



City of Palo Alto

City Council Staff Report

(ID # 9439)

Report Type: Consent Calendar

Meeting Date: 8/27/2018

Summary Title: Approval of Airport Contracts & Budget Amendments

Title: Approval of: 1) Contract Number C19171727 With DeSilva Gates Construction, LP in the Amount of \$12,497,319; 2) Amendment Number 3 to Contract Number C15155208B With Mead & Hunt, Inc. in the Amount of \$1,345,644; and 3) Amendment Number 6 to Contract Number C15155208A With C&S Engineers, Inc. in the Amount of \$373,451 for Phase II of the Airport Apron Reconstruction Capital Improvements Program Project AP-16000; Adoption of a Resolution Authorizing the City Manager to Execute Future Grant Agreements Offered by the California Department of Transportation for Airport Improvement Program Matching Grant Funds for Apron Reconstruction at the Palo Alto Airport, and Authorizing the City Manager to Execute Supporting Documents or Contracts Associated With the Application and Acceptance of Said Grant Funds; Approval of a Budget Amendment in the Airport Enterprise Fund; and Approval of Findings that the Proposed Project is Exempt From Environmental Review under California Environmental Quality Act (CEQA) Guidelines 15301 and 15302 and Federal Aviation Administration (FAA) Order 1050.1F

From: City Manager

Lead Department: Public Works

Recommendation

Staff recommends that Council:

1. Approve and authorize the City Manager or his designee to execute the attached contract number C19171727 with DeSilva Gates Construction LP, (Attachment A) in an amount not to exceed \$10,867,235 for the Airport Apron Reconstruction project (AP-16000);

2. Authorize the City Manager or his designee to negotiate and execute one or more change orders to the contract with DeSilva Gates Construction LP for related, additional but unforeseen work that may develop during the project, the total value of which shall not exceed \$1,630,085;
3. Approve Amendment No. Three to Contract C15155208B with Mead & Hunt, Inc. (Attachment B) in the amount of \$1,345,644 for a total contract amount not-to-exceed \$2,192,806 for inspection and construction administration services related to the Airport Apron Reconstruction project (AP-16000); and
4. Approve Amendment No. Six to Contract C15155208A with C & S Engineers, Inc. (Attachment C) in the amount of \$373,451 for a total contract amount not-to-exceed \$2,220,463 for construction administration services related to the Airport Apron Reconstruction project (AP-16000); and
5. Amend the Fiscal Year 2019 Budget Appropriation Ordinance for the Airport Enterprise Fund by:
 - a. increasing the revenue estimate by \$2,804,610 in grants from the federal government;
 - b. increasing the Airport Apron Reconstruction project (AP-16000) appropriation in the amount of \$3,125,335;
 - c. decreasing contract services expenditure appropriation by \$20,725; and
 - d. decreasing the ending fund balance in the amount of \$300,000.
6. Adopt a resolution authorizing the City Manager to execute grant agreements offered to the City of Palo Alto by the California Department of Transportation for Airport Improvement Program (AIP) matching grant funds to be used for the Apron Reconstruction project (Attachment D).

Executive Summary

Since the transfer of operations of the Palo Alto Airport (PAO) from Santa Clara County in August 2014, the City of Palo Alto has been working with the Federal Aviation Administration (FAA) to rehabilitate and update PAO to current FAA

standards. To meet FAA design standards, correct deficiencies and ultimately improve airport safety, a multi-phase apron reconstruction capital project (AP-16000) was established.

In support of completing the project sooner, the FAA is encouraging reconstruction of more of the apron in this phase than originally planned and is willing to fund up to 90% of the project through a reimbursable grant. With Council's approval, the middle section of the apron will be reconstructed, including the installation of underground conduit for future solar projects.

