating persons authorized to select or recommend consultants for various assignments. The persons designated may include the administrator or the department head to be supplemented by others making up a selection board. The persons empowered to make the selection of one consultant over another must be kept free of pressures, both internal and external. 2 CFR § 200.318(c) requires that sponsors maintain a written code of standards of conduct governing the performance of their employees engaged in the award and administration of contracts. They must not participate in selection or in the award or administration of a contract supported by Federal funds if a conflict of interest, real or apparent, would be involved.
- 2.5.2 The typical procedure for selecting a consultant is to use a selection board composed of at least three persons, with at least one being an engineer, airport planner, or other professional knowledgeable of the service required. For projects that have special design requirements or are particularly complex, the selection board should have additional technical members with the appropriate expertise in those required disciplines. The board should be prepared to evaluate potential consultants, i.e., conduct interviews and inquiries as desired and make recommendations to the governing body in accordance with Paragraph 2.8.14.

2.6 Policy for Selection.

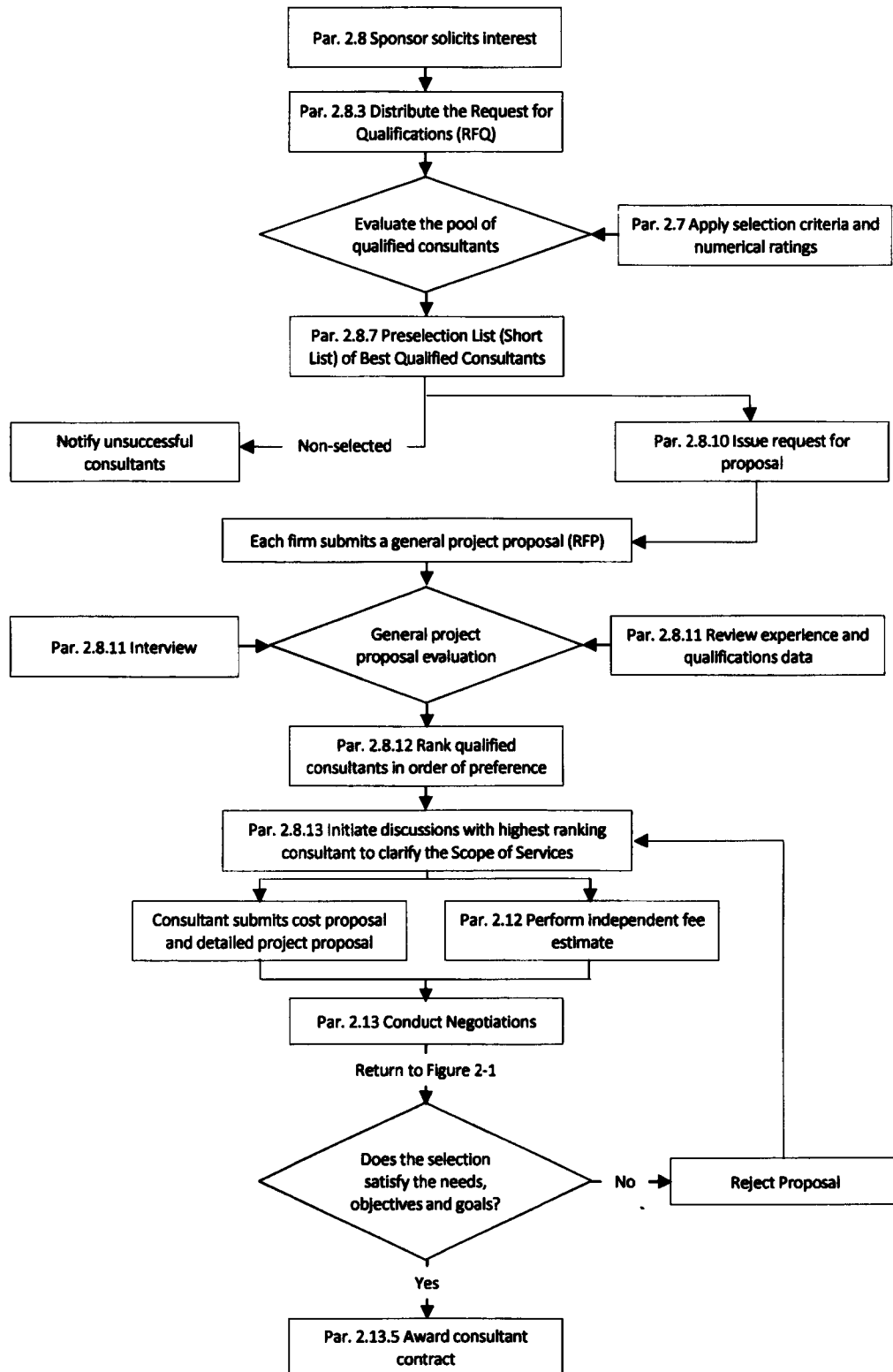
- 2.6.1** The selection of a consultant must be based on a comparative analysis of the professional qualifications necessary for satisfactory performance of the service required. Moreover, the selection process must satisfy requirements for open and free competition.
- 2.6.2** Sponsors may procure a consultant for several projects through one procurement action provided the following conditions are met:
- 1.** The consultant is selected using the qualifications based selection procedures described in paragraph 2.8.
 - 2.** The parties competing for the work must be advised that the work may be accomplished during the course of multiple grants. The expected schedule of projects must be defined, together with a statement of work and the required services. The statement of work must be described in sufficient detail so that all parties may adequately establish the type of services required to accomplish the work. Avoid generic statements of work.
 - 3.** All parties are advised that some of the services may not be required and that the sponsor reserves the right to initiate additional procurement action for any of the services included in the initial procurement.
 - 4.** The services are limited to those projects that can reasonably be expected to be initiated within five (5) years of the date the initial contract is signed by the consultant. With the understanding that not all projects can be foreseen, with mutual agreement between the sponsor and the FAA, new projects may be added after the original selection is made. Otherwise, sponsors that want to add projects not included in the original procurement action must conduct a separate and new procurement action.
 - 5.** If more than one party is selected, the expected projects to be performed by each party must be defined, together with the statement of work and the required services, at the time of the initial procurement action. The sponsor must provide notification to each firm of the projects they were awarded. Sponsors must avoid the practice of selecting multiple firms and assigning project responsibility at a later date.
 - 6.** The negotiation of the fee is limited to the services expected to be performed under the first grant or project after the initial procurement action. The contract must be limited to the services covered by the negotiated fee. The negotiation of the fee for subsequent services, i.e., services included in the procurement action but not in the initial contract, must occur at the time those services are needed. A fee estimate must be performed for each of these negotiations. (See paragraph 2.12 for information on fee estimate.) If a fee cannot be agreed upon between the sponsor and the selected firm, then negotiations are terminated with that firm. If the sponsor identified and ranked multiple firms for the project at the time of the initial procurement action, then the sponsor may enter into negotiations with the firm ranked next. If no additional firms were identified and ranked or agreement is not reached with any selected firms, then the sponsor must initiate a new procurement action.

7. In the case of an unforeseen project as in Paragraph 4, the Sponsor and the FAA may mutually agree on the ranking of the selected consultants by evaluating their capabilities and the scope of the unforeseen project. However, if the scope of the unforeseen project does not match the capabilities of the selected consultants, a new procurement action must be conducted.
- 2.6.3 Unless there is a convincing reason to combine eligible and ineligible projects in a single solicitation, sponsors are discouraged from doing so (Order 5100.38).
- 2.7 **Selection Criteria.**
- 2.7.1 Based on the proposed scope of service(s) and prior to evaluating consultants, a sponsor(s) must develop a list of selection criteria to be used in evaluating potential consultants. Numerical rating factors (ranges) should be assigned to each criterion on the basis of the sponsor's priorities and conception of the importance of each factor in the attainment of a successful project. The sponsor(s) should include the criteria with a Request for Qualifications (RFQ) in advance of the selection process.
- 2.7.2 Based on a sponsor's goals/objectives for each project, the list of selection criteria will vary for each RFQ and must be appropriate for the proposed scope of services. Suggested selection criteria include, but are not limited to, the following:
1. Capability to perform all or most aspects of the project and recent experience in airport projects comparable to the proposed task.
 2. Key personnel's professional qualifications and experience and availability for the proposed project; their reputation and professional integrity and competence; and their knowledge of FAA regulations, policies, and procedures.
 3. Capability to meet schedules or deadlines.
 4. Quality of projects previously undertaken and capability to complete projects without having major cost escalations or overruns.
 5. Qualifications and experience of sub-consultants regularly engaged by the consultant under consideration.
 6. Capability of a branch office that will do the work to perform independently of the home office, or conversely, its capability to obtain necessary support from the home office. The use of geographic location may be a selection criteria provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.
 7. Ability to furnish qualified inspectors for construction inspection if applicable.
 8. Understanding of the project's potential challenges and the sponsor's special concerns.
 9. Degree of interest shown in undertaking the project and their familiarity with and proximity to the geographic location of the project.

10. Capability to incorporate and blend aesthetic and architectural concepts with the project design while accomplishing the basic requirements that transportation facilities be functional, safe, and efficient.
11. In meeting the Disadvantaged Business Enterprise (DBE) contract goal, evidence documenting that the consultant met the DBE goal, or by documenting that it made adequate good faith efforts to meet the DBE goal. (See 49 CFR, § 26.53)
12. Capability to conduct a Value Engineering (VE) study for projects that are particularly complex or have unique features. Order 5100.38, Chapter 3, Subsection 3-57; AC 150/5300-15, *Use of Value Engineering for Engineering and Design of Airport Grant Projects*; and AC 150/5370-10, *Standards for Specifying Construction of Airports*, contain additional guidance on VE studies.

2.8 Selection Procedures.

The sponsor must use the following selection procedures or equivalent State/sponsor qualifications based selection for individual project selections involving Federal airport grants (see Figure 2-1 and Figure 2-2). However, the requirement for both an RFQ and an RFP should be evaluated based on the complexity of the project as these steps may be combined into a single request.

Figure 2-2. Consultant Selection Process for a Single Project

- 2.8.1 The selection board should review the nature of the proposed project and the general scope of services to be procured in order to ensure an understanding of the project requirements and the qualifications needed by the consultant.
- 2.8.2 As discussed in paragraph 2.7, the selection board must develop the selection criteria and the evaluation system used in preparing a pre-selection short-list of consultants who are best qualified for the project as well as in determining the final selection.
- 2.8.3 To obtain experience and qualification data from potentially qualified consultants, the sponsor should issue an RFQ inviting consultants to submit their experience and qualifications data relating to the proposed project usually in the form of a Statement of Qualifications (SOQ). To ensure the broadest publicity concerning sponsor interest in obtaining consultant services, public announcements for all projects should be advertised in local newspapers with a wide circulation, national trade journals and magazines, and through electronic media. Public announcements should include information such as a description of the proposed project and its location, a description of the services, and the estimated range of construction costs. The public announcement should allow sufficient time for submission of the statement of qualifications.
- 2.8.4 Sponsors may also send the public announcements directly to known, potentially qualified consultants to determine their interest in the project and to request their experience and qualification data.
- 2.8.5 Affirmative steps pursuant to 2 CFR §200.321 and good faith efforts should be taken to assure that small and minority firms are used whenever possible, consistent with 49 CFR part 26. These steps and efforts should include, but not be limited to, the following:
1. Include qualified small business and minority firms on solicitation lists.
 2. Assure that small business and minority firms are solicited whenever they are potential sources. Consultation with regional Airports Divisions, Office of Civil Rights, and/or State transportation offices is encouraged.
 3. Divide the total requirements into small tasks, when economically feasible, to permit maximum small business and DBE firm participation.
 4. Use the services and assistance of the Small Business Administration, the Minority Business Development Agency of the Department of Commerce, and the Minority Resource Center Regional Centers of the Department of Transportation (<http://osdbu.dot.gov>).
 5. Arrange solicitations, time for presentation of offers and delivery schedules to facilitate DBE and other small business participation.
 6. Encourage consultants to subcontract portions of the work, even when they might otherwise perform the work with their own forces.
- 2.8.6 FAA Airports field offices may also furnish the names of consultants who have engaged in projects of similar nature in their areas of jurisdiction. However, with the exception

of an EIS, FAA personnel will not recommend consultants or participate in the selection process. The addresses of FAA Airports Regional/District Offices having jurisdiction over specific geographic areas are available at:

http://www.faa.gov/airports/news_information/contact_info/regional/

- 2.8.7 From the experience and qualification data obtained from consultants, the selection board should prepare a pre-selection short-list of the best qualified consultants for further consideration. With adequate response to the RFQ, the typical pre-selection short-list should consist of between three and five consultants.
- 2.8.8 At this point, consultants who expressed an interest in the project but were not included on the pre-selection short-list should be notified that they were unsuccessful.
- 2.8.9 Detailed information on the qualifications and performance data of each of the consultants on the pre-selection short-list should be obtained. This can be achieved by contacting former clients identified by the consultant in their statement of qualifications to ascertain the quality of work, ability to meet schedules, cost control, and consultant-client relationship.
- 2.8.10 At this point, the selection organization may elect to obtain a general project proposal from each of the firms on the pre-selection short-list, typically by issuing a Request for Proposal (RFP) to each consultant on the pre-selection short-list. The RFP should include a detailed description of the project and the proposed scope of services required. The selection criteria, including their relative importance that will be used to evaluate the proposals must also be made available to each of the firms on the pre-selection short-list. The RFP shall not contain a request for any cost information, such as total cost, cost per hour, work hours, or other pricing data. Requests for cost or pricing information, prior to discussions with the best qualified firm, to define the scope of services is contrary to 49 USC § 47107 (a) (17) and 2 CFR § 200.320(d). The general project proposal will help the selection board recommend a consultant who can achieve design excellence, while successfully controlling time and costs and who has the ability to understand and accomplish the specialized requirements of the project. The elements of a typical general project proposal should include, but are not limited to, the following:
 1. Team members, other key personnel, previous experience, and the role they will fill on the project. The qualifications and time commitment of the project manager proposed for the project.
 2. Current workload.
 3. Proposed project schedule, including major tasks and target completion dates.
 4. Technical approach – a brief discussion of the tasks or steps that the consultant will take to accomplish the work described in the scope of services.
 5. Value engineering – when a value engineering study is included in the selection criteria, a brief discussion of the consultant's capability, training, and experience to carry out such a study.

- 2.8.11 Conduct interviews with each consultant on the pre-selection short-list. On small projects, a telephone interview may be sufficient. Careful consideration of time and cost should be given to the need for formal interviews. If sponsor has received sufficient information included in the qualification submission to make a selection, then formal interviews may not be necessary.
- 2.8.12 Review the experience and qualifications data, the general project proposal, the interview results, and other relevant data. Using the selection criteria developed for the project; rank the qualified consultants in order of preference.
- 2.8.13 Initiate discussion with the first-ranked consultant to fully define the scope of work and services to be provided (see paragraph 2.11). After agreement on a detailed scope of services has been reached, the consultant should submit their cost proposals together with a detailed project proposal. Negotiations should then be conducted to reach a fair and reasonable fee, subject to the procedures indicated in paragraphs 2.12 and 2.13.
- 2.8.14 Prepare a report that documents the Sponsor's procurement actions and the selection of the consultant they deem most qualified. The report must contain sufficient detail to indicate the extent of the review and the considerations used for the recommendations. The report should be forwarded to the sponsor's administrator or governing body authorized to review the recommendations of the selection board. The recommendations of the selection board should normally be accepted unless the report does not adequately support the recommendations. This will help to ensure complete fairness and open competition. If the recommendations are not accepted, the selection board should reconvene until acceptable recommendations have been agreed upon.

2.9 Alternate Selection Procedures.

2.9.1 Proposals Requested with Qualification Data.

The selection procedure recommended in paragraph 2.8 should normally be followed in the procurement of consulting services. For small projects where the scope of work and services can be clearly defined or the sponsor anticipates receipt of less than four proposals, the sponsor may wish to solicit proposals at the time of advertising for experience and qualification data. In this case, the announcement must contain a detailed scope of services and indicate where the selection criteria can be obtained. The advertisement cannot request pricing information.

2.9.2 Informal Procedures.

- 2.9.2.1 Informal Qualifications Based Selection procedures may be used for A/E procurements estimated to be less than \$100,000. However, this does not relieve the sponsor from the obligation to perform a cost analysis and prepare an independent fee estimate (see paragraph 2.12). Sponsors must consult with FAA Airport personnel before using informal procedures to assure that the circumstances justify their use.

2.9.2.2 Under this procedure, a sponsor must contact at least three firms and discuss their qualifications to perform the work. Negotiations must then be conducted with the best-qualified firm to arrive at a fee. These negotiations may be conducted via telephone or e-mail. After selection, using this procedure, the sponsor must document their procurement action and then submit a statement to the FAA explaining the basis for the selection and method used to determine reasonableness of the fee.

2.9.2.3 The informal selection process may not be used to select a firm for multiple projects.

2.9.3 Non-competitive Procedures.

The FAA may authorize non-competitive negotiation for services if the cost of the contract is not expected to exceed \$10,000 and the services are incidental to the grant project. When this procedure is used, the sponsor must submit a statement to the FAA explaining the basis used to determine reasonableness of cost as discussed in 2.9.2 above.

2.10 **Selection Procedures for Environmental Impact Statement (EIS) Preparation.**

The procurement of consultant services to assist the FAA in preparing an EIS is somewhat unique because the regulations implementing the National Environmental Policy Act (NEPA) (42 USC § 4321 et seq.), require Federal agencies to prepare the EIS or select the contractor that prepares the EIS (Orders 5050.4 and 1050.1 provide additional guidance). Selection of a consultant must, therefore, be made by the FAA from a short-list of qualified consultants submitted by the sponsor. The sponsor and the FAA must follow the selection procedures recommended in paragraph 2.8 with the following exceptions:

1. The proposed scope of work is to be provided by the FAA.
2. The FAA must concur with the selection and evaluation criteria prepared by the sponsor.
3. The FAA will be invited to participate with the sponsor in the interviews with consultants on the pre-selection short-list.
4. The sponsor may indicate to the FAA their ranking of the consultants on the pre-selection short-list after the interview process has been concluded. The FAA, however, is under no obligation to make a selection based on this ranking.
5. Using the previous sponsor/FAA agreed upon selection and evaluation criteria, the FAA will independently evaluate and rank the consultants on the pre-selection short-list in order of preference, based on qualifications.
6. The FAA must advise the sponsor of the FAA's ranking in order of preference, and the sponsor must advise and initiate discussions with the consultant ranked first.
7. The FAA will be invited to discussions on the scope during any IFE process conducted by the Sponsor or their consultant, as necessary.

8. The FAA's involvement in the negotiation of the project cost must be limited to making a reasonableness determination once a satisfactory cost proposal has been reached between the sponsor and the consultant.
9. The FAA must prepare a selection report for its records.

2.11 Scope of Services.

2.11.1 An important step in the negotiation process is to reach a complete and mutual understanding of the scope of services to be provided. The general scope of services developed during initiation of the procurement process is of necessity too broad to serve as the basis for a contractual agreement. A well-defined project description and scope of services should be developed between the sponsor and first-ranked consultant prior to negotiating a project design fee. This may be accomplished in a scoping meeting or separate investigation or study to clearly define the extent of the project. The sponsor's engineer or independent consultant (see paragraph 2.12) should attend the meeting so they will have a complete understanding of the scope of services prior to developing a detailed fee estimate. Such a meeting offers the opportunity for refinement, amendment, and complete definition of the services to be rendered.

2.11.2 The scope of service(s) must be sufficiently detailed so that the consultant can make a reasonable fee estimate (see Appendix E). Although the scope of service(s) will vary from project to project (see samples in Appendix C), the following items are typical of those that should be considered in developing the scope of services:

1. List of meetings the consultant is expected to attend.
2. Design schedule.
3. Special services required.
4. Complexity of design.
5. Safety and operational considerations.
6. Environmental considerations.
7. Survey and geotechnical testing requirements.
8. Sponsor representation services during construction.
9. Quality control during construction.
10. Preparation of forms, letters, documents, and reports.
11. Airport Layout Plan updates.
12. Property map preparation.
13. Quality control during design.
14. Coordination with other consultants and agencies.
15. Deliverables.
16. Data and material furnished by the sponsor.

17. Testing and commissioning requirements.
18. City/county requirements.
19. Number of bid packages.
20. Complexity of construction phasing to minimize impacts on airport operations.
21. Public Outreach.

2.12 Independent Fee Estimate.

- 2.12.1 A sponsor must perform a price or cost analysis for every A/E contract (2 CFR § 200.323). The method and degree of analysis is dependent on the facts surrounding the contract. To properly evaluate the cost of professional services an independent fee estimate (IFE) is required, prior to receiving the consultant's proposal, as part of the cost analysis for all A/E contracts and contract modifications. The word "independent" does not imply that the IFE has to be performed by someone other than the sponsor. Preparation of an IFE can be completed in a number of ways, such as the following, or as approved by your local ADO:
 1. A sponsor having a staff with experience in estimating the professional services and negotiating contracts for these services can develop its own IFE for the services, based on the scope of services agreed upon in paragraph 2.11.
 2. Sponsors having no staff with this expertise or having minimal or no previous experience may engage the services of a consultant on retainer for preparation of the IFE provided the consultant has experience with the services involved and who is not being considered for the project.
 3. Alternatively, an independent engineering, architecture, or planning consultant may be retained to prepare an IFE provided this consultant was not on the pre-selection short-list. The consultant must have recent experience in airport work similar to that proposed and be familiar with FAA requirements and procedures. The sponsor should request evidence that the consultant meets the above requirements.
- 2.12.2 State aviation personnel who have experience with the services involved may also prepare the IFE for the sponsors use.
- 2.12.3 The level of detail needed to satisfy the requirements of an IFE varies and is dependent on the anticipated value of the A/E contract. For contracts with an anticipated value less than \$100,000 the sponsor can satisfy the IFE requirement by comparing the A/E contract with previous contracts of a similar nature, or preparing a detailed fee/cost analysis (see Appendix E). At a minimum, the independent estimate must address direct labor work hours, labor rates, general and administrative overhead, non-salary expenses and a reasonable profit. For contracts anticipated to be greater than \$100,000 a detailed fee/cost analysis is required.
- 2.12.4 If the sponsor hires a consultant to perform any of these functions, that consultant may be retained using informal or non-competitive qualifications based procedures (see

paragraphs 2.9.2 and 2.9.3) as applicable; however, the IFE consultant will not be eligible for consideration to perform work on the project.

- 2.12.5 Another source on estimating consultant's cost can be found in ASCE Manuals and Reports on Engineering Practice No. 45, "How to Work Effectively with Consulting Engineers." However, these graphs must be used with judgment and within their stated limitations. Other resources include project history files, previous contracts, etc.
- 2.12.6 Sponsors have an obligation to obtain a fair and reasonable fee in all cases. Prior to initiating further discussions with the first-ranked consultant, the sponsor must accept the IFE and retain it for their records. Appendices D and E present sample formats for consultant services fee/cost and detailed fee/cost analysis respectively, however any format that meets this purpose is acceptable. The FAA retains the right to disallow negotiated fees that the FAA determines to be unreasonable.
- 2.13 **Negotiations.**
 - 2.13.1 After developing a detailed scope of services and after the IFE requirements have been satisfied per Par. 2.12, the sponsor may enter into negotiations with the consultant given first preference by the selection board. Once the rankings have been established, the sponsor shall inform the other firms on the pre-selection shortlist that negotiations have been initiated with the first ranked firm. If an independent firm has been retained by the sponsor for the purpose of preparing an independent fee estimate, the firm may be consulted by the sponsor during negotiations, to clarify problem areas, but not to review the consultant's fee proposal or attend any negotiating sessions.
 - 2.13.2 Based on the scope of services agreed upon in paragraph 2.11, the sponsor must request the consultant to submit the proposed fee and supporting cost breakdown. The consultant must prepare a detailed estimate of the hours and cost required for each of the major tasks. In addition to charges for labor, the consultant should, if appropriate, indicate the costs for subcontractors, travel, living expenses, reproduction, and other out-of-pocket expenses expected to be incurred.
 - 2.13.3 When evaluating the reasonableness of a consultant's fee proposal, a general review standard used within the FAA and industry is whether the total fee proposal, as well as individual tasks within the proposal, is within 10% of the IFE. When differences exceed 10%, the sponsor and IFE preparer should review those areas with the consultant to determine if there is a misunderstanding of the scope of services or level of effort required to complete the work. While this should not be construed as policy, the use of the 10% standard is one method to help identify areas of significant difference between the consultant's fee proposal and the IFE.
 - 2.13.4 Negotiations should be based upon the data submitted by the consultant and an evaluation of the specific work hours required for each task. The sponsor should subject the consultant's data to a technical/engineering analysis. Based on this analysis, the sponsor should identify differences in the work-hour estimates. Significant differences, either positive or negative, between the estimate submitted by the

consultant and the estimate developed by the sponsor should be resolved, and revisions should be made to the work hours or scope of services as required. The fee should then be evaluated, taking into consideration the experience level required by the engineer working on each task. A sample fee/cost analysis form is shown in Appendix E.

- 2.13.5 If a mutually satisfactory contract cannot be negotiated with the first-ranked consultant, the negotiations must be terminated and the consultant notified. Negotiations must then be initiated with the consultant given second preference by the selection board. This procedure must be continued with recommended consultants in the sequence of ranking established by the selection board until a mutually satisfactory contract has been negotiated. Once negotiations have been terminated with a firm and begun with another, they cannot be reopened with the former firm.
- 2.13.6 A record of negotiations must be prepared by the sponsor and included in the contract file. This record must contain sufficient detail to reflect any changes in the scope of services controlling the establishment of the cost and other terms of the contract. An explanation must be provided for any significant differences between the sponsor's original estimate and the final fee agreed upon. The scope of services, draft contract, sponsor's independent fee estimate, consultant's fee proposal with any revisions, and detailed fee analysis must be attached to the report. A sample Record of Negotiations is contained in Appendix F.
- 2.13.7 Upon completion of successful negotiations, all consultants interviewed by the selection board should be informed of the consultant selected for the project.
- 2.13.8 FAA personnel will not be present and will not participate in the negotiation process. The FAA's role is to make a judgment on the reasonableness of the compensation for the services to be furnished and to ensure that all services required for a particular project have been included in the proposal.
- 2.13.9 If requested by the FAA, the sponsor must submit the record of negotiations and all attachments to the FAA for a reasonableness of cost determination (Order 5100.38, Chapter 3, Section 14).

2.14 Sponsor Force Account Projects.

Proposals to accomplish airport engineering with the sponsor's own personnel or by its agent must be approved by the FAA. Proposals must be submitted in writing and subjected to a review similar to that for engineering contracts. Most of the factors considered in the selection of a consultant would be applicable to approval of services to be done by force account. The sponsor's proposal to use force account rather than contract-engineering services must be fully documented and should contain as a minimum:

1. Justification for doing the work by force account rather than by contract;
2. Estimate of costs, including detailed data on estimated work hours, hourly rates, non-salary expenses, and indirect costs;

3. Names and engineering qualifications of personnel that will be accomplishing specific tasks;
4. Statements concerning the capability of the sponsor to perform the various tasks of design, supervision, inspections, testing, etc., as applicable to the project with arguments to support the decision to use force account;
5. Summary of sponsor's experience with airport engineering pertaining to projects with similar design scopes; and
6. Statement by the sponsor on the ability of its personnel to integrate the project into their workload, with a schedule of accomplishment of tasks, date by which the work will be completed, or dates within which it will take place.

Page Intentionally Blank

CHAPTER 3. CONTRACT FORMAT AND PROVISIONS

3.1 General.

- 3.1.1 The relationship of the consultant with the sponsor should be clearly defined by a written agreement before commencement of actual work. All of the terms should be clearly defined in the agreement. It should state the parties to the contract and define the complete extent and character of the work to be performed as well as conditions relating to any time limitations that may be involved. The terms and payments for various services should be included. The scope of the consultant effort should be described in complete detail to determine the sufficiency of the supervisory and inspection staff and to determine whether some services will need to be otherwise contracted for or be provided by the sponsor.
- 3.1.2 Consultant contracts usually cover highly technical services. Therefore, to assure the soundness of a legal document, it is essential that someone who has thorough knowledge of the project prepare the sections describing services to be performed, sequence of work, information to be furnished by the sponsor, and terms of payment.

3.2 Contract Format.

Many government agencies, business firms, and engineering organizations have developed standardized forms for engineering and planning contracts. The American Council of Engineering Companies, the National Society of Professional Engineers, and the American Society of Civil Engineers have developed such standardized forms. Some State aviation departments have developed standardized forms for engineering services provided in their own states. The American Institute of Architects has standardized forms for architectural contracts. It is often necessary to modify these standard agreements to reflect the specific terms and conditions applicable to a particular project, as well as the mandatory contract provisions in paragraph 3.4.

3.3 Division of Responsibility and Authority.

- 3.3.1 It is common to have one firm provide the basic services and one or more firms provide special services. In these cases, the firm providing the basic consultant services is considered the primary engineer or principal consultant as defined in Appendix A. As such, the principal consultant represents the sponsor in coordinating and overseeing the work of other engineering/consultant firms and has the overall responsibility to coordinate the work and to review the work products for general conformance to the requirements of the sponsor. Therefore, it is extremely important that the contract documents clearly specify the division of responsibility and authority between all parties involved in carrying out elements of the project.
- 3.3.2 The contract between the sponsor and consultant is based on the scope of services established earlier in the process (see paragraph 2.11) and involves carrying out professional duties under the requirements of law. The contract must not attempt to

make the consultant an indemnitor of the sponsor such as in the event of the sponsor's negligence or the absence of any wrongdoing by the consultant. The consultant must fully stand behind their services and indemnify the sponsor for damages and expenses caused by their own errors, omissions, and negligent or wrongful acts.

- 3.3.3 Expanding the consultant's liability beyond the scope or purpose of a contract could affect the competitive process of contract award in a way that conflicts with the requirements of 2 CFR §200.319 and may impact Federal eligibility.

3.4 Mandatory Contract Provisions.

- 3.4.1 Federal laws and regulations prescribe that certain provisions be included in federally funded contracts. For purposes of this section, the term "contract" includes subcontracts. The type of contract must be appropriate for the particular procurement.
- 3.4.2 The provisions that pertain to consultant contracts, including the source of each requirement are listed in Table 3-1. Specific wording of Federal contract provisions is available on the FAA website at <http://www.faa.gov/airports/aip/procurement/>.

Table 3-1. Mandatory Federal Contract Provisions for Professional Services (A/E) Contracts

Provision	Law/Statute
Provisions for all A/E Contracts	
Civil Rights Act of 1964, Title VI - Contractor Contractual Requirements	49 CFR part 21
Airport and Airway Improvement Act of 1982, Section 520	49 USC § 47123
Participation by Disadvantaged Business Enterprises	49 CFR part 26
New Restrictions on Lobbying	49 CFR part 20
Access to Records and Reports	2 CFR 200. Appendix II
Breach of Contract Terms	2 CFR 200. Appendix II
Rights to Inventions	2 CFR 200. Appendix II
Trade Restriction Clause	49 CFR part 30
Additional Provisions for A/E Contracts Exceeding \$10,000	
Termination of Contract	2 CFR 200

Provision	Law/Statute
	Appendix II
Additional Provisions for A/E Contracts Exceeding \$25,000	
Debarment and Suspension	2 CFR part 180; 2 CFR part 1200

3.5 Time Overruns Beyond Control of the Consultant.

Frequently, the consultant is called upon to continue technical inspection services on construction contracts overrunning the program schedule contemplated at the time of negotiation. In most instances, the time element is beyond the control of the consultant. To provide for the contingency of overrun of time, the agreement between the sponsor and the consultant should state the period for which the compensation applies and that the consultant must be reimbursed for services in excess of the specified period of time at a mutually acceptable fee negotiated at the time all the pertinent circumstances are known. The cost of additional consultant technical inspection services that would result from contractor caused construction delays should be included in the liquidated damages established for construction contracts.

3.6 Ownership of Drawings and Contract Documents.

3.6.1 Original documents, such as tracings, plans, specifications, maps, basic survey notes and sketches, charts, computations, and other data prepared or obtained under the terms of the contract, are instruments of service and remain the property of the consultant unless otherwise agreed to by both parties. Reproducible copies of drawings and copies of other pertinent data should be made available to the sponsor upon request. Electronic copies containing all drawings should be furnished to the sponsor. Terms and conditions for sponsor's reuse of documents/data on other projects should be addressed in the contract.

3.6.2 When a contract is only for preliminary plans, no commitment that would constitute a limitation on the subsequent use of the preliminary plans or ideas incorporated therein should be stated or implied.