Background

As a General Aviation Reliever Airport for three primary Bay Area airports, PAO is an important airport in the National Plan of Integrated Airport Systems (NPIAS), thereby qualifying for FAA airport improvement grant funding for capital improvements necessary for continued safe and efficient operation of an airport. If eligible, 90% of project costs could be reimbursed. In accepting grant funding, PAO is required by law to meet grant assurances (Attachment E) and operate the airport in compliance with FAA requirements. The California Department of Transportation (DOT), pursuant to Public Utilities Code Section 21683.1, is authorized to provide AIP matching grants of up to five percent (5%) of FAA grant amounts. Staff will apply for and seek the maximum amount of state matching grant funds if these funds are available from DOT (Attachment D). If state matching grant funds are secured, they will be in addition to the reimbursements currently budgeted and proposed in the budget amendment.

The Airport Apron Reconstruction project, recommended as an important safety-related maintenance and modernization project as part of an airport infrastructure analysis, was designed to be constructed in as many as five phases dependent on funding and the logistics of moving tie-downs and mobilization.

To provide on-call design services, construction administration, environmental studies, and planning functions required for FAA Airport CIP projects, PAO contracts with consultants C & S Engineers, Inc. and Mead & Hunt, Inc. On-call consultant services contracts compliant with FAA requirements are eligible for 90% reimbursement.

To support operations and provide seed funding for capital improvement projects, the General Fund has loaned PAO \$3.1 million since the City took over operations from Santa Clara County. The table to the right shows the breakdown of loans by fiscal year, and it is anticipated that Airport Fund will begin to repay the General Fund in Fiscal Year 2020.

Fiscal Year	Loan Amount
2011	\$300,000
2013	\$310,000
2014	\$325,000
2015	\$760,000
2016	\$515,601
2017	\$704,150
2018	\$200,000
TOTAL	\$3,114,751

Discussion

Project Description

Pending Council approval, Phase II of the Airport Apron Reconstruction project will continue installation of underground conduit for future solar projects, reconstruct the pavement section of the middle section of the apron and replace the aircraft washrack. The project includes add-alternate joint repairs to the 54" diameter outfall pipeline delivering final treated water from the Regional Water Quality Control Plant to an unnamed slough at the San Francisco Bay. The RWQCP outflow pipeline crosses under the airport apron. The current pipeline leakage into the soil is compromising the structural integrity of the apron. The work in this contract will seal the leaks to ensure the stability of the new pavement. These improvements are not eligible for FAA funding, and are funded by the Regional Water Quality Control Plant.

76 percent of the airport apron will reconstructed upon completion of Phase II. When all phases of the reconstruction project are complete, PAO will meet FAA design standards, with deficiencies corrected and airport safety improved. The areas impacted by Phase II of this project are highlighted in Attachment F.

Bid Process

On June 18, 2018, a notice inviting formal bids (IFB) for the Apron Construction Phase II Plan was posted at City Hall and on the City's eProcurement system. The bidding period was 38 days. Bids were received from six contractors on July 26, 2018, as listed on the attached Bid Summary (Attachment G).

Summary of Bid Process

Bid Name/Number	IFB171727
Proposed Length of Project	170 days
Number of notices sent to Contractors and Builder's Exchanges via City's eProcurement system	717
Number of Bid Packages downloaded by Contractors	37
Number of Bid Packages downloaded by Builder's Exchanges	6
Total Days to Respond to Bid	38
Mandatory Pre-Bid Meeting	Yes
Number of Company Attendees at Pre-Bid Meeting	10
Number of Bids Received:	6
Bid Price Range	\$10,867,234 to \$17,056,029

Bids ranged from \$10,867,234 to \$17,056,029 and 20% below to 20% above the project estimate of \$13,576,748. Staff has reviewed the bids submitted and recommends the Base Bid and Alternates, totaling \$10,867,234 submitted by DeSilva Gates Construction LP be accepted, and DeSilva Gates Construction LP be declared the lowest responsible bidder. The contingency amount of \$1,630,085 (15 percent of the total contract) is requested for related additional, but unforeseen work that may develop during the project. Staff is requesting a 15% contingency (5% more than the standard 10% contingency) for the project because additional stabilization procedures related to re-treatment of "bay mud" subgrade are costly and time-consuming. Subgrade re-treatment was encountered in Phase I of the Apron Reconstruction and that phase of the project fully utilized its 10% contingency.

Consultant services have been vital to the successful delivery of CIP projects, providing on-call design services, construction administration, environmental studies, and planning functions required for FAA Airport CIP projects. Contract amendment number six with C & S Engineers, Inc. will increase the contract by \$373,451 for a total contract amount not-to-exceed \$2,220,463 for construction administration services for Phase II and bidding services for Phase III. Similarly, contract amendment number three with Mead & Hunt, Inc., will increase the contract by \$1,345,644 for a total contract amount not-to-exceed \$2,192,806 for

construction observation and administration. FAA reimbursement of 90% for services under these contracts is anticipated to equal \$1,547,186.

Resource Impact

The adopted Fiscal Year 2019 non-salary funding for the Airport Apron Reconstruction project (AP-16000) is \$10,555,000, which is insufficient to award and amend the contracts necessary to complete Phase II work at a total cost of \$14,216,415. Of this total contract amount, \$536,080 is encumbered in the Wastewater Treatment Fund's Plant Repair, Retrofit, and Equipment Replacement project (WQ-19002) to fund the outfall pipeline repair portion of the Apron Reconstruction project. Therefore, additional funding of \$3,125,335 will need to be appropriated to AP-16000 in Fiscal Year 2019 to fund the full cost of phase II. FAA grant reimbursements of 90% of these costs, \$2,804,610, will be recognized and appropriated in the Airport Fund. The remaining 10% matching amount of \$320,725 will be funded through a one-time reduction in Airport contract services expenditures by \$20,725 and \$300,000 from the fund balance. This will exhaust the estimated fund balance in the Airport Fund for FY 2019. Staff will closely monitor, scrutinize, and prioritize spending throughout FY 2019 to ensure overall expenditures stay within budget in the Airport Fund. Additionally, staff will explore potential short-term revenue opportunities during the year.

Due to the nature of a contingency, FAA grant funding for the construction contingency cannot be requested until an action to use contingency is exercised. Therefore, the current FAA grant application will not include these potential costs; however, staff will seek FAA approval for reimbursement prior to providing notices to proceed on change order requests.

Environmental Review

National Environmental Policy Act

Based on FAA direction, C & S Engineers, Inc. prepared documentation necessary to comply with National Environmental Policy Act (NEPA) requirements for the proposed apron rehabilitation project at the Palo Alto Airport (PAO). As a project that involves only the rehabilitation and minor expansion of existing facilities it qualified as a categorical exclusion (CATEX) under FAA Order 1050.1F-*Environmental Impacts: Policies and Procedures*. At the request of the FAA, two separate CATEX forms were submitted for review. The initial CATEX form, which only focused on the rehabilitation of the existing pavement and ancillary facilities,

was approved in January 2017. A second CATEX form was submitted for the minor apron expansion only. The CATEX was approved by the FAA in April 2017. The NEPA findings were adopted in [CMR 8127](#).

California Environmental Quality Act

Environmental Assessment: Exempt from the Provisions of the California Environmental Quality Act (CEQA) per Guideline Section 15302 (Replacement or Reconstruction).

The subject project has been assessed in accordance with the authority and criteria contained in the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and the environmental regulations of the City. Specifically, the project is categorically exempt from the provisions of CEQA per Section 15301 (Existing Facilities). See the Notice of Exemption included in Attachment B of [CMR 8127](#), which was filed with the County following Minor Architectural Review approval of the project. The CEQA findings were adopted in the same report.

Policy Implications

Authorization of this project does not represent a change in existing policies.