3.7 Contract Checklist.

The following checklist identifies important items and provisions to be considered in preparing any contract for consultant services. It is not all-inclusive because each contract will vary based on the unique requirements of the project scope of services.

1. Effective date of contract.
2. Names and descriptions of the parties to the agreement with their addresses and, in the case of a corporate body, the legal description of the corporation.

3. Nature, extent, and character of the project, the location thereof, and the time limitations.
4. Services, including performance and delivery schedules, to be rendered by the consultant.
5. Delineation of responsibilities of the consultant, the sponsor, and other consultants and parties involved in the performance of the project, particularly key personnel such as the project manager.
6. Delineation of the duties and responsibilities of the resident engineer/inspector.
7. Inclusion of mandatory contract provisions identified in paragraph 3.4.
8. Provision for renegotiation of the contract on the basis of change in the scope of the project, changes in conditions, additional work, etc.
9. Provision that reproducible copies of planning and design drawings and specifications be made available to the sponsor upon request.
10. Compensation, including methods of payment and payment schedules, for services to be rendered by consultants.
11. Provision for the termination of the consultant services before completion of work.
12. Provision for preparation of a Quality Control Plan as required by the special provisions of the grant agreement.
13. Provision for preparation of an Engineer's Design Report and Final Report.

3.8 FAA Contract Review.

- 3.8.1** FAA Airports field office personnel are available to assist the sponsor and provide guidance on:
1. The scope of services to be provided;
 2. The appropriate type of contract;
 3. The mandatory contract provisions to be included; and
 4. Sponsor certification requirements.
- 3.8.2** If deemed necessary by the FAA, a draft of the contract will be submitted to ensure that:
1. The scope of the engineering is described completely;
 2. The fees and reimbursements are reasonable and eligible as shown by a cost/price analysis;
 3. The type of contract is appropriate; and
 4. The engineering/consulting firm and the proposed contract terms are acceptable.
- 3.8.3** Pre-award review of proposed contracts is required under certain circumstances. Additional guidance is available in Order 5100.38, Section 10.

3.9 **FAA Contract Approval.**

FAA Airports offices are authorized to accept certifications from sponsors that they will comply with statutory and administrative requirements. Use of sponsor certifications for selection of engineering, architectural, professional services, and planning consultants is encouraged. Acceptance by the FAA of the sponsor's certification does not limit the FAA's ability to request and review documentation to ensure the accuracy of the certification. Reference Order 5100.38, Chapter 5, Subsection 5-23(g), *Sponsor Certification Forms*, "Selection of Consultants;" and 49 USC 47105 (d).

Page Intentionally Blank

CHAPTER 4. METHODS OF CONTRACTING AND ALLOWABLE COSTS

4.1 General.

The method of contracting selected for consultant services is dependent on the types of services required and specific circumstances relating to the individual project. The various types of contracts and methods of compensation are discussed in this chapter and listed in Table 4-1. Contracts may be negotiated to include a combination of two or more of these methods. With all of the following methods, the Sponsor must negotiate profit as a separate element of the price for each contract and supplemental agreement. When establishing a fair and reasonable profit, consideration must be given to the complexity of the work to be performed; the risk borne by the firm; the firm's investment; the amount of sub-consultants; the firm's record of past performance; and industry profit rates in the surrounding geographical area for similar work.

4.2 Direct Personal Services.

4.2.1 Direct personal services are usually charged on a per diem basis. This method is particularly suited to court work or similar efforts involving intermittent personal service.

4.2.2 When such consulting or expert services are furnished, the consultant is compensated for the time devoted to the work and travel. The per diem charge should be based on the complexity of the work involved and the experience of the consultant. In addition to the compensation based on per diem, the consultant is reimbursed for travel and other out-of-pocket expenses incurred while away from the normal place of business provided they are reasonable, allocable, and of a generally allowable nature. Additionally, reimbursable expenses at the normal place of business may be reimbursed, such as special computer work, rendering, exhibits, provided they are reasonable, allocable, and of a generally allowable nature.

4.2.3 Each direct personal services contract must include a ceiling price that the contractor exceeds at their own risk. Furthermore, the Sponsor must assert oversight in order to obtain reasonable assurance that the contractor is using efficient methods and effective cost controls.

4.2.4 For services in court or on other engagements in which the consultant appears as an expert, a per diem charge is considered to be earned for each day of such appearance, although the consultant may not be called to testify or, if called, may finish his/her testimony in a fraction of a day.

4.2.5 On occasion, the urgency of the engagement requires the consultant to work longer than the normal day. In some instances, this requirement is a necessary feature of the services, and an understanding should be made with the sponsor as to what constitutes a day. In such cases, the per diem rate may be based on the normal number of working

hours per day, or the per diem rate may be increased to take into consideration the extended work day.

- 4.2.6 For certain kinds of work, compensation based on hourly rates is an equitable arrangement. Compensation for consultant service on an hourly basis demands a higher rate per hour than would be represented in a per diem rate. Also, the hourly rates should apply to time for travel involved, plus reimbursement for travel costs, subsistence, and other out-of-pocket expenses. Depending on the duration of the services, compensation on an hourly basis may include an agreement on a preset minimum amount or retainer in addition to the payments based on the hourly rates.
- 4.2.7 If public hearings are involved in the consultant services, determination of the fee could present a problem since extensive hearings and follow-up work may be required. In these instances, the per diem approach may be considered as an appropriate method of payment for services rendered subsequent to the initial hearing. An estimated upper limit should be set forth in the contract. The contract should provide for renegotiation of the upper limit if unforeseeable conditions are encountered.

Table 4-1. Contracting Methods and Allowable Costs

Contracting Method	Compensation	Allowable Cost
§4-2. Direct Personal Services	<ul style="list-style-type: none"> • Per Diem. • Hourly Rate (§4-2.6). 	Costs must be allowable, reasonable, and allocable to the project. Costs must be consistent with 2 CFR 200.459, FAA Order 5100.38 and 48 CFR Part 31.
§4-3. Retainer	<ul style="list-style-type: none"> • Fixed sum. • Paid monthly. • Some other mutually agreeable basis. 	
§4-4. Cost-Plus-a-Fixed-Fee (NTE)	Fixed sum.	
§4-5. Fixed Lump-Sum Payment	Fixed sum.	
§4-6. Cost-Plus-a-Percentage-of-Cost	Prohibited method.	Prohibited.
§4-7. Specific Rates of Compensation	Hourly Rate	Costs must be allowable, reasonable, and allocable to the project. Costs must be consistent with 2 CFR 200.459, FAA Order 5100.38 and 48 CFR Part 31.
§4-8. Phasing of Work	May include two or more of the above methods of compensation.	Costs must be allowable, reasonable, and allocable to the project. Costs must be consistent with 2 CFR 200.459, FAA Order 5100.38.

Note: See Paragraph 4.10 for non-allowable costs for all types of service.

See Appendix G for Alternative Project Delivery Systems.

4.3 Retainer.

4.3.1 The engagement of consultants on a retainer basis is a common practice. This practice assures the sponsor of always having the services of a certain individual engineer or organization available for future work. This method is used in cases of protracted litigation or for work over the years when the services of the consultant may be intermittent. It is also used in the development of undertakings for which the services of a consultant specialist are not required on a full-time basis. On large projects, this method enables the sponsor to have the specialists who prepared the original plans and specifications on hand for maintenance or additions.

4.3.2 The retainer fee varies with the character and value of the services to the sponsor and with the reputation and standing of the consultant in his/her profession.

- 4.3.3 The terms of agreement for services on a retainer basis vary widely. Compensation may be based on a fixed sum, paid monthly, or on some other mutually agreeable basis, with per diem or hourly rates in addition to time spent at the request of the sponsor. In any case, the same principles, explained previously for per diem or hourly charges, govern under retainer contracts.
- 4.3.4 This type of contract is rarely used for grant projects. However, it is permissible to use a firm on retainer for projects without further procurement action if:
1. The retainer contract was awarded as a result of competition.
 2. The parties competing for the retainer were advised that subsequent grant funded projects (including the scope of work for those projects) would be performed under the retainer contract.
 3. The price for the work performed under the grant will be fair and reasonable and supported by a price or cost analysis.
- 4.3.5 Detailed records should be kept to identify the work that is part of a Federal grant project and eligible for reimbursement.
- 4.4 Cost-Plus-a-Fixed-Fee (Not to Exceed (NTE)).**
- 4.4.1 The cost-plus-a-fixed-fee contract is frequently used when the consultant is required to start work before the cost and scope of the project can be accurately determined. It is recommended that services for the construction phase of a project be paid for under a cost-plus-a-fixed-fee type contract.
- 4.4.2 This type of contract provides for reimbursement of allowable costs such as salary, overhead, and direct non-salary expenses, plus a fixed fee.
- 4.4.3 A cost-plus-a-fixed-fee proposal should be accompanied by the consultant's estimate. The estimate should detail the direct labor costs by categories of employees, work hours, and hourly rate; overhead; direct non-salary expenses; and the fixed fee.
- 4.4.4 The fee is fixed and does not vary no matter what the costs turn out to be. In most instances, however, a ceiling is applied which establishes an upper limit on the allowable costs. In establishing the upper limit, an allowance for contingencies should be included so that, as such contingencies are encountered, renegotiation of the upper limit will not be necessary. The intent of the upper limit is to ensure that the allowable costs do not exceed an agreed-upon ceiling without prior approval of the sponsor. (If Federal participation is desired in the increased cost, the sponsor must obtain the prior approval of the FAA.) Such contracts should contain provisions that provide for renegotiation of both the upper limit and the fixed fee if the scope of work described in the contract has changed.
- 4.4.5 Any increase in costs should be fully justified by the consultant prior to approval by the sponsor. As the consultant is approaching the upper limit and it becomes apparent that

the project cannot be completed within that limit, the consultant should alert the sponsor. Approval must be obtained before the upper limit is exceeded.

- 4.4.6 Overhead charges will vary according to the nature, type, diversity, size of firm, and number/amount of contracts currently held by the firm. The consultant should be prepared to validate the overhead costs with a certified statement from the sponsor's auditor, state's auditor, or consultant's accountant. A firm can demonstrate that the non-allowable costs are not included in its overhead calculation rather than requiring a complete audit in advance of contracting. Otherwise, if the consulting firm has been audited by an agency of the Federal Government within the previous 12 months, the overhead rate determined by this audit may be used.
 - 4.4.7 Fixed-fee is in addition to reimbursement for salary, overhead, and direct non-salary expenses. The consultant is paid a fixed amount for profit, willingness to serve, and assumption of responsibility. This may be an amount based on the estimated design cost of the project at the time the consultant is engaged and will vary with the scope of the services involved.
- 4.5 Fixed Lump-Sum Payment.**
- 4.5.1 The fixed lump-sum payment contract is normally used when the scope of work can be clearly and fully defined at the time the agreement for services is prepared.
 - 4.5.2 The fixed amount of compensation is determined by estimating the allowable costs such as salary, overhead, and direct non-salary expenses, plus a reasonable margin of profit all expressed as a single lump sum. A lump sum proposal must be accompanied by the consultant's estimate. The estimate must detail the direct labor costs by categories of employees, work hours, and hourly rate; overhead; direct non-salary expenses; and profit.
 - 4.5.3 Where consultation is undertaken on a lump-sum basis, the agreement must contain a clearly stated time limit during which the services will be performed. In design contracts, there should be a provision for changes required after the approval of preliminary designs with a clear understanding as to where the final approval authority lies.
 - 4.5.4 Lump-sum contracts must contain a clause that provides for renegotiation if the scope of work described in the contract has changed.
 - 4.5.5 Overhead charges will vary according to the nature, type, diversity, size of firm, and number/amount of contracts currently held by the firm. Guidance is provided in paragraph 4.4.6.

4.6 Cost-Plus-a-Percentage-of-Cost.

Cost-plus-a-percentage-of-cost (CPPC) methods of contracting are prohibited for consultant services under airport grant programs. CPPC contracts may be defined as a

payment formula based on a fixed predetermined percentage rate of actual performance costs by which the sum of the consultant's entitlement, uncertain at the time of agreement, increases commensurately with increased performance costs. The types of contracts discussed below are based on the CPPC methods of contracting and, therefore, are prohibited:

1. **Salary Cost Times a Percentage Multiplier, Plus Direct Non-salary Expense.** This type of contract contains CPPC methods of contracting because the consultant's indirect cost and profit are not fixed at the time the contract is signed.
2. **Percentage of Construction Costs.** This type of contract contains CPPC methods of contracting since a portion of the consultant's fee that does not reflect actual costs constitutes a profit that is not fixed at the time the contract is executed.

4.7 Specific Rates of Compensation (Not to Exceed (NTE)).

- 4.7.1 The "specific rates of compensation" contracting method should only be used when it is not possible at the time of procurement to estimate the extent or duration of the work or to estimate costs with any reasonable degree of accuracy. Sponsor must get advanced approval from the FAA for all work conducted under this method.
- 4.7.2 The "specific rates of compensation" contracting method provides for reimbursement for consultant services on the basis of direct labor hours at specified fixed hourly rates (including direct labor costs, indirect costs, and fee (profit)) plus any other direct expenses/costs, subject to an agreed maximum amount.
- 4.7.3 While the inclusion of fee (profit) in the loaded hourly rate(s) established for a contract allows the fee earned to be based on the labor hours worked on the project, this is not considered a "cost plus a percentage of cost" contracting method. A key distinction for the "specific rates of compensation" contracting method is that indirect costs and fee must be recovered as a component of the established, fixed hourly billing rates for labor hours worked. The negotiated rate is typically fixed for the life of the project, however, the Sponsor must reserve the right (by contract) to audit and adjust multiplier rates.
- 4.7.4 Use of this contracting method requires close monitoring to ensure efficient methods and cost controls are employed by the consultant.

4.8 Phasing of Work.

Design projects may be negotiated to be performed in phases and include two or more of the foregoing methods of compensation. For example, the first phase of a project might cover the development of the precise scope of work for a project and be paid for under a cost-plus-fixed-payment contract. The follow-on work could then be negotiated on the basis of information developed in the first phase and might be accomplished under a lump-sum contract.

4.9 Allowable Costs.

Costs incurred must be consistent with the Federal cost principles contained in 48 CFR part 31, 2 CFR §200 Subpart E, and FAA Order 5100.38 to be reimbursable under an airport planning or development grant. The following are typical expenses allowable under the above regulations:

1. **Direct Salary Costs.**
 - a. Direct salary costs include the cost of salaries of engineers, planners, computer aided design and drafting (CADD) technicians, surveyors, stenographers, administrative support etc., for time directly chargeable to the project.
 - b. Salaries or imputed salaries of partners or principals, to the extent that they perform technical or advisory services directly applicable to the project, are to be added to salary cost.
2. **Overhead Costs.** Overhead costs include overhead on direct salary costs and general and administrative overhead. Refer to 48 CFR Part 31 for additional information on allowable overhead costs.
3. **Direct Non-salary Expenses.** Direct non-salary expenses usually incurred may include the following (detailed records must be kept to support charges and allow auditing):
 - a. Living and traveling expenses of employees, partners, and principals when away from the home office on business connected with the project. (Records must include employee name, dates, points of travel, mileage rate, lodging, and meals.)
 - b. Identifiable communication expenses such as long-distance telephone, telegraph, cable, express charges, and postage, other than for general correspondence.
 - c. Services directly applicable to the work such as special legal and accounting expenses, computer rental and programming costs, special consultants, borings, laboratory charges, commercial printing and bindings, and similar costs not applicable to general overhead.
 - d. Identifiable computer and office supplies and stenographic supplies and expenses charged to the sponsor's work as distinguished from such supplies and expenses that are applicable to two or more projects.
 - e. Identifiable reproduction costs applicable to the work.
 - f. Advertising costs that are solely for the recruitment of personnel required for the performance by the consultant of obligations arising under the contract.
 - g. Sub-consultant and outside services including administrative costs associated with managing said services, either by a reasonable percentage mark-up or time and expenses.

4.10 Non-Allowable Costs.

Costs incurred must be consistent with the Federal cost principles contained in 48 CFR part 31, 2 CFR §200 Subpart E, and FAA Order 5100.38 to be reimbursable under an airport planning or development grant.

4.11 Fixed Fee.

A percentage rate is applied to determine payment for profit, willingness to serve, and assumption of responsibility. Expenses and any pass-through costs may not be included when applying profit to the price.

APPENDIX A. DEFINITIONS

Some common terms used in this AC are defined below. Additional definitions of terms and phrases are available in Order 5100.38, Airport Improvement Program Handbook, current version.

1. **Architectural/Engineering (A/E) Services.** The term “architectural and engineering services” means:
 - a. Professional services of an architectural or engineering nature, as defined by State law, if applicable, which are required to be performed or approved by a person licensed, registered, or certified to provide such services as described in this paragraph;
 - b. Professional services of an architectural or engineering nature performed by contract that are associated with research, planning, development, design, construction, alteration, or repair of real property; and
 - c. Such other professional services of an architectural or engineering nature, or incidental services, which members of the architectural and engineering professions (and individuals in their employ) may logically or justifiably perform, including studies, investigations, surveying and mapping, tests, evaluations, consultations, comprehensive planning, program management, conceptual designs, plans and specifications, value engineering, construction phase services, soil engineering, drawing reviews, preparation of operating and maintenance manuals, and other related services.
2. **Consultant.** A firm, individual, partnership, corporation, or joint venture that performs architectural, engineering or planning services as defined in paragraphs 1 and 4, employed to undertake work funded under an FAA airport grant assistance program.
3. **Fee.** Compensation paid to the consultant for professional services rendered.
4. **Planning Services.** Professional services of a planning firm include: airport master and system plan studies, airport noise compatibility plans (14 CFR part 150 studies), and environmental assessments and related studies.
5. **Primary Engineer or Principal Consultant.** A firm that is held responsible for the overall performance of the service, including that which is accomplished by others under separate or special service contracts.
6. **Sponsor.** A public agency or private owner of a public-use airport that submits to the Secretary an application for financial assistance for the airport (49 USC § 47102(19)).
7. **Bridging Documents.** Preliminary engineering documents intended to define a scope of work for a subsequent design and construction efforts. These documents are typically prepared by a professional services firm who is not eligible to bid on the proposal.

Page Intentionally Blank

APPENDIX B. BIBLIOGRAPHY

This bibliography covers Public Law, FAA Orders, Advisory Circulars (ACs), and Code of Federal Regulations (CFRs) referenced within this AC.

B.1 Public Law.

1. Brooks Act: Federal Government Selection of Architects and Engineers. Public Law 92-582, 92nd Congress, H.R. 12807, October 27, 1972. (See <http://www.usa.gov/>.)
2. *United States Code*. Title 40 Subtitle I, Chapter 11 Selection of Architects and Engineers. (See <http://uscode.house.gov>.)
3. *United States Code*. Title 42 Chapter 55 USC 4321 National Environmental Act of 1969. (See <http://uscode.house.gov>.)
4. *United States Code*. Title 49 Subtitle VII, Aviation Programs, USC §47123 Nondiscrimination. (See <http://uscode.house.gov>.)
5. *United States Code*. Title 49 Subtitle VII, Aviation Programs, §47107(a) (17), Project Grant Application Approval Conditioned on Assurances About Airport Operations. (See <http://uscode.house.gov>.)
6. *United States Code*. Title 49 Subtitle VII, Chapter 471 USC §47102 Definitions. (See <http://uscode.house.gov>.)
7. *United States Code*. Title 49 Subtitle VII, Chapter 471 USC §47105 Project Grant Applications. (See <http://uscode.house.gov>.)

B.2 Code of Federal Regulations.

Access the Code of Federal Regulations online at
<http://www.gpo.gov/fdsys/browse/collectionUScode.action?collectionCode=USCODE>.

1. Airport Noise Compatibility Planning. *Code of Federal Regulations*. Title 14 CFR part 150.
2. Contract Cost Principles and Procedures. *Code of Federal Regulations*. Title 48 CFR part 31.
3. Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction. *Code of Federal Regulations*. Title 29 CFR part 5.
4. New Restrictions on Lobbying. *Code of Federal Regulations*. Title 49 CFR part 20.
5. Nondiscrimination in Federally-Assisted Programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964. *Code of Federal Regulations*. Title 49 CFR part 21.

6. Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor. *Code of Federal Regulations*. Title 41 CFR part 60.
7. Participation by Disadvantaged Business Enterprises (DBE) in Department of Transportation Financial Assistance Programs. *Code of Federal Regulations*. Title 49 CFR part 26.
8. Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments. *Code of Federal Regulations*. Title 2 CFR part 200.

B.3 FAA Orders and Advisory Circulars. Please refer to current versions.

1. U.S. Department of Transportation. Federal Aviation Administration. Order 1050.1, Environmental Impacts: Policies and Procedures. (See http://www.faa.gov/regulations_policies/orders_notices/.)
2. U.S. Department of Transportation. Federal Aviation Administration. Order 5050.4, Airport Environmental Handbook. (See <http://www.faa.gov/airports/resources/publications/orders/>.)
3. U.S. Department of Transportation. Federal Aviation Administration. Order 5100.38, Airport Improvement Program Handbook. (See <http://www.faa.gov/airports/resources/publications/orders/>.)
4. U.S. Department of Transportation. Federal Aviation Administration. Advisory Circular 150/5300-15, Use of Value Engineering for Engineering and Design of Airport Grant Projects. (See http://www.faa.gov/airports/resources/advisory_circulars/.)

APPENDIX C. SCOPE OF SERVICES SAMPLES

- C.1 This appendix contains three different examples of Scope of Services. Example 1 is a Design Services scope, Example 2 is a Planning Services scope, and Example 3 is a Construction Services scope. Samples may not necessarily include all provisions and terms required by this AC. If a conflict exists between these examples and the AC, the AC will prevail.

C.2 **Example 1. Design Services Scope.**

**TAXIWAY A SOUTH AND HOLDING APRON RECONSTRUCTION AND NEW
HARDSTAND**

ABC INTERNATIONAL AIRPORT

The consultant will provide the required professional services to design the reconstruction of Taxiway A South and holding apron and the proposed hardstand (attach a drawing or exhibit if necessary). This work will be performed and constructed under a Federal Aviation Administration (FAA) Airport Improvement Program (AIP) grant to the airport.

Taxiway A South will be constructed in Portland Cement concrete and will be widened to 100 feet and have new 40-foot-wide asphalt shoulders added. The South Holding Apron will be reconstructed to essentially the same configuration as presently exists. Centerline taxiway lighting will be added to the taxiway and through the holding apron to Runway 18L/36R. Control panels in the FAA tower and field lighting electrical vault will also be modified for the new centerline lighting.

The new hardstand will be located north of the Airlift Airlines Maintenance Facility (currently under construction) south of the northeast Cargo Taxilane and west of the flying Bears hardstand. The hardstand will be a Portland Cement concrete apron with lighting similar to other hardstands, drainage to the Industrial Waste Sewerage System (IWS), and other utilities including fire protection. No downstream IWS changes are anticipated. It is anticipated that utilities are immediately available for fire protection adjacent to hardstand.

Professional services to be provided by the consultant will include civil, electrical and structural, and geotechnical engineering services required to accomplish the following items:

PHASE 1 - PRELIMINARY DESIGN

The preliminary design phase is intended to identify and evaluate alternatives to assure cost effective and practical solutions for the work items identified. The consultant will complete its evaluation of alternatives through contacts with local authorities and review of the preapplication, field investigations, and a practical design approach. The design will take advantage of local knowledge and experience and utilize expertise from recent construction projects to design a cost-effective project and ensure competitive construction bids. Activities include:

1. Coordinate with airport operations, FAA tower, and the airlines to minimize impacts in day-to-day operations of the airlines and air cargo lines. Also coordinate with facilities and

maintenance and fire department. (This will require four coordination meetings throughout the design.)

2. Prepare a preliminary estimate of probable construction costs and schematic design for each element of the project.
3. Provide all geotechnical investigation and analysis and pavement and other nondestructive testing and analysis required for the design.
4. Coordinate with the airport's project manager for required survey information.
5. Prepare an overall construction phasing plan in order to maximize project constructability and minimize interference with airport operations. The consultant's phasing plan must take into account other airport construction projects.
6. Determine aircraft usage through coordination with Airport staff and information furnished by the sponsor. Design the pavements to meet the anticipated aircraft traffic.

PHASE 2 - ENGINEERING PHASE ACTIVITIES

1. Evaluate local conditions.
 - a. Evaluate local material suppliers, sources, and capabilities.
 - b. Evaluate drainage alternatives.
 - c. Review electrical lighting layouts and determine system relocation capacities.
2. Review and evaluate project layout.
 - a. Verify master plan dimensions and data.
 - b. Review findings and recommendations with airport personnel.
3. Complete a soils investigation, soils report, and recommendations including:
 - a. Field Exploration.
 - i. Conduct test pit explorations with a rubber-tired backhoe at various locations to a maximum depth of 8 feet in the runway, taxiway, and apron areas. Log and field classify soils and obtain samples for laboratory testing.
 - b. Laboratory Testing.
 - i. Perform laboratory index and strength tests as follows:
 - (1) Compacted CBR test (3 compaction points/test).
 - (2) Standard Proctor (4 point) compaction tests.
 - (3) Atterberg limit determinations.
 - (4) Sieve analysis.
 - (5) Unit weight and water content determinations.
 - (6) FAA soil classifications for all samples.
4. Complete necessary topography and site surveying, including establishment of project control points.

5. Complete pavement section alternatives analysis and provide recommendations including:
 - a. Conduct an initial cost analysis, life-cycle cost analysis, and analysis of locally available resources for up to three alternatives.
 - b. Strategize bidding procedures and pavement section alternatives to provide a basis for competitive bidding.
6. Complete preliminary plan and profile design for the runway, taxiway, and apron area.
7. Complete preliminary runway lighting, signing, and system circuitry layout.
8. Provide recommendations for construction phasing to the sponsor for their review.
9. Complete estimates of probable construction costs for the recommended alternatives.
10. Provide five sets of review documents.
11. Complete the preliminary design report including:
 - a. Geotechnical investigation.
 - b. Topographical survey.
 - c. Preliminary plans.
 - d. Pavement section design and analysis.
 - e. Drainage design analysis.
 - f. Estimates of probable construction costs.
 - g. Final summary and recommendations.
 - h. Phasing and scheduling recommendations.
12. Solicit comments on preliminary design from airport personnel and the FAA.

PHASE 3 - FINAL DESIGN

In the decision phase, the consultant will provide well-defined construction requirements, with selected bid alternatives as appropriate to provide a basis for competitive construction bids. Construction schedules will be closely coordinated to endeavor the best possible weather conditions and the least possible interference with airport operations. Assist the airport with the advertisement, notification of local airport users, and generally complete the final construction contract documents for the project. The following outline describes in greater detail the tasks and products.

1. Incorporate preliminary design comments and respond as necessary to requests for additional information.
2. Provide final design drawings, specifications, and final estimate of probable construction costs and schedule for the project.
3. Provide Engineering Report.
4. Develop specifications using Advisory Circular 150/5370-10, Standards for Specifying Construction of Airports, as amended, and utilize standard provisions supplied by the sponsor.

5. Develop a safety plan in accordance with AC 150/5370-2, Operational Safety on Airports During Construction.
6. Design all improvements in accordance with FAA standards and guidelines and in accordance with the Airport Certification Manual.
7. Coordinate the design of the project with existing and ultimate grades established at adjacent areas.
8. Provide for all required design of utilities and services within the area defined in the preliminary design.
9. Complete final quantity calculations.
10. Solicit sponsor and FAA review and approval.
11. Provide ___ sets of contract documents.
12. Assist airport with advertising and interpretation of project requirements.
13. Assist airport with preparation of the FAA application.
14. Provide review of all submittal and shop drawings during construction.
15. Provide technical assistance and recommendations to the sponsor during construction.
16. The following project schedule will be utilized unless otherwise approve by the sponsor: Taxiway A South and the Holding Apron portion of the project will be phased to be constructed on an accelerated basis to be completed within two (2) months of the construction consultant's notice to proceed or earlier, if possible. During construction, runway 18L/36R will be kept in service at all times. The project limits will be defined such that the construction activities will not impact the operation of the runway as defined by airport and FAA operational criteria.
17. The construction budget for the project is \$ ___, including construction change order contingency. The consultant will evaluate the feasibility of this budget and keep the sponsor apprised during each phase of the design. The consultant will advise the sponsor as to options available for reducing construction costs to stay within the budget, if it appears that likely consultant bid prices will exceed this budget.

The design schedule is anticipated to be as follows:

Commission Authorization of Consultant Contract - 10/10/XX
Contract Execution - 10/10/XX
Start Design - 10/11/XX
50 Percent Design Review - 11/22/XX
Complete Design, Submit Estimates, Plans and Specs for Review 1/12/XX

Advertise for Bids - 3/21/XX
Open Bids - 4/11/XX
Prepare Award Memo - 4/12/XX
Award Construction Contract - 4/25/XX
Construction Contract Executed - 5/08/XX
Construction Notice to Proceed - 5/14/XX

Complete Taxiway A South & Holding Apron - 7/13/XX
Complete Hardstand Construction - 11/01/XX

PHASE 4 - CONSTRUCTION SERVICES

During the construction phase of the project, the consultant will assist the sponsor to monitor and document progress for quality and cost. Review consultant payment requests, complete necessary quality control testing, establish necessary survey control, continually inform the sponsor on project progress and problems, conduct the final project inspection, and complete the associated certification.

ACTIVITIES

1. Assist with prebid conference and bid opening. Issue addenda, prepare an abstract of bids, and make recommendations for award.
2. Assist in award notification to successful bidder and notify and return bid bonds to the unsuccessful bidders.
3. Solicit and review bonds, insurance certificates, construction schedules, etc.
4. Conduct preconstruction conference.
5. Complete construction staking, provide horizontal and vertical control.
6. Provide resident project representative to monitor and document construction progress, confirm conformance with schedules, plans and specifications, measure and document construction pay quantities, document significant conversations or situations, document input or visits by local authorities, etc.
7. Prepare change orders and supplemental agreement, if required.
8. Prepare and submit inspection reports.
9. Prepare and confirm monthly payment request.
10. Conduct necessary quality control testing.
11. Conduct and document periodic wage rate interviews.
12. Conduct a final project inspection with airport personnel, the FAA, and the consultant.
13. Prepare as-constructed drawings and the final project from information furnished by the consultant.

C.3 Example 2. Planning Services Scope.

AIRPORT LAYOUT PLAN UPDATE

ANYTOWN MUNICIPAL AIRPORT

The purpose of this Airport Layout Plan Update (ALPU) is to identify potential development options specifically associated with closed Runway 10-28 at Anytown Municipal Airport. The existing Airport Layout Plan (ALP) is an integral component of the Airport Master Plan Update (AMPU) completed in 2005, which was based on data compiled in the mid-2000s, which is now nearly 10 years old. Since that time, a number of critical growth and operational issues have

surfaced that need to be assessed and factored into the preferred layout plan. Included in this assessment is a fresh look at terminal area development, growth within the adjoining (off-airport) industrial park, and an evaluation of airport land usage for aeronautical/nonaeronautical purposes.

This ALPU will help the community focus on the best course of action for continued development of the airport, by identifying the key critical issues the airport faces in the next five to ten years.

CRITICAL ISSUES

Anytown is in a multiyear airport development plan that includes the reconstruction of Runway 15-33, expansion of hangar and aircraft parking facilities, construction of an airport access road, plus plans for the development of a new terminal building, expanded aircraft parking, and fueling facilities.

The airport is now in a position to start focusing on long-term landside development, particularly along the closed runway, with a realistic assessment of the existing terminal area configuration on the east end of the closed runway. An equally important component of this study is the identification of aviation development limits on the west end of the closed runway over the next 20 years. These limits are critical to future expansion of both the airport and adjacent industrial park.

TASKS

XYZ Company proposes to provide the following services. To the maximum extent possible, and unless otherwise noted, data from the most recent AMPU and ALP will be used. In the interest of cost savings, updated aerial mapping will not be obtained for this project. XYZ Company will rely on existing data.

CONCEPT

XYZ Company will prepare a written report and update the ALP, focusing on development of airport landside facilities, with emphasis on the closed runway, and the limits of compatible aviation development. Findings will be presented in written form at key phases through the term of this project, with each subsequent part building on previously submitted information. This concept will result in the development of a complete draft report that will then be updated to reflect agreed upon changes, resulting ultimately in the final ALPU.