Attachments:

- Attachment A: DeSilva Gates Contract No. C19171727
- Attachment B: Mead Hunt C15155208B Amendment 3-Final
- Attachment C: C15155208A C S Engineers- Amendment No. 6-Final
- Attachment D: RESO DOT Grant Agreement
- Attachment E: FAA Grant Assurances
- Attachment F: Phasing Exhibit Map
- Attachment G: Bid Tabulation

Attachment A

DeSilva Gates Construction Contract C19171727 will go in late packet, and will be distributed on Thursday, August 23, 2018.

**AMENDMENT NO. 3 TO CONTRACT NO. C15155208B
BETWEEN THE CITY OF PALO ALTO AND
MEAD & HUNT, INC.**

This Amendment No. 3 to Contract No. C15155208B ("Contract") is entered into August 27, 2018, by and between the CITY OF PALO ALTO, a California chartered municipal corporation ("CITY"), and MEAD & HUNT, INC., a Wisconsin corporation, located at 133 Aviation Boulevard, Suite 100, Santa Rosa, California 95403 ("CONSULTANT").

RECITALS

A. The Contract was entered into October 27, 2014 between the parties for the provision of On-call engineering services including planning, design engineering, environmental analyses, grant management and construction management.

B. The parties wish to amend the Contract to increase the compensation to cover additional anticipated task orders which includes a task order for Phase II of the Airport Apron Reconstruction Capital Improvement Project; to increase the total not-to-exceed amount by One Million Three Hundred Forty Five Thousand Six hundred Forty Four Dollars (\$1,345,644.00), from Eight Hundred Forty Seven Thousand One Hundred Sixty Two Dollars (\$847,162.00), to a new total not-to-exceed amount of Two Million One Hundred Ninety Two Thousand Eight Hundred Six Dollars (\$2,192,806); as detailed herein.

NOW, THEREFORE, in consideration of the covenants, terms, conditions, and provisions of this Amendment, the parties agree:

SECTION 1. Section 4. NOT TO EXCEED COMPENSATION is hereby amended to read as follows:

"The compensation to be paid to CONSULTANT for performance of the Services described in Exhibit "A", including both payment for professional services and reimbursable expenses, shall not exceed Two Million One Hundred Ninety Two Thousand Eight Hundred Six Dollars (\$2,192,806) for the entire five-year term. The applicable rates and schedule of payment are set out in Exhibit "C-1", entitled "HOURLY RATE SCHEDULE," which is attached to and made a part of this Agreement.

SECTION 2. Except as herein modified, all other provisions of the Contract, including any exhibits and subsequent amendments thereto, shall remain in full force and effect.

(SIGNATURE BLOCK FOLLOWS ON THE NEXT PAGE.)

SIGNATURES OF THE PARTIES

IN WITNESS WHEREOF, the parties hereto have by their duly authorized representatives executed this Agreement on the date first above written.

CITY OF PALO ALTO

City Manager or Designee

APPROVED AS TO FORM:

City Attorney or Designee

Director of Public Works


MEAD & HUNT, INC.

Officer 1

By: 
Name: Jon J. Faucher

Title: Vice President

Officer 2

By: 
Name: Bob Casagrande

Title: Vice President

**AMENDMENT NO. 6 TO CONTRACT NO. C15155208A
BETWEEN THE CITY OF PALO ALTO AND C & S ENGINEERS, INC.**

This Amendment No. 6 to Contract No. C15155208A ("Contract") is entered into August 27, 2018 by and between the CITY OF PALO ALTO, a California chartered municipal corporation ("CITY"), and C & S ENGINEERS, INC., a New York corporation, located at 499 Col. Eileen Collins Boulevard, Syracuse, New York 13212 ("CONSULTANT").

RECITALS

A. The Contract was entered into October 27, 2014 between the parties for the provision of on-call engineering services including planning, design, engineering, environmental analyses, grant management and construction management in connection various projects.