TASK A - STUDY DESIGN/ADMINISTRATIVE

1. **Project Scoping Meeting.** The consultant will arrange and attend a project scoping meeting with the FAA, state, and city of Anytown (Sponsor) to review the project scope and tasks and to confirm the specific requirements of the ALPU.
2. **Refine Scope of Services.** XYZ Company will refine and prepare a detailed scope of services and fee to complete the defined tasks for submission to the sponsor, state, and FAA.
3. **Prepare Grant Application.** XYZ Company will prepare and submit applications for Federal assistance. The sponsor will sign and distribute the applications to state and FAA. The grant application will be submitted on or about April 15, 20XX.

4. **Attend City Council Meeting.** XYZ Company will attend a regularly scheduled city council meeting for the purpose of answering questions and addressing issues concerning this project.
5. **Grant Administration.**
 - a. XYZ Company will submit a monthly invoice to the sponsor, including supporting documentation which specifically describes the work and other items for which the billing is submitted. The billing report will also include an estimate of the percent complete of each task appearing on the report. The sponsor will be billed on a monthly basis for all work conducted in association with this project.
 - b. The FAA and state will reimburse the sponsor for these fees through the grant reimbursement process. XYZ Company will prepare these grant reimbursement requests for the sponsor's signature and distribution to the FAA and state. It is anticipated that seven grant reimbursement requests will be prepared during the life of this project.

TASK B - ALPU REPORT

XYZ Company will prepare an ALPU report consisting of five chapters and various appendices, developed in two phases (draft and final).

Chapter 1 - Inventory and Forecasts

1. **Update Existing Activity:** This task will update existing based aircraft totals and evaluate current aircraft operations using industry standards, observations, and discussions with airport operators and users. The sponsor will provide XYZ Company will an accurate list of all based aircraft by aircraft make and model, sorted by hangared aircraft and aircraft parked on open aprons.
2. **Field Inventory:** XYZ Company will conduct a site field investigation of the airport that will provide an update of recently constructed facilities as well as potential development areas.
3. **Identify On-Airport Developable Land:** XYZ Company will use existing base mapping superimposed by the airport property line and resource protection limits to identify areas of airport property that can be "disturbed" or used for future airport development. This task will focus on the closed runway.
4. **Evaluate Existing Lease Agreements.** XYZ Company will obtain and evaluate existing airport lease agreements for compliance with FAA grant assurances.
5. **Review SASP:** XYZ Company will obtain and review aircraft and operational data in the current State Aviation Systems Plan (SASP) as applicable to Anytown.
6. **Update 19XX Forecasts.** The 20XX AMPU forecasts will be updated based on current aircraft loading and operations and projected forward 5, 10 and 20 years using SASP forecasts, as applicable.
7. **Forward Draft Findings.** XYZ Company will prepare and submit a draft Inventory and Forecasts Chapter, providing 10 copies of the draft chapter to the sponsor and one copy each to the state and FAA. It is recommended that the sponsor post this report on its website. XYZ Company will provide a copy of the report as it progresses, in Adobe® PDF format, to the sponsor's webmaster or information technology (IT) department.

8. **Meeting.** XYZ Company will present the Inventory and Forecast data to the sponsor; answering questions and resolving any conflicts prior to starting the next phase of the project.

Chapter 2 - Demand/Capacity Analysis & Facility Requirements. Pending receipt and resolution of comments from the sponsor, state, and the FAA on Chapter 1, XYZ Company will prepare Chapter 2. XYZ Company will review and respond to comments to all parties.

1. **Landside Facility Capacities:** XYZ Company will identify the capacity of the existing landside facilities including, but not limited to aviation facilities: hangars, aircraft parking, fuel facilities; compatible non-aviation facilities: industrial park; and common facilities: automobile parking and access roads
2. **Airside Facility Requirements:** This ALPU will not evaluate airside facilities (runway, taxiways, etc).
3. **Landside Facility Requirements:** XYZ Company will evaluate existing landside facilities and compliance with FAA safety and design requirements. Based on the safety and capacity computations as well as the forecasts of aviation demand for the airport, XYZ Company will identify the needed improvements for the landside facilities (i.e., hangars, aircraft parking, automobile parking and access, and aircraft fueling facilities).
4. **Forward Draft Findings:** XYZ Company will prepare and submit the Capacity and Facilities Chapter, providing 10 copies of the draft chapter to the sponsor and one copy each to the state and FAA.
5. **Meeting.** XYZ Company will present its findings from the first two chapters to the sponsor; answering questions and resolving any conflicts prior to starting the next phase of the project.

Chapter 3 - Alternative Developments. Pending receipt and resolution of comments from the sponsor, state, and FAA on Chapter 2, XYZ Company will prepare Chapter 3. XYZ Company will review and respond to comments to all parties.

1. **Identify Limits of Short-Term Aviation Development.** Based on previously developed forecasts (Chapter 1) and identified facility needs (Chapter 2), XYZ Company will identify areas of airport property that can be used for future airport development. Emphasis will be placed along the entire close runway corridor, with particular attention given to realistic development of the existing terminal area.
2. **Identify Potential Nonaeronautical Use.** XYZ Company will analyze future aviation needs (projected in 5, 10, and 20 year periods) and then identify on-airport areas potentially available for compatible nonaeronautical use. Emphasis will be placed on development in the area along or in the vicinity of the west end of the closed runway.
3. **Identify Development Alternatives:** The objective of this task is to identify feasible landside alternative development plans for the airport based on Tasks A and B above. While a variety of alternative solutions could be considered, for the purposes of this study, XYZ Company will develop a series of possible alternatives consistent with the needs of the sponsor.
4. **Forward Draft Findings:** XYZ Company will prepare and submit the Alternatives Chapter addressing the tasks in this chapter, providing 10 copies of the draft chapter to the city, and one copy each to the state and FAA.

5. **Preferred Alternative Meeting:** XYZ Company will meet with the sponsor to assist him in evaluating and selecting the preferred alternative. Subsequent to the selection of the preferred alternative, XYZ Company will complete and submit an updated Alternatives Chapter to all parties.

Chapter 4 - Environmental Evaluation. Pending receipt and resolution of comments from the sponsor, state, and FAA on Chapter 3, XYZ Company will prepare Chapter 4. XYZ Company will review and respond to comments to all parties.

1. **Identify Existing Environmental Conditions.**
 2. This task will include the collection of data to identify protected resources and environmental issues as defined by the 23 impact categories found in FAA Order 5050.4, Airport Environmental Handbook, in the vicinity of the airport that are anticipated to be impacted by the proposed capital improvements or existing operations. A review of existing data and coordination with appropriate regulatory agencies will identify potential protected resources and issues important to the human and natural environment that may require additional data collection beyond the scope of this study. XYZ Company will conduct one site visit to compare existing conditions to written data.
 3. In addition, XYZ Company will review previous environmental permitting and, if applicable, protected resource mitigation performed as part of previous airport and industrial park improvement projects. This information will be useful to the sponsor when future environmental permits need to be obtained.
 4. Delineated flagged wetlands will be identified and evaluated using the current Federal and State (and local, if applicable) methodologies. These wetland boundaries, which are already digitized, will be placed on the appropriate airport plans and figures.
5. **Identify Potential Adverse Impacts:** Based upon the recommended airport improvements identified as the preferred alternative, potential impacts to the environment that are protected by local, State, and Federal regulations will be identified for the first five years of the planning period.
6. **Describe Regulatory Requirements:** XYZ Company will identify the permit requirements for the anticipated first five years of airport improvements. This information can then be used to plan the phasing requirements for each project (refer to Chapter 5 – Implementation Schedule & Financial Analysis).
7. **Forward Draft Findings:** XYZ Company will prepare and forward the Environmental Chapter covering the tasks described in this section. This chapter will provide the basis for the environmental permitting requirements and financial impacts presented in Chapter 6. XYZ Company will provide copies as previously described above.

Chapter 5 - Implementation & Financial Analysis. Pending receipt and resolution of comments from the sponsor, state, and FAA on Chapter 4, XYZ Company will prepare Chapter 5. XYZ Company will review and respond to comments to all parties.

1. **Implementation Schedule.** Based on the adopted preferred alternative, a phased implementation schedule will be developed. This schedule will be based on demand levels and their estimated timeframes for realization. This schedule will not only include the

development previously mentioned, but also major maintenance projects that were identified and necessary to maintain the viability of the airport.

2. **Capital Improvement Plan.** The ALPU will include a CIP using planning-level opinions of cost for each of the projects, both for development and maintenance of the airport. The distribution of eligible costs between the sponsor, state, FAA, and private investors will be evaluated for the presence of extensive financial burdens during any one timeframe; if necessary, projects may be shifted to offset this burden.
3. **Funding Sources:** XYZ Company will identify typical and potential funding sources for paying for proposed airport improvements or necessary maintenance projects.
4. **Forward Draft Findings.** XYZ Company will prepare and forward the Implementation Schedule and Financial Analysis Chapter covering the tasks described in this section. This chapter will provide the basis for future capital planning considerations on the part of the state and FAA. XYZ Company will provide copies as previously described above.

TASK C – UPDATE ALP

Three key components of the ALP will be updated: Existing Airport Layout Plan, Terminal Plan, and Ultimate Airport Layout Plan. The Approach Plan and Profile, Land-Use, and CFR Part 77 Analysis sheets **will not** be updated. Based on the selection of the preferred alternative, several drawings of the existing ALP set will require revisions and updating. All plans will be prepared to conform to state and FAA CADD standards and will be made available in electronic format.

1. **Existing Airport Facilities Plan:** This drawing will be updated reflecting changes since completion of the existing drawing. This drawing will be prepared at a scale of either 10 = 3009 or 10 = 4009.
2. **Ultimate Airport Layout Plan:** This drawing will be revised reflecting the preferred alternate layout. This drawing will be prepared at a scale of either 10 = 3009 or 10 = 4009.
3. **Terminal Area Plan:** This drawing will be prepared at a scale of either 10 = 509 or 1009 reflecting the revised preferred layout.
4. **Forward Draft Findings:** XYZ Company will prepare and submit the revised ALP drawings. One full-size 240 x 360 set will be provided each to the sponsor, FAA, and the state. In addition, a reduced 110 x 170 set will be provided in Adobe PDF to the sponsor's webmaster for inclusion on the city's website.

TASK D – FINAL DOCUMENTATION

1. **Final Meeting.** XYZ Company will hold a final project meeting with the sponsor, state, and FAA to review the project and solicit all final comments.
2. **Final Report.** Pending receipt of comments from all interested parties, a final ALPU report will be prepared. Bound, printed copies will be distributed to the sponsor, state, and FAA. Additional copies of the final report will be available upon request on CD-ROM in Adobe PDF format.
3. **Airport Layout Plan.** Four (4) full-size sets of the final ALP set will be distributed to the sponsor, state, and FAA for approval signatures. All signatory parties and XYZ Company will receive one (1) signed ALP set for their files.

ANTICIPATED PROJECT SCHEDULE

The following anticipated project schedule is based on the timely receipt and resolution of comments from the sponsor, state, and FAA:

Anticipated Project Schedule

Task	Date
Study Design	May 20XX
Inventory and Forecasts	June 20XX
Capacity Analysis and Facility Requirements	August 20XX
Alternatives Development	September 20XX
Environmental Evaluation	October 20XX
Financial Analysis	November 20XX
Airport Plans	December 20XX
Final Documentation	January 20XX

C.4 Example 3. Construction Services Scope.**DESIGN AND CONSTRUCT 6-UNIT HANGAR****ANYTOWN MUNICIPAL AIRPORT****ARTICLE A - DATA COLLECTION AND PROJECT DEVELOPMENT**

1. **Predesign Conference** - A representative of the engineer will attend a predesign meeting at the offices of the state to provide the representatives of the owner, the FAA, and the state with the opportunity to review and discuss the nature and extent of the project and to establish the project design criteria, budget, and schedule. The engineer will coordinate the date and time of the predesign conference via teleconferences, letters, faxes and emails to the representatives of the owner, the FAA and the state. The engineer will prepare a presentation of the project components for discussion at the predesign conference. The engineer will use the Airports Division Predesign Conference Form XX to determine the design and construction parameters that will be used for this project.
2. **Review and Evaluate Existing Data** - The engineer will compile the existing data that was prepared for previous projects at the airport, that is germane to the project, and that might be useful in the design of the project. The existing data includes airport master plan, airport Exhibit "A" property plan, engineering drawings, airspace obstruction analyses, aerial photogrammetry data, and aerial photographs. The engineer will utilize the pertinent data and information as appropriate to prepare worksheets to facilitate the development of the project. The engineer will review the existing data for accuracy and completeness and to determine the feasibility of utilizing the data to prepare plans and specifications for the design and construction of the project.

3. **Site Location Survey** - The engineer will retain a professional land surveyor who is licensed in the State to provide site location survey services in the vicinity of the proposed hangar project area sufficient to prepare the project plans. The land surveyor may be required to locate the pertinent existing physical features within the vicinity of the project including pavements, drainage structures, swales and ditches, fence lines, property lines, rights-of-way, and tree and brush lines. The engineer will incorporate the results of the survey into the project plans to supplement the available existing data for the project locations.

Expenses - The engineer will incur certain miscellaneous project related expenses during this phase of the work which may include but will not be limited to: meals, lodging, mileage cost at \$0.405 per mile, tolls, overnight shipping, plans, photocopies, photographic materials, equipment rental, survey materials, long distance telephone calls from the field, newspaper advertisements, and miscellaneous vendor invoices. These expenses will be included in the engineer's contract with the owner.

Outside Services - The engineer will incur certain project related costs during the data collection and project development phase of the work in the form of subconsultant costs for land surveying. These costs will be included in the engineer's contract with the owner.

ARTICLE B - DESIGNS, PLANS AND SPECIFICATIONS

1. **Project Plans** - The engineer will prepare preliminary and final plans based on the existing conditions plans that were prepared during the data collection phase of the project. The engineer will prepare the plans based on the locations of pavements, buildings, wetlands, tree lines, pole lines, fences, property lines, aviation easements, rights-of-way and other considerations to sufficiently depict the project area for the construction of the hangar. The engineer will evaluate the project work area to identify other necessary incidental improvements that should be included in the project. The engineer will incorporate the electrical and structural plans into the project plans. The engineer will coordinate the development of the project plans with the staff of their aviation planning and environmental departments including:

- Title sheet
- Site plan
- Grading Plan
- Civil Details
- Cross Sections
- Hangar Elevations and Details
- Floor Plan and Details
- Foundation Plan and Details
- Building Details and Typical Sections
- Electrical Layout Plan
- Electrical Schedules and One-Line Diagram
- Electrical Specifications

- a. The engineer will distribute the preliminary plans to the owner, the state, and the FAA for review. The engineer will provide the owner with one (1) set of preliminary plans for review and comments. The engineer will provide the state with two (2) sets of preliminary plans for review and comments. The engineer will provide the FAA with five (5) sets of preliminary plans for review and comments. The engineer will further develop the preliminary plans into final plans subsequent to the review and comment period.
 - b. The engineer will distribute the final plans to the owner, the state, and the FAA. The engineer will provide the owner with one (1) set of final plans. The engineer will provide the state with one (1) set of final plans. The engineer will provide the FAA with one (1) set of final plans.
2. **Project Specifications and Contract Documents** – The engineer will prepare preliminary and final specifications and construction contract documents based on the preliminary and final plans. The engineer will incorporate the electrical and structural specifications into the project specifications. The specifications will establish the requirements for the project in accordance with the current version of and changes to FAA AC 150/5370-10, *Standards for Specifying Construction of Airports*, including general provisions and technical specifications.
 - a. The contract documents will include: Invitation to Bid, Information for Bidders, Bid Proposal, Schedule of Items, consultant's Qualifications and Certifications, Buy American Requirements, Contract Agreement, Notice to Bidders (Bonding), Bid Bond, Payment Bond, Performance Bond, Maintenance Bond, and Insurance Requirements. The contract documents will include Federal special provisions including: Federal Requirements for Construction Contracts \$100,000 and Over, Instructions to Bidders, Certification for Nonsegregated Facilities, Required Assurances, Disadvantaged Business Enterprise Eligibility Requirements, and Federal wage rate requirements for Anytown USA.
 - b. The engineer will distribute the preliminary specifications and contract documents to the owner, the state, and the FAA for review and approval. The engineer will provide the owner with one (1) set of preliminary specifications and contract documents for review and comment. The engineer will provide the state with one (1) set of preliminary specifications and contract documents for review and comment. The engineer will provide the FAA with one (1) set of preliminary specifications and contract documents for review and comment. The engineer will further develop the preliminary specifications and contract documents into final specifications and contract documents subsequent to the review and comment period.
 - c. The engineer will distribute the final specifications and contract documents to the owner, the state, and the FAA. The engineer will provide the owner with one (1) set of final specifications and contract documents. The engineer will provide the state with one (1) set of final specifications and contract documents. The engineer will provide the FAA with one (1) set of final specifications and contract documents.
3. **Estimates** - The engineer will prepare estimates of material quantities and construction costs based on the plans, specifications, and environmental permitting requirements. The engineer will incorporate the electrical and structural estimates into the project estimates. The

estimates will be distributed to the owner, the state, and the FAA for review and modification. The owner, the state and the FAA each will be provided with one (1) copy of the estimates.

Note: The construction cost estimates will reflect the engineer's opinion of probable construction costs and will be based on the engineer's experience with similar recent construction. The engineer has no control over the actual cost of consultant labor and materials or over the competitive bidding and construction market conditions. The engineer cannot guarantee the accuracy of the construction cost estimates when compared to the consultants' construction bids or to the final project construction cost.

4. **Electrical Design, Specifications and Estimates** - The engineer will utilize the staff of their electrical division for the design of the electrical components of the hangar building. The engineer will visit the project site to determine the availability and suitability of the existing electrical system for the proposed project. The engineer will prepare electrical plans in the form of one line diagrams, electrical service installation details, panel schedules, lighting plan, power plan, and fixture schedule. The engineer will prepare electrical specifications and cost estimates for the construction of a pre-engineered metal building. The engineer will incorporate the electrical plans, specifications, and cost estimates into the project plans, project specifications and project cost estimates.
5. **Structural Design, Specifications and Estimates** - The engineer will utilize the staff of their structural division for the design of the structural components of a hangar building measuring approximately 33-feet wide by 252-feet long. The engineer will visit the project site to determine the suitability of the proposed site for the hangar building. The engineer will utilize the geotechnical data compiled for the recent runway, taxiway, and apron reconstruction projects to evaluate the suitability of the existing soils to design the building foundation. The engineer will prepare structural plans in the form of building elevations, floor plans, foundation plans, reinforcing plans, structural cross sections, and details suitable for establishing the requirements of a pre-engineered metal building. The engineer will prepare structural specifications and cost estimates for the construction of the pre-engineered metal building. The engineer will incorporate the structural plans, specifications, and cost estimates into the project plans, project specifications and project cost estimates.
6. **Quality Control and Design Review** - The engineer will conduct in-house quality control and design review meeting with experienced representatives of the engineer. The engineer will provide staff members with the opportunity to perform independent analyses of the final plans and specifications to ensure clarity, accuracy, completeness, and constructability. The electrical and structural plans will be reviewed separately by senior staff members in those disciplines. Subsequent to the independent reviews, a special in-house project review meeting will be conducted to discuss and consolidate the findings of the reviewers. The recommendations of the design review team will be incorporated into the final plans and specifications.

Expenses - The engineer will incur certain miscellaneous project related expenses during this phase of the work which may include but will not be limited to: meals, lodging, mileage cost at \$0.405 per mile, tolls, overnight shipping, plans, photocopies, photographic materials, equipment rental, survey materials, long distance telephone calls from the field, and miscellaneous vendor invoices. These expenses will be included in the engineer's contract with the owner.

ARTICLE C - ENVIRONMENTAL SERVICES

1. **Regulatory Review** - The engineer will evaluate the preliminary design of the project to determine the environmental impacts of the project. The engineer will review the latest pertinent Federal, State, and local environmental regulatory measures for recent changes and compliance issues. The engineer will contact the appropriate Federal, State, and local regulatory authorities to ascertain the permitting requirements for the project based on the anticipated final design and its potential environmental impacts. The engineer will contact regulatory authorities through telephone calls, letter correspondence, fax, and email to confirm environmental, aviation, and municipal zoning regulations. The engineer will review the available environmental documents including the airport master plan and wetlands studies for environmental issues and recommendations. The engineer will incorporate the recommendations of the regulatory agencies into the final design of the project to mitigate the environmental aspects of the project.
2. **Facility Storm Water Pollution Prevention Plan** - The engineer will amend the owner's airport Storm Water Pollution Prevention Plan (SWPPP) which was prepared in 1996 for the owner's airport industrial use as required by the National Pollution Discharge Elimination System (NPDES) regulations. The engineer will prepare a revised airport base map depicting the hangar development and other incidental changes. The engineer will prepare a narrative describing the changes at the airport. The engineer will deliver the revised base map and narrative to the owner for inclusion in the SWPPP as an appendix.

Expenses - The engineer will incur certain miscellaneous project related expenses during this phase of the work which may include but will not be limited to: meals, lodging, mileage cost at \$0.405 per mile, tolls, overnight shipping, plans, photocopies, photographic materials, equipment rental, survey materials, long distance telephone calls from the field, newspaper advertisements, permit application fees, and miscellaneous vendor invoices. These expenses will be included in the engineer's contract with the owner.

ARTICLE D - PROJECT ADMINISTRATION

1. **Scope of Services and Contract** - The engineer will communicate and coordinate with the owner via telephone, letters, fax, and email requesting the authority to proceed with the preliminary phases of the proposed project pending the execution of the engineering services agreement. The engineer will prepare an engineering services agreement including a detailed work scope narrative and itemized fee schedules for submission to the owner, the state, and the FAA for review and approval. The engineer will coordinate the preparation of the contract with the staff of their planning, CADD, and environmental departments.
 - a. The engineer will make changes to the work scope narrative and the fee schedules of the selected proposal. The engineer will make changes to the contract document standard provisions at the request of the owner's legal counsel and with the approval of the engineer's executive management. The engineer will prepare letters of transmittal and will distribute three (3) copies the final contract to the owner and the engineer's executive management for original authorized signatures. The engineer will prepare letters of transmittal and will distribute one (1) signed original copy of the fully executed contract to the owner, one (1) signed original copy to the engineer's executive management, one (1) signed photocopy to the state, and one (1) signed photocopy to the FAA.

2. **FAA Grant Application** - The engineer will prepare seven (7) copies of the formal FAA grant application including letters of transmittal, Standard Form 424, Standard Form 5100-100, project narrative, cost estimate, project schedule, location sketch, statement of environmental action, statement of airport user coordination, statement of intergovernmental coordination, statement of owner DBE program status, sponsor certifications, and grant assurances. The engineer will submit the grant application to the owner with transmittal letters for signatures and forwarding to the FAA and state. The engineer will review the Federal grant offer and assist the owner in complying with the terms and conditions of the grant offer.
3. **Executive Order 12372** - The engineer will communicate with the Anystate Office of State Planning to confirm the requirements of the submission package for intergovernmental agency review in accordance with Executive Order 12372. The engineer will prepare and submit six (6) copies of the submission package with a cover letter. The engineer will also prepare and deliver one (1) submission package with a cover letter directly to the U.S. Fish and Wildlife Service to facilitate Federal agency review of the proposed project. The engineer will obtain response letters at the end of the review period identifying specific requirements to be incorporated into the proposed project.
4. **Reimbursement Requests** - The engineer will prepare the Federal and State reimbursement requests using FAA Forms 5100-X and 5100-6X and State Form 55XX including letters of transmittal to the FAA and state. The engineer will compile the sponsor administration costs, engineering costs, subconsultant costs and construction costs. The engineer will submit five (5) copies of each reimbursement request package to the owner with transmittal letters for signature and forwarding to the FAA and the state for payment. It is anticipated that a total of six (6) reimbursement request packages including the final reimbursement request will be prepared and submitted during the course of the project.
 - a. The engineer will compile, review, and approve the consultant's construction cost data and will prepare FAA Form 51XX-8 periodic cost estimates. The engineer will submit seven (7) copies of the periodic cost estimates to the consultant for signature and return to the engineer for inclusion in the reimbursement request packages. It is anticipated that a total of four (4) periodic cost estimates will be prepared and submitted during the course of the project.
5. **In-House Administration** - The engineer will provide general project administration and coordination including in-house staff review of the project's progress, in-house staff communication, and dissemination of project data and information to in-house staff in the form of internal memos, discussions, meetings, and updates to apprise the project team of new developments throughout the design phases of the project. The engineer will prepare an in-house project work plan for distribution to the engineer's design team members to inform them of the project goals and objectives including scope of work, team assignments and responsibilities, project budget, project schedule, project contacts, and contract requirements, obligations, and limitations.
6. **Outside Administration** - The engineer will provide general project administration and coordination including disseminating interim project data and information to the owner, the state, the FAA, and the engineer's subconsultants in the form of telephone conversations, letters, faxes, email, copies, etc. to apprise the owner, the state, and the FAA of new developments throughout the design phase of the project.

7. **Accounting Administration** - The engineer will provide general project administration and coordination with the staff of their accounting department. The engineer will prepare the internal close out forms. The engineer will verify and reconcile the monthly accounting statements and will prepare memos for adjustments and corrections when necessary. The engineer will approve and process invoices received from subconsultants and vendors providing services to the engineer throughout the design phases of the project. The engineer will prepare and submit monthly invoices to the owner for services provided to the owner and for costs incurred by the engineer and their subconsultants. It is anticipated that a total of six (6) invoices will be prepared and submitted during the course of the project.
8. **Miscellaneous Administration** - The engineer will provide miscellaneous project administration and coordination duties which are not specifically addressed or anticipated in other project related tasks including telephone conversations with the owner, the state, the FAA, and other interested parties; disseminating interim project information to the owner, the state, the FAA, and other interested parties; and organizing, maintaining, and archiving the project records for six (6) years.
9. **Disadvantaged Business Enterprise Program** - The engineer will update the airport Disadvantaged Business Enterprise (DBE) program in accordance with 49 CFR Part 26, *Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs*. The engineer will review the methodology for evaluating the availability of DBE businesses to provide services and products for airport projects in the Federal fiscal year 20XX. The engineer will review the airport's service area by analyzing the utilization of DBE businesses on previous airport projects. The engineer will prepare a legal advertisement describing the revised DBE utilization goal and methodology. The engineer will deliver the advertisement to the owner to publish in one (1) newspaper as a public notice to provide a thirty day public comment period. The engineer will submit the revised DBE program to the FAA Office of Civil Rights review and comments. The engineer will prepare the DBE program annual update on Form 4XXX at the conclusion of Federal fiscal year 20XX to reflect the actual DBE utilization on airport projects.

Expenses - The engineer will incur certain miscellaneous project related expenses during this phase of the work which may include but will not be limited to: meals, lodging, mileage cost at \$0.405 per mile, tolls, overnight shipping, plans, photocopies, photographic materials, equipment rental, survey materials, long distance telephone calls from the field, and miscellaneous vendor invoices. These expenses will be included in the engineer's contract with the owner.

ARTICLE E - BIDDING SERVICES AND CONSTRUCTION ARRANGEMENTS

1. **Bid Documents** - The engineer will prepare XX sets of bid documents comprising the construction plans, construction specifications, and construction contract in accordance with the requirements of the owner, the state, and the FAA.
2. **Bid Advertisement** - The engineer will prepare a legal advertisement and deliver it to three (3) newspapers to publish as a solicitation for construction bids in accordance with the owner's bidding procedures. The engineer will deliver the bid advertisement to five (5) plan viewing rooms for publication in order to maximize the project exposure and generate widespread consultant interest in the project. The engineer will communicate with the plan viewing rooms and similar industry entities to provide technical information for their publications. The engineer will notify the state and the FAA of the project's advertisement.

3. **Distribute Bid Documents** - The engineer will contact consultants who are potential bidders in order to maximize consultant participation in the project. The engineer will issue the bid documents to the interested bidders and to five (5) plan viewing rooms. The engineer will maintain a list of the bid document recipients including the recipient's name, overnight mailing address, telephone number, and fax number for use in issuing addenda. The engineer will distribute the bid document recipient list to interested parties if requested by potential bidders.
4. **Pre-Bid Conference** - The engineer will attend the pre-bid conference at the airport to present the project to interested parties and to answer consultants' and subconsultants' questions. The engineer will conduct a site walk of the project area to allow the consultants and subconsultants to observe the existing conditions first-hand and to ask questions regarding their observations. The engineer will prepare written responses to questions that require additional information that is not available at the time of the pre-bid conferences. The engineer will distribute the responses to the bid document recipients and pre-bid conference attendees.
5. **Bid Questions and Addenda** - The engineer will answer questions and provide technical advice to the potential bidders concerning the bid documents. The engineer will answer questions and provide technical advice to the owner concerning the bid documents. The engineer will prepare and issue one (1) addenda to the bid document recipients to clarify, modify, or correct the bid documents.
6. **Bid Analyses, Recommendation and Award** - The engineer will conduct a detailed analysis of the consultants' bids for completeness and accuracy and will note omissions and discrepancies. The engineer will compile a bid summary comprising the results of the bids for distribution to the bid document recipients. The engineer will write a letter to the owner recommending the award of the construction contract to the apparent low bidder based on the bid analyses. With the concurrence of the owner, the state and the FAA, the engineer will issue a written notification to the successful bidder informing the bidder of the bid results. The engineer will disseminate the bid results to the plan viewing rooms.
7. **Bid Sureties** - The engineer will issue letters to the unsuccessful bidders returning the bid sureties, distributing the bid summary, and describing the bid results. The engineer will return the bid surety to the successful bidder after the bidder has executed the construction contract. The engineer will return the bid surety to the second low bidder after the successful bidder has executed the construction contract.
8. **Consultant Coordination** - The engineer will prepare six (6) copies of the consultant's bid proposal package for use as the construction contract document. The engineer will coordinate with and provide information to the consultant to facilitate the preparation and execution of the construction contract document. The engineer will review the consultant's construction contract for accuracy and completeness before submitting the document to the owner for final signatures. The engineer will prepare a checklist of tasks to be performed by the owner to fully execute the construction contract. The engineer will distribute the construction contract documents at the preconstruction conference.

Expenses - The engineer will incur certain project related expenses during this phase of the work which may include but will not be limited to: meals, lodging, mileage cost at \$0.405 per mile, tolls, overnight shipping, plans, photocopies, photographic materials, equipment rental, survey

materials, long distance telephone calls from the field, and miscellaneous vendor invoices. These expenses will be included in the engineer's contract with the owner.

ARTICLE F - CONSTRUCTION ADMINISTRATION

1. **Preconstruction Conference** - The engineer will coordinate the time, date, and location of the preconstruction conference. The engineer will notify the owner, the FAA, the state, the consultant, the resident engineer, and other interested parties of the preconstruction conference and will invite their representatives to attend. The engineer will conduct the preconstruction conference in accordance with FAA AC 150/5300-9, *Predesign, Prebid, and Preconstruction Conferences for Airport Grant Projects*, to ensure that the attendees are aware of the design, construction, and safety requirements of the project and are informed of their individual responsibilities.
2. **Shop Drawing Review** - The engineer will review the shop drawings and materials submittals that are furnished by the consultant as required by the construction contract documents. The engineer will either fully approve, conditionally approve, or reject the shop drawings and materials. The engineer will return conditionally approved and rejected shop drawings and materials submittals to the consultant for changes or revisions prior to the use of the materials on the project. The engineer will review only one resubmission of a conditionally approved or rejected shop drawing or submittal. The engineer will prepare and maintain a submittal register identifying the submittal number, description, specification section, specification paragraph, received date, action date, and action taken. The engineer will distribute copies of the submittals and the updated submittal register to the owner and the consultant.
3. **Construction Administration** - The engineer will provide general consultation and advice to the owner during the construction phase of the project. The engineer will provide general coordination between the owner, the state, and the FAA during the construction phase of the project. The engineer will assist the owner with the preparation and issuance of change orders, recommend construction specification waivers, and advise the owner as to the consultant's performance. The engineer will review daily progress reports, monthly construction progress reports, wage survey records, and certified payrolls. The engineer will distribute copies of the monthly construction progress reports to the owner, the FAA, and the state.
 - a. The engineer will provide general supervision and support to the resident engineer including, but not limited to, coordinating field survey personnel, processing the resident engineer's weekly time sheets and expense sheets, providing technical documentation, providing field office supplies and materials, performing construction contract interpretation, analyzing unusual or unique developments or complications during construction, and communicating and corresponding with the consultant regarding contract administration, project changes, bonding and insurance issues, and other construction related matters.
 - b. The engineer will communicate and coordinate with the consultant on a regular basis throughout the construction phase of the project in the form of teleconferences, letters, memos, faxes, and email.
4. **Site Visits** - The engineer will make visits to the construction site to observe the progress, safety, and quality of the construction. The engineer will coordinate the site visits with the

owner and representatives of the electrical and structural divisions. The engineer's representatives will meet with the representatives of the owner and the consultant to discuss the project's progress and to identify areas of concern to facilitate the construction.