B. The parties now wish to amend the Contract to increase the compensation to cover additional anticipated task orders and to include a task order for Phase II of the Airport Apron Reconstruction Capital Improvement Project; to increase the total not-to-exceed amount of the by an amount not to exceed Three Hundred Seventy Three Thousand Four hundred Fifty One Dollars(\$373,451.00), from One Million Eight Hundred Eighty Hundred Forty Seven Thousand Twelve Dollars (\$1,847,012.00), to a new total not-to-exceed amount of Two Million Two Hundred Twenty Thousand Four Hundred Sixty Three Dollars (\$2,220,463.00); as detailed herein.

NOW, THEREFORE, in consideration of the covenants, terms, conditions, and provisions of this Amendment, the parties agree:

SECTION 1. Section 4. NOT TO EXCEED COMPENSATION is hereby amended to read as follows:

" The compensation to be paid to CONSULTANT for performance of the Services described in Exhibit "A" ("Basic Services"), and reimbursable expenses, shall not exceed Two Million Two Hundred Twenty Thousand Four Hundred Sixty Three Dollars (\$2,220,463)."

SECTION 2. Except as herein modified, all other provisions of the Contract, including any exhibits and subsequent amendments thereto, shall remain in full force and effect.

(SIGNATURE BLOCK FOLLOWS ON THE NEXT PAGE.)

SIGNATURES OF THE PARTIES

IN WITNESS WHEREOF, the parties hereto have by their duly authorized representatives executed this Agreement on the date first above written.

CITY OF PALO ALTO

City Manager or Designee


APPROVED AS TO FORM:

City Attorney or Designee

Director of Public Works

C & S ENGINEERS, INC.

Officer 1:

By: 
Name: Jessica Bryan

Title: Department Manager

Officer 2:

By: 
Name: Cory Hazlewood

Title: Department Manager

Resolution No.

Resolution of the City Council of the City of Palo Alto Authorizing the City Manager to Execute Grant Agreements Offered to the City of Palo Alto by the California Department of Transportation for Airport Improvement Program (AIP) Matching Grant Funds to be Used for Apron Reconstruction, Phase II, for the Palo Alto Airport; and Authorizing the City Manager or his Designee to Execute, on Behalf of the City, any Other Documents Associated with the Application and Acceptance of Grant Funds from the California Department of Transportation; and Certifying that the Airport Enterprise Fund has Sufficient Local Matching Funds to Finance One Hundred Percent (100%) of the California Department of Transportation Grant Funded Projects

R E C I T A L S

A. The City of Palo Alto (“the City”) and the Federal Aviation Administration are parties to federal Airport Improvement Program (AIP) grant 3-06-0182-14 for Apron Reconstruction, Phase II, at Palo Alto Airport.

B. The California Department of Transportation (“DOT”), pursuant to Public Utilities Code Section 21683.1, is authorized to provide AIP matching grants of up to five percent (5%) of FAA grant amounts.

C. The DOT requires a local agency, as a condition of receiving these AIP matching grant funds, to adopt a resolution authorizing the submittal of an application and the execution of grant agreements for the acceptance of said grant funds and to certify the availability of the local matching funds for AIP grants.

D. The Council wishes to authorize the City to receive the maximum of available DOT grant funds for Apron Reconstruction, Phase II, for the Palo Alto Airport.

E. The Council has recommended that grant agreements offered to the City by DOT for the Palo Alto Airport be executed by the City Manager or his designee on behalf of the City.

F. This Council has considered the recommendation of the City Manager.

NOW, THEREFORE, the Council of the City of Palo Alto does hereby RESOLVE, as follows:

SECTION 1. Authorizes the City Manager to execute AIP Matching Grant agreements offered to the City by the California Department of Transportation to be used for Apron Reconstruction, Phase II, for Palo Alto Airport.

SECTION 2. Authorizes the City Manager or his designee to execute on behalf of the City any other documents associated with the application and acceptance of the allocation of AIP Matching grant funds from the California Department of Transportation.