5. **Final Inspection** - The engineer will conduct a site walk and final inspection of the project to confirm the completeness and quality of the construction. The engineer will coordinate the date and time of the final inspection via teleconferences, letters, faxes and email to the owner, the FAA, the state, the resident engineer, and the consultant. The engineer will prepare a summary report of the final inspection, including a punch list of work items that the consultant must accomplish to complete the project. The engineer will distribute the summary report to the owner, the FAA, the state, the resident engineer, and the consultant.
6. **Record Drawings** - The engineer will prepare four (4) sets of paper copies of the record drawings and final quantities representing the completed project and reflecting the actual work accomplished during construction. The engineer will distribute the four (4) sets of record drawings to the owner, the FAA, and the state for signatures. The engineer will prepare and distribute one (1) set of mylar copies of the record drawings to the owner after the record drawings have been signed by all parties. The engineer will provide the owner with electronic files of the record drawings in AutoCAD DWG format and PDF format on CD-ROM.
7. **Airport Layout Plan Drawing** - The engineer will update the electronic versions of the Ultimate Airport Layout Plan drawing which is identified as Sheet 3 of the Airport Layout Plan drawing set. The engineer will update the drawing to reflect the actual work accomplished by the project.
8. **Airport Terminal Area Plan Drawing** - The engineer will update the electronic version of the Airport Terminal Area Plan drawing which is identified as Sheet 4 of the Airport Layout Plan drawing set. The engineer will update the drawing to reflect the actual work accomplished by the project and previous airport development.
9. **Project Close Out Report** - The engineer will prepare the final project documentation in the form of a project close out report that consolidates the project related information that will be required by the FAA to formally close out the project. The engineer will include in the close out report all general, fiscal, miscellaneous, engineering and construction information, and submissions/certifications listed on the FAA project closure summary checklist. The engineer will distribute one (1) copy of the project close out report each to the owner, the FAA and the state.

Expenses - The engineer will incur certain project related expenses during this phase of the work which may include but will not be limited to: meals, lodging, mileage cost at \$0.405 per mile, tolls, overnight shipping, plans, photocopies, photographic materials, equipment rental, survey materials, and long distance telephone calls from the field. These expenses will be included in the engineer's contract with the owner.

Outside Services - The engineer will incur certain project related costs during the construction administration phase of the work in the form of subconsultant costs for geotechnical testing services. These costs will be included in the engineer's contract with the owner.

ARTICLE G - TECHNICAL OBSERVATION OF CONSTRUCTION

1. **Resident Engineer - The engineer will provide a qualified construction resident engineer to observe that the construction is carried out in reasonable conformity with the contract documents and in accordance with the customary practices of professional engineers and consultants. The resident engineer will be available for both full-time and part-time construction observation services during the 90 calendar day duration of the project as required by the nature of the ongoing construction activities.**
 - a. **For budgeting purposes, the resident engineer can be available sixteen (16) hours per week for twelve (12) weeks including travel time for a total of 192 hours during the course of the construction. The resident engineer can also be available for eight (8) hours to attend the final inspection. Variations to this proposed manhour distribution may be necessary as the work progresses but must not exceed 200 manhours. Additional manhours for the resident engineer must be addressed by a supplemental agreement.**
 - b. **The resident engineer will be the engineer's primary contact with the consultant and their subconsultants during the course of construction. The resident engineer will be available to meet with the representatives of the owner, the FAA, the state, and other interested parties at the project location. The resident engineer will coordinate and supervise the engineer's subconsultants and personnel who are performing on-site testing, surveying, or other project related services.**
 - c. **The resident engineer will monitor and coordinate the construction progress; will coordinate with the owner, the engineer, and the consultant; will provide construction oversight to ensure that the work is proceeding according to the construction contract documents; and will notify the engineer if problems, disputes, or changes arise during the course of construction.**
 - d. **The resident engineer will prepare and maintain cost estimates and construction quantity estimates for use in preparing monthly payment reimbursement requests and for monitoring the progress of the consultant's work. The resident engineer will prepare daily construction progress reports of the construction activities that are observed and will submit the reports to the engineer for review. The resident engineer will prepare monthly construction summary reports of completed work that has been accepted and approved by the consultant and will submit the reports to the engineer for review.**
 - e. **The resident engineer will conduct Federal wage rate surveys with the consultant's personnel and their subconsultants' personnel to ensure compliance with the U.S. Department of Labor regulations for federally funded construction projects. The resident engineer will submit the wage rate survey records to the engineer for review.**
 - f. **The resident engineer will assist the consultant with construction surveying to identify the limits of work, to determine elevations and grades, to locate physical features discovered during the course of construction, and to calculate quantities of materials either removed or utilized on the project. The consultant's construction survey data will be incorporated into the record drawings at the completion of the project. The engineer will provide the resident engineer with CADD support to plot the results of**

the construction survey data and to generate electronic drawings, sketches, and details at the request of the resident engineer to facilitate the construction.

Expenses - The engineer will incur certain project related expenses during the course of the technical observation of construction phase of the work which may include but will not be limited to: meals, lodging, mileage cost at \$0.405 per mile, tolls, overnight shipping, blueprints, photocopies, photographic materials, equipment rental, survey materials, long distance telephone calls from the field, and miscellaneous vendor invoices. These expenses will be included in the engineer's contract with the owner.

Outside Services - The engineer will incur certain project related costs during the technical observation phase of the work in the form of geotechnical subconsultant costs for quality assurance testing of construction materials and practices. These costs will be included in the engineer's contract with the owner.

APPENDIX D. CONSULTANT SERVICES FEE/COSTS SAMPLE

This example can be modified as necessary for any type of project.

Airport: _____

Project: _____

Date: _____

**THIS IS A SAMPLE
ANY SIMILAR FORM MAY BE
USED**

TASKS	EMPLOYEE CLASSIFICATIONS					
	DIRECTOR AVIATION	PROJECT MANAGER	AIRPORT PLANNER	ENVIRO. ANALYST	CADD TECH	CLERICAL
1 Project Scoping Meeting						
2 Refine Scope and Fee						
3 Prepare Grant Application						
4 Attend City Council Meeting						
5 Update Existing Activity						
6 Field Inventory						
7 Identify On-Airport Developable Land						
8 Evaluate Existing Lease Agreements						
9 Update 1999 Forecasts						
10 Review and Respond to Comments						
11 Landside Facility Capacity & Requirements						
12 Meeting						
13 Review and Respond to Comments						
14 Identify Limits of Aviation Development						
15 Identify Development Alternatives						
16 Review and Respond to Comments						
17 Identify Existing Environmental Conditions						
18 Describe Regulatory Requirements						
19 Prepare and Forward Draft Findings						
20 Implementation Plan & Capital Improvement Plan						
21 Existing Airport Facilities Plan						
22 Ultimate Airport Layout Plan						
23 Final Meeting						
24 Prepare and Forward Final Report						
25 Prepare and Forward Final Airport Layout Plan						
TOTAL HOURS	0	0	0	0	0	0
HOURLY RATE	\$0	\$0	\$0	\$0	\$0	\$0
DIRECT SALARY COST	\$0	\$0	\$0	\$0	\$0	\$0
Direct Nonsalary Expenses						
Travel (x miles at \$x.xx/mile)	\$0.00					
Per Diem	\$0.00					
Reproduction	\$0.00					
Testing	\$0.00					
Consultants/Outside Services	\$0.00					
Other	\$0.00					
Total Direct Nonsalary Expenses	\$0.00					
Total Direct Salary Costs						\$0.00
Overhead (xxx % of Direct Labor Costs)						\$0.00
Total Labor Cost						\$0.00
Fixed Fee (xx % of Total Labor Cost)						\$0.00
Subtotal						\$0.00
Total Direct Nonsalary Expenses						\$0.00
TOTAL COST (Total Labor, Fixed Fee & Expenses)						\$0.00

Page Intentionally Blank.

9/30/2014

AC 150/5100-14E

Appendix E

APPENDIX E. DETAILED FEE/COST ANALYSIS SAMPLE

DATE: _____

PROJECT: _____

ESTIMATED CONSTRUCTION COSTS (ECC): \$ _____

ESTIMATED CONSTRUCTION DURATION: _____

ie calendar days

**THIS IS A SAMPLE
ANY SIMILAR FORM MAY BE
USED**

ITEM	SPONSOR'S INDEPENDENT ESTIMATE	CONSULTANT FEE PROPOSAL	NEGOTIATION	
			DIFFERENCE	OBJECTIVE
Wages and Overhead	\$	\$	\$	
Overhead Percent				
Principal \$/Hour				
Project Manager \$/Hour				
Civil Engineer \$/Hour				
Electrical Engineer \$/Hour				
CADD Technician \$/Hour				
Resident Engineer \$/Hour				
Inspector \$/Hour				
Project Engineer (Construction) \$/Hour				
Surveyor \$/Hour				
2-Man Crew				
WORKHOURS				
Principal				
Project Manager				
Civil Engineer				
Electrical Engineer				
CADD Technician				
Resident Engineer				
Inspector				
Project Engineer (Construction)				
Surveyors				
Workhour Totals				
Geotech	\$	\$	\$	
Travel	\$	\$	\$	
Printing	\$	\$	\$	
Total Fee	\$	\$	\$	
As percent of ECC				

Page Intentionally Blank.

APPENDIX F. RECORD OF NEGOTIATIONS SAMPLE**ARCHITECTURAL AND ENGINEERING SERVICES**

DATE:

Job Title

Location:

Anticipated A.I.P. Grant:

1. The consulting firm of XYZ was selected on January 21, 20XX, from those consultants who submitted their qualifications. A scope of work and detailed independent cost estimate in the amount of \$44,364 for the design phase and \$54,956 for the construction phase were prepared by the sponsor on February 21 and submitted to the ADO on February 23.
2. The scope of work and request for fee proposal were sent to XYZ Consultants on February 23.
3. The meeting was held on February 27 with the sponsor, consultant, and FAA to ensure the consultant had a thorough understanding of the scope of work.
4. The consultant submitted their fee proposal for the work on March 2, broken down as follows:

Design Phase \$58,224

Construction Phase \$66,345

5. A detailed cost analysis comparing the detailed independent estimate with the consultant's fee proposal was done on March 6 and negotiation objectives were established.
6. The sponsor's negotiator, Mr. A called Mr. X of XYZ Consultants on March 7 to discuss the fee proposal. It was agreed that the construction duration of 60 days was adequate. The consultant was told that their overhead rate appeared high and asked to submit a detailed statement of overhead expenses for the previous year to verify their rate. Also the man hours for the principal and project manager seemed excessive. It was also noted that both a resident engineer and an inspector were not needed on the construction site fulltime. The surveying manhours during construction were also excessive. The consultant agreed to revise their fee proposal and resubmit it to the sponsor.
7. The consultant submitted a revised fee proposal for the work on March 9, broken down as follows:

Design Phase \$51,286

Construction Phase \$59,432

8. The detailed cost analysis was revised on March 12 to reflect the consultant's revised fee proposal.
9. The sponsor's negotiator met with Mr. X of XYZ Consultants at the sponsor's office on March 13. Ineligible costs for entertainment and interest expense were deleted from the consultant's overhead and an acceptable overhead rate of 134 percent was agreed upon. A combined time of 60 man hours for the principal and project manager were agreed upon allowing 15 for the principal and 45 for the project manager. The consultant's figures of 302

civil work hours, 120 electrical work hours, and 410 drafting work hours were accepted. The consultant agreed to have a full time inspector on the job with a resident engineer also on the job one third of the time. The construction surveying work hours were reduced to 32 hours of a three-man crew. The consultant agreed to make the discussed changes and submit a final fee proposal.

10. The consultant submitted a final fee proposal for the work on March 14, broken down as follows:

Design Phase \$47,324

Construction Phase \$56,658

11. The final fee proposal is considered reasonable by the sponsor. A contract has been prepared for the agreement between the sponsor and consultant. The scope of work, draft contract, sponsor's independent cost estimate, consultant's fee proposals with revisions and detailed cost analysis are attached to this record of negotiation and hereby submitted to the ADO for a reasonableness of cost determination.
12. The negotiations were conducted in good faith to ensure the fees are fair and reasonable. The procedures outlined in AC 150/5100-14 have been followed.

Sponsor's Signature

APPENDIX G. ALTERNATIVE PROJECT DELIVERY SYSTEMS**G.1 Alternative Project Delivery Systems.**

G.1.1 Alternative project delivery systems (APDS) are popular construction methods in State and local governments. The philosophy behind these types of delivery systems is that there is a potential to reduce delivery time and minimize change orders that results in overall lower costs and greater efficiency.

G.1.2 Before undertaking alternative project delivery for an AIP funded project, the conditions for the project must be evaluated to determine if alternative delivery is more beneficial than the traditional design-bid-build method. The information contained in this appendix is offered to provide Sponsors with some insight when pursuing alternative project delivery. Sponsors should follow all applicable State and local laws but must include the required Federal contract clauses and provisions in the procurement documents. See Title 2 CFR § 200.326.

G.2 Alternative Project Delivery System Requirements.

The ADO must approve the use of an alternative project delivery system in advance of the project starting. The Sponsor must submit the following documentation to the ADO for review:

1. A description of the delivery system to be used.
2. A full description of the project with preliminary drawings of the proposed work.
3. Documentation that provides the reason and justification for using the alternative delivery system.
4. Documentation that the selection process is allowed under State or local law.
5. An organizational chart that shows contractual relationships between all the parties.
6. A statement describing what safeguards are in place to prevent conflicts of interest.
7. Documentation that the system will be as open, fair and objective as the traditional design-bid-build project delivery system.
8. Documentation of the amount of experience the parties involved in the project have in the proposed project delivery method.

G.3 Alternative Project Delivery Items Not Allowed Under AIP.

Because of federal contract and procurement requirements, some of the characteristics of APDS are not eligible on AIP funded projects. Some of these include:

1. Early completion bonuses
2. Cost overruns greater than 15%
3. Shared cost savings

4. Sponsor contingency costs
5. Price escalation
6. Sponsor insurance costs
7. In-state or local preferences

G.4 Design-Build Project Delivery.

G.4.1 49 U.S.C §47142 establishes design-build contracting as an approvable form of project delivery under AIP. Under the statute, design-build contracting is defined as an agreement that provides for both design and construction of a project by a single contractor. That contractor holds responsibility for the entire contract. Design-build may provide cost savings because of time savings in the contracting process as well as earlier start of construction.

G.4.2 Design-build project delivery can be performed by a single company with both design and construction ability in-house, or by a joint venture working under a single design-build contract. Design-build services can be performed under all the contractual methods used for construction including lump-sum, cost reimbursable with not-to-exceed ceiling (excluding cost-plus-percentage of costs) and time and material. If an outside firm is used to develop the initial qualifications package, that firm may not participate as a competing party or sub-party in step 2. However, they may participate as a Sponsor representative on the selection board. Design fees are part of the overall contract price, but are separated as a subset of the total price. Contracting for design-build services can be done through a two-step Competitive Proposal Selection (CPS) as described below:

1. **Step one:** The Sponsor prepares a design criteria package for the project using in-house staff or a separate professional services firm. The Sponsor also advertises for Design-Build firms or Joint Ventures to submit a qualifications package for consideration of the proposed project. Interested firms will respond to the solicitation, and are short-listed using a similar process used for QBS.
2. **Step two:** The design criteria package is issued to the short listed firm or teams, who respond with separate technical and price proposals. 49 U.S.C §47142 requires at least 3 firms submit proposals. Technical proposals which include preliminary drawings, outline specifications, and project schedules, are evaluated first, using a numerical **points earned** system. Then, price proposals are opened and prices are factored into the **points earned** system to decide the final selection

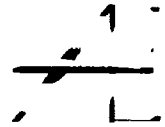
G.5 Construction Manager-At-Risk (CM-A-R).

G.5.1 Utilizing the CM-A-R delivery system, the Sponsor engages a professional services design firm and in the early design phase, a construction manager/general contractor (CM-A-R) is selected.