SECTION 3. Certifies that the Airport Enterprise Fund has sufficient local matching funds to finance one hundred percent (100%) of the California Department of Transportation grant funded projects.

SECTION 4. The Council finds that the adoption of this resolution does not constitute a 'project' under Section 21065 of the California Public Resources Code and Sections 15378(b)(4) and 9b)(5) of the California Environmental Quality Act (CEQA) and the CEQA Guidelines, and therefore, no environmental assessment is required.

INTRODUCED AND PASSED:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

ATTEST:

City Clerk

Mayor

APPROVED AS TO FORM:

APPROVED:

Chief Assistant City Attorney

City Manager

Director of Public Works



**FAA
Airports**

ASSURANCES

Airport Sponsors

A. General.

1. These assurances shall be complied with in the performance of grant agreements for airport development, airport planning, and noise compatibility program grants for airport sponsors.
2. These assurances are required to be submitted as part of the project application by sponsors requesting funds under the provisions of Title 49, U.S.C., subtitle VII, as amended. As used herein, the term "public agency sponsor" means a public agency with control of a public-use airport; the term "private sponsor" means a private owner of a public-use airport; and the term "sponsor" includes both public agency sponsors and private sponsors.
3. Upon acceptance of this grant offer by the sponsor, these assurances are incorporated in and become part of this grant agreement.

B. Duration and Applicability.

1. **Airport development or Noise Compatibility Program Projects Undertaken by a Public Agency Sponsor.**

The terms, conditions and assurances of this grant agreement shall remain in full force and effect throughout the useful life of the facilities developed or equipment acquired for an airport development or noise compatibility program project, or throughout the useful life of the project items installed within a facility under a noise compatibility program project, but in any event not to exceed twenty (20) years from the date of acceptance of a grant offer of Federal funds for the project. However, there shall be no limit on the duration of the assurances regarding Exclusive Rights and Airport Revenue so long as the airport is used as an airport. There shall be no limit on the duration of the terms, conditions, and assurances with respect to real property acquired with federal funds. Furthermore, the duration of the Civil Rights assurance shall be specified in the assurances.

2. **Airport Development or Noise Compatibility Projects Undertaken by a Private Sponsor.**

The preceding paragraph 1 also applies to a private sponsor except that the useful life of project items installed within a facility or the useful life of the facilities developed or equipment acquired under an airport development or noise compatibility program project shall be no less than ten (10) years from the date of acceptance of Federal aid for the project.

3. Airport Planning Undertaken by a Sponsor.

Unless otherwise specified in this grant agreement, only Assurances 1, 2, 3, 5, 6, 13, 18, 25, 30, 32, 33, and 34 in Section C apply to planning projects. The terms, conditions, and assurances of this grant agreement shall remain in full force and effect during the life of the project; there shall be no limit on the duration of the assurances regarding Airport Revenue so long as the airport is used as an airport.

C. Sponsor Certification.

The sponsor hereby assures and certifies, with respect to this grant that:

1. General Federal Requirements.

It will comply with all applicable Federal laws, regulations, executive orders, policies, guidelines, and requirements as they relate to the application, acceptance and use of Federal funds for this project including but not limited to the following:

Federal Legislation

- a. Title 49, U.S.C., subtitle VII, as amended.
- b. Davis-Bacon Act - 40 U.S.C. 276(a), et seq.¹
- c. Federal Fair Labor Standards Act - 29 U.S.C. 201, et seq.
- d. Hatch Act – 5 U.S.C. 1501, et seq.²
- e. Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 Title 42 U.S.C. 4601, et seq.^{1 2}
- f. National Historic Preservation Act of 1966 - Section 106 - 16 U.S.C. 470(f).¹
- g. Archeological and Historic Preservation Act of 1974 - 16 U.S.C. 469 through 469c.¹
- h. Native Americans Grave Repatriation Act - 25 U.S.C. Section 3001, et seq.
- i. Clean Air Act, P.L. 90-148, as amended.
- j. Coastal Zone Management Act, P.L. 93-205, as amended.
- k. Flood Disaster Protection Act of 1973 - Section 102(a) - 42 U.S.C. 4012a.¹
- l. Title 49, U.S.C., Section 303, (formerly known as Section 4(f))
- m. Rehabilitation Act of 1973 - 29 U.S.C. 794.
- n. Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
- o. Americans with Disabilities Act of 1990, as amended, (42 U.S.C. § 12101 et seq.), prohibits discrimination on the basis of disability).
- p. Age Discrimination Act of 1975 - 42 U.S.C. 6101, et seq.
- q. American Indian Religious Freedom Act, P.L. 95-341, as amended.
- r. Architectural Barriers Act of 1968 -42 U.S.C. 4151, et seq.¹
- s. Power plant and Industrial Fuel Use Act of 1978 - Section 403- 2 U.S.C. 8373.¹
- t. Contract Work Hours and Safety Standards Act - 40 U.S.C. 327, et seq.¹
- u. Copeland Anti-kickback Act - 18 U.S.C. 874.1
- v. National Environmental Policy Act of 1969 - 42 U.S.C. 4321, et seq.¹
- w. Wild and Scenic Rivers Act, P.L. 90-542, as amended.
- x. Single Audit Act of 1984 - 31 U.S.C. 7501, et seq.²
- y. Drug-Free Workplace Act of 1988 - 41 U.S.C. 702 through 706.

- z. The Federal Funding Accountability and Transparency Act of 2006, as amended (Pub. L. 109-282, as amended by section 6202 of Pub. L. 110-252).

Executive Orders

- a. Executive Order 11246 - Equal Employment Opportunity¹
- b. Executive Order 11990 - Protection of Wetlands
- c. Executive Order 11998 – Flood Plain Management
- d. Executive Order 12372 - Intergovernmental Review of Federal Programs
- e. Executive Order 12699 - Seismic Safety of Federal and Federally Assisted New Building Construction¹
- f. Executive Order 12898 - Environmental Justice

Federal Regulations

- a. 2 CFR Part 180 - OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement).
- b. 2 CFR Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. [OMB Circular A-87 Cost Principles Applicable to Grants and Contracts with State and Local Governments, and OMB Circular A-133 - Audits of States, Local Governments, and Non-Profit Organizations].^{4, 5, 6}
- c. 2 CFR Part 1200 – Nonprocurement Suspension and Debarment
- d. 14 CFR Part 13 - Investigative and Enforcement Procedures 14 CFR Part 16 - Rules of Practice For Federally Assisted Airport Enforcement Proceedings.
- e. 14 CFR Part 150 - Airport noise compatibility planning.
- f. 28 CFR Part 35- Discrimination on the Basis of Disability in State and Local Government Services.
- g. 28 CFR § 50.3 - U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964.
- h. 29 CFR Part 1 - Procedures for predetermination of wage rates.¹
- i. 29 CFR Part 3 - Contractors and subcontractors on public building or public work financed in whole or part by loans or grants from the United States.¹
- j. 29 CFR Part 5 - Labor standards provisions applicable to contracts covering federally financed and assisted construction (also labor standards provisions applicable to non-construction contracts subject to the Contract Work Hours and Safety Standards Act).¹
- k. 41 CFR Part 60 - Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor (Federal and federally assisted contracting requirements).¹
- l. 49 CFR Part 18 - Uniform administrative requirements for grants and cooperative agreements to state and local governments.³
- m. 49 CFR Part 20 - New restrictions on lobbying.
- n. 49 CFR Part 21 – Nondiscrimination in federally-assisted programs of the Department of Transportation - effectuation of Title VI of the Civil Rights Act of 1964.
- o. 49 CFR Part 23 - Participation by Disadvantage Business Enterprise in Airport Concessions.