- G.5.2** The design firm is selected using professional services QBS. The CM-A-R is selected using a two-step competitive proposal.
- 1. Step one:** The sponsor and design firm prepare a RFQ with preliminary project information and use qualifications based criteria to rank and short list the top firms.
 - 2. Step two:** More detailed design information is provided to the short listed firms who reply with price information for various items such as, profit/contractor fee, insurance, bonding and general conditions.
- G.5.3** The CM-A-R is then selected with qualifications and price as a consideration.
- G.5.4** After selection, the sponsor then negotiates the fees for pre-construction services that may include:
- 1.** Design document reviews
 - 2.** Construction scheduling and sequencing
 - 3.** Cost Estimating at various stages of the design
 - 4.** Constructability reviews with recommended cost savings based on construction expertise.
- G.5.5** At some point either in the design stage or after subcontractor bidding, the CM-A-R and the Sponsor negotiate a Guaranteed Maximum Price (GMP) for the project. The GMP is generally comprised of construction/ materials, contractor fee, general conditions, insurance, bonding and a contingency percentage which varies depending on the state of the design. The Sponsor and the design firm are directly involved in fixing the GMP through cost estimating at different levels of design completion, typically the 30, 60, and 90% completion levels. Some State and local laws require that the GMP can only be fixed after the CM-A-R publically bids the project design packages.
- G.5.6** If the CM-A-R and the Sponsor cannot agree on a GMP, the project may be converted to the traditional design-bid-build method. Please consult the FAA program manager to discuss any consequences associated with such a change.
- G.5.7** During the construction phase, the CM-A-R role is of a general contractor. Since the GMP is designed to prevent cost overruns for the Sponsor, the CM-A-R bears the responsibility for ensuring the project stays on schedule, within budget and conforms to the plans and specifications.

ATTACHMENT C

AE Consulting, Inc.
AIRPORT ENGINEERING



145 Yorba Street
Tustin, CA 92780
(714) 575-0214 Tel
(714) 575-1214 Fax

**HOURLY RATES AND CHARGES
FOR PROFESSIONAL SERVICES**

STANDARD HOURLY BILLING RATE SCHEDULE

Classification	Rate
Principal Engineer	\$180
Project Manager	\$165
Senior Engineer	\$145
Engineer	\$125
Senior Designer	\$105
Designer	\$ 90
CADD Operator	\$ 80
Administrative Support	\$ 65

EXPENSES AND CHARGES

Communications – No charge for long distance phone calls within the US. Overseas calls will be charged at cost plus 10%.

Deliveries – Delivery charges will be billed at actual cost plus 15%.

Reproductions - Reproduction charges will be billed at actual cost plus 15%.

Travel – All expenses for airfare, automobile rental, hotel lodging, sustenance, commercial services and incidental expenses will be billed at actual cost plus 5%. Automobile mileage will be billed at 65¢ per mile

Subcontractors – For services rendered by others as subcontractors for surveying, soil borings, pavement testing, subsurface investigations, laboratory testing or other activities requested will be billed at actual cost plus 15%.

Rates are in US Dollars. The rates and charges shown above are in effect until December 31, 2015 and are subject to revision thereafter. All above rates and charges are subject to project specific proposals, agreements and contracts.



ENGINEERING, INC.

Electrical Engineering

1543 West Garvey Ave. North, Suite 210

West Covina, California 91790

626.337.1965 * Fax: 626.337.1902

2015 HOURLY RATE SCHEDULE

The 2015 Hourly Rate Schedule for professional engineering services performed by JMD Engineering will be at the following rates:

Principal Engineer	\$150.00/hour
Senior Electrical Engineer	\$140.00/hour
Senior Mechanical Engineer	\$140.00/hour
Project Manager	\$140.00/hour
Construction Administration	\$120 - \$150/hour
Project/Design Engineer	\$120.00/hour
CAD Operator	\$100.00/hour
Clerical	\$75.00/hour

GEOTECHNICAL PROFESSIONALS INC

2015 FEE SCHEDULE

SERVICES	RATE
Staff Engineer/Geologist	\$ 137.00/hr
Project Engineer/Geologist	157.00/hr
Senior Engineer/Geologist	192.00/hr
Associate	234.00/hr
Principal	265.00/hr
Senior Technician (Field or Lab)	110.00/hr
Technician (Field or Lab)	99.00/hr
Assistant Technician (Field or Lab)	74.00/hr
City of Los Angeles Deputy Grading Inspector	123.00/hr
Technician - Prevailing Wage Projects*	134.00/hr
Technician Overtime - Prevailing Wage Project	153.00/hr
Technical Illustrator	115.00/hr
Word Processor/Sr. Clerical	93.00/hr
Clerical	66.00/hr
Legal Testimony and Depositions (4 hr. minimum)	375.00/hr

EQUIPMENT

Field Vehicles with test equipment (travel and on-site use)	\$ 9.00/hr
Passenger Cars (mileage only)	0.68/mi
Other specialized equipment charges can be provided upon request.	

EXPENSES & OUTSIDE SERVICES

Out-of-pocket expenses (expendable field supplies, aerial photos, long distance calls, blueprints, report production expenses, etc.) are charged at cost plus 15 percent.

Outside services (drilling, consultants, selected laboratory testing, geophysical surveys, etc.) are charged at cost plus 15 percent.

* Projects requiring our services to be performed under a Project Labor Agreement (PLA) will be subject to incrementally higher fees to account for the added union fringe benefit costs. The increment will be equal to the fringe benefit amount due to the union.



CIVIL ENGINEERS • SURVEYORS • RIGHT-OF-WAYS

SBE • WBE • DBE • CERTIFIED

AS-NEEDED SURVEY AND MAPPING SERVICES

PROPOSED HOURLY RATES

<u>LABOR CLASSIFICATION</u>	<u>HOURLY RATE</u>
Office Work	
Principal in Charge	\$200
Project Manager	\$175
Project Surveyor / Engineer (PLS/PE)	\$150
Assistant Surveyor / Engineer	\$140
Photogrammetrist	\$150
Survey Technician / GIS Analyst / Researcher (LSIT)	\$125
Junior Surveyor / Engineer	\$95
CADD Technician	\$85
Surveying / Engineering Intern	\$75
Office Support / Clerical	\$70
 Field Work ⁴	
1-person survey crew	\$170
2-person survey crew	\$275
3-person survey crew	\$375
Apprentice	\$100

NOTES

1. 10% mark-up allowed on all sub-consultant work.
2. Reimbursable costs including but not limited to delivery or messenger charges, additional reprographic costs (beyond the scope of the contract), utility agency research fees, permits, title company fees, etc. shall be billed at cost to the County. Mileage is not reimbursable.
3. Consultant shall submit invoices to the County on a monthly basis and be compensated accordingly.
4. Rates are inclusive of all survey vehicles and conventional survey equipment and tools. If special equipment is needed, written pre-authorization from the project manager and contract administrator is required.
5. Expenses for any special requests shall be at the discretion of the project manager and contract administrator.

ATTACHMENT D

INDEMNIFICATION AND INSURANCE PROVISION

I. INDEMNIFICATION

A. The Contractor shall indemnify, defend and hold harmless the County, its Special Districts, elected and appointed officers, employees, agents and volunteers ("County Indemnitees") from and against any and all liability, including but not limited to demands, claims, actions, fees, costs and expenses (including attorney and expert witness fees), arising from and/or relating to this Contract, except for such loss or damage arising from the sole negligence or willful misconduct of the County Indemnitees.

B. To the fullest extent permitted by California Civil Code Section 2782.8, the Consultant shall (1) immediately defend and (2) indemnify the County, its Special Districts, elected and appointed officers, employees, agents and volunteers (Indemnified Party) from and against all liabilities, regardless of nature or type that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant, or its employees, agents, or subcontractors. Liabilities subject to the duties to defend and indemnify include, without limitation, all claims, losses, damages, penalties, fines, and judgments; associated investigation and administrative expenses; defense costs, including but not limited to reasonable attorneys' fees; court costs; and costs of alternative dispute resolution. The Consultant's obligation to indemnify applies unless it is finally adjudicated that the liability was caused by the sole active negligence or sole willful misconduct of an indemnified party. If it is finally adjudicated that liability is caused by the comparative active negligence or willful misconduct of an indemnified party, then Consultant's indemnification obligation shall be reduced in proportion to the established comparative liability.

II. GENERAL PROVISIONS FOR ALL INSURANCE COVERAGE

Without limiting Contractor's indemnification of County, and in the performance of this Contract and until all of its obligations pursuant to this Contract have been met, Contractor shall provide and maintain at its own expense insurance coverage satisfying the requirements specified in paragraphs II and III of this Attachment. These minimum insurance coverage terms, types and limits (the "Required Insurance") also are in addition to and separate from any other contractual obligation imposed upon Contractor pursuant to this Contract. The County in no way warrants that the Required Insurance is sufficient to protect the Contractor for liabilities which may arise from or relate to this Contract.

A. Evidence of Coverage and Notice to County

- Certificate(s) of insurance coverage (Certificate) satisfactory to County, and a copy of an Additional Insured endorsement confirming County and its Agents

(defined below) has been given Insured status under the Contractor's General Liability policy, shall be delivered to County at the address shown below and provided prior to commencing services under this Contract.

- Renewal Certificates shall be provided to County not less than 10 days prior to Contractor's policy expiration dates. The County reserves the right to obtain complete, certified copies of any required Contractor and/or Sub-Contractor insurance policies at any time.
- Certificates shall identify all Required Insurance coverage types and limits specified herein, reference this Contract by name or number, and be signed by an authorized representative of the insurer(s). The Insured party named on the Certificate shall match the name of the Contractor identified as the contracting party in this Contract. Certificates shall provide the full name of each insurer providing coverage, its NAIC (National Association of Insurance Commissioners) identification number, its financial rating, the amounts of any policy deductibles or self-insured retentions exceeding fifty thousand (\$50,000.00) dollars, and list any County required endorsement forms.
- Neither the County's failure to obtain, nor the County's receipt of, or failure to object to a non-complying insurance certificate or endorsement, or any other insurance documentation or information provided by the Contractor, its insurance broker(s) and/or insurer(s), shall be construed as a waiver of any of the Required Insurance provisions.

Certificates and copies of any required endorsements shall be emailed to the Contract Administrator.

Contractor also shall promptly report to County any injury or property damage accident or incident, including any injury to a Contractor employee occurring on County property, and any loss, disappearance, destruction, misuse, or theft of County property, monies or securities entrusted to Contractor. Contractor also shall promptly notify County of any third party claim or suit filed against Contractor or any of its Sub-Contractors which arises from or relates to this Contract, and could result in the filing of a claim or lawsuit against Contractor and/or County.

B. Additional Insured Status and Scope of Coverage

The County of Los Angeles, its Special Districts, Elected Officials, Officers, Agents, Employees and Volunteers (collectively County and its Agents) shall be provided additional insured status under Contractor's General Liability policy with respect to liability arising out of Contractor's ongoing and completed operations performed on behalf of the County. County and its Agents additional insured status shall apply with respect to liability and defense of suits arising out of the Contractor's acts or omissions, whether such liability is attributable to the Contractor or to the County. The full policy limits and scope of protection also shall apply to the County and

its Agents as an additional insured, even if they exceed the County's minimum Required Insurance specifications herein. Use of an automatic additional insured endorsement form is acceptable providing it satisfies the Required Insurance provisions herein.

C. Cancellation of or Changes in Insurance

Contractor shall provide County with, or Contractor's insurance policies shall contain a provision that County shall receive, written notice of cancellation or any change in Required Insurance, including insurer, limits of coverage, term of coverage or policy period. The written notice shall be provided to County at least ten (10) days in advance of cancellation for non-payment of premium and thirty (30) days in advance for any other cancellation or policy change. Failure to provide written notice of cancellation or any change in Required Insurance may constitute a material breach of the Contract, in the sole discretion of the County, upon which the County may suspend or terminate this Contract.

D. Failure to Maintain Insurance

Contractor's failure to maintain or to provide acceptable evidence that it maintains the Required Insurance shall constitute a material breach of the Contract, upon which County immediately may withhold payments due to Contractor, and/or suspend or terminate this Contract. County, at its sole discretion, may obtain damages from Contractor resulting from said breach. Alternatively, the County may purchase the Required Insurance, and without further notice to Contractor, deduct the premium cost from sums due to Contractor or pursue Contractor reimbursement.

E. Insurer Financial Ratings

Coverage shall be placed with insurers acceptable to the County with A.M. Best ratings of not less than A:VII unless otherwise approved by County.

F. Contractor's Insurance Shall Be Primary

Contractor's insurance policies, with respect to any claims related to this Contract, shall be primary with respect to all other sources of coverage available to Contractor. Any County maintained insurance or self-insurance coverage shall be in excess of and not contribute to any Contractor coverage.

G. Waivers of Subrogation

To the fullest extent permitted by law, the Contractor hereby waives its rights and its insurer(s)' rights of recovery against County under all the Required Insurance for any loss arising from or relating to this Contract. The Contractor shall require its insurers to execute any waiver of subrogation endorsements which may be necessary to effect such waiver.

H. Sub-Contractor Insurance Coverage Requirements

Contractor shall include all Sub-Contractors as insureds under Contractor's own policies, or shall provide County with each Sub-Contractor's separate evidence of insurance coverage. Contractor shall be responsible for verifying each Sub-Contractor complies with the Required Insurance provisions herein, and shall require that each Sub-Contractor name the County and Contractor as additional insureds on the Sub-Contractor's General Liability policy. Contractor shall obtain County's prior review and approval of any Sub-Contractor request for modification of the Required Insurance.

I. Deductibles and Self-Insured Retentions (SIRs)

Contractor's policies shall not obligate the County to pay any portion of any Contractor deductible or SIR. The County retains the right to require Contractor to reduce or eliminate policy deductibles and SIRs as respects the County, or to provide a bond guaranteeing Contractor's payment of all deductibles and SIRs, including all related claims investigation, administration and defense expenses. Such bond shall be executed by a corporate surety licensed to transact business in the State of California.

J. Claims Made Coverage

If any part of the Required Insurance is written on a claims made basis, any policy retroactive date shall precede the effective date of this Contract. Contractor understands and agrees it shall maintain such coverage for a period of not less than three (3) years following Contract expiration, termination or cancellation.

K. Application of Excess Liability Coverage

Contractors may use a combination of primary, and excess insurance policies which provide coverage as broad as the underlying primary policies, to satisfy the Required Insurance provisions.

L. Separation of Insureds

All liability policies shall provide cross-liability coverage as would be afforded by the standard ISO (Insurance Services Office, Inc.) separation of insureds provision with no insured versus insured exclusions or limitations.

M. Alternative Risk Financing Programs

The County reserves the right to review, and then approve, Contractor use of self-insurance, risk retention groups, risk purchasing groups, pooling arrangements and captive insurance to satisfy the Required Insurance provisions. The County and its Agents shall be designated as an Additional Covered Party under any approved program.

N. County Review and Approval of Insurance Requirements

The County reserves the right to review and adjust the Required Insurance provisions, conditioned upon County's determination of changes in risk exposures.

III. INSURANCE COVERAGE

A. Commercial General Liability insurance (providing scope of coverage equivalent to ISO policy form CG 00 01), naming County and its Agents as an additional insured, with limits of not less than:

General Aggregate:	\$2 million
Products/Completed Operations Aggregate:	\$1 million
Personal and Advertising Injury:	\$1 million
Each Occurrence:	\$1 million

B. Automobile Liability insurance (providing scope of coverage equivalent to ISO policy form CA 00 01) with limits of not less than \$1 million for bodily injury and property damage, in combined or equivalent split limits, for each single accident. Insurance shall cover liability arising out of Contractor's use of autos pursuant to this Contract, including owned, leased, hired, and/or non-owned autos, as each may be applicable.

C. Workers Compensation and Employers' Liability insurance or qualified self-insurance satisfying statutory requirements, which includes Employers' Liability coverage with limits of not less than \$1 million per accident. If Contractor will provide leased employees, or, is an employee leasing or temporary staffing firm or a professional employer organization (PEO), coverage also shall include an Alternate Employer Endorsement (providing scope of coverage equivalent to ISO policy form WC 00 03 01 A) naming the County as the Alternate Employer, and the endorsement form shall be modified to provide that County will receive not less than thirty (30) days advance written notice of cancellation of this coverage provision. If applicable to Contractor's operations, coverage also shall be arranged to satisfy the requirements of any federal workers or workmen's compensation law or any federal occupational disease law.

D. Professional Liability/Errors and Omissions

Insurance covering Contractor's liability arising from or related to this Contract, with limits of not less than \$1 million per claim and \$2 million aggregate. Further, Contractor understands and agrees it shall maintain such coverage for a period of not less than three (3) years following this Contract's expiration, termination or cancellation.