- p. 49 CFR Part 24 – Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs.^{1 2}
- q. 49 CFR Part 26 – Participation by Disadvantaged Business Enterprises in Department of Transportation Programs.
- r. 49 CFR Part 27 – Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefiting from Federal Financial Assistance.¹
- s. 49 CFR Part 28 – Enforcement of Nondiscrimination on the Basis of Handicap in Programs or Activities conducted by the Department of Transportation.
- t. 49 CFR Part 30 - Denial of public works contracts to suppliers of goods and services of countries that deny procurement market access to U.S. contractors.
- u. 49 CFR Part 32 – Governmentwide Requirements for Drug-Free Workplace (Financial Assistance)
- v. 49 CFR Part 37 – Transportation Services for Individuals with Disabilities (ADA).
- w. 49 CFR Part 41 - Seismic safety of Federal and federally assisted or regulated new building construction.

Specific Assurances

Specific assurances required to be included in grant agreements by any of the above laws, regulations or circulars are incorporated by reference in this grant agreement.

Footnotes to Assurance C.1.

¹ These laws do not apply to airport planning sponsors.

² These laws do not apply to private sponsors.

³ 49 CFR Part 18 and 2 CFR Part 200 contain requirements for State and Local Governments receiving Federal assistance. Any requirement levied upon State and Local Governments by this regulation and circular shall also be applicable to private sponsors receiving Federal assistance under Title 49, United States Code.

⁴ On December 26, 2013 at 78 FR 78590, the Office of Management and Budget (OMB) issued the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards in 2 CFR Part 200. 2 CFR Part 200 replaces and combines the former Uniform Administrative Requirements for Grants (OMB Circular A-102 and Circular A-110 or 2 CFR Part 215 or Circular) as well as the Cost Principles (Circulars A-21 or 2 CFR part 220; Circular A-87 or 2 CFR part 225; and A-122, 2 CFR part 230). Additionally it replaces Circular A-133 guidance on the Single Annual Audit. In accordance with 2 CFR section 200.110, the standards set forth in Part 200 which affect administration of Federal awards issued by Federal agencies become effective once implemented by Federal agencies or when any future amendment to this Part becomes final. Federal agencies, including the Department of Transportation, must implement the policies and procedures applicable to Federal awards by promulgating a regulation to be effective by December 26, 2014 unless different provisions are required by statute or approved by OMB.

⁵ Cost principles established in 2 CFR part 200 subpart E must be used as guidelines for determining the eligibility of specific types of expenses.

⁶ Audit requirements established in 2 CFR part 200 subpart F are the guidelines for audits.

2. Responsibility and Authority of the Sponsor.

a. Public Agency Sponsor:

It has legal authority to apply for this grant, and to finance and carry out the proposed project; that a resolution, motion or similar action has been duly adopted or passed as an official act of the applicant's governing body authorizing the filing of the application, including all understandings and assurances contained therein, and directing and authorizing the person identified as the official representative of the applicant to act in connection with the application and to provide such additional information as may be required.

b. Private Sponsor:

It has legal authority to apply for this grant and to finance and carry out the proposed project and comply with all terms, conditions, and assurances of this grant agreement. It shall designate an official representative and shall in writing direct and authorize that person to file this application, including all understandings and assurances contained therein; to act in connection with this application; and to provide such additional information as may be required.

3. Sponsor Fund Availability.

It has sufficient funds available for that portion of the project costs which are not to be paid by the United States. It has sufficient funds available to assure operation and maintenance of items funded under this grant agreement which it will own or control.

4. Good Title.

- a. It, a public agency or the Federal government, holds good title, satisfactory to the Secretary, to the landing area of the airport or site thereof, or will give assurance satisfactory to the Secretary that good title will be acquired.
- b. For noise compatibility program projects to be carried out on the property of the sponsor, it holds good title satisfactory to the Secretary to that portion of the property upon which Federal funds will be expended or will give assurance to the Secretary that good title will be obtained.

5. Preserving Rights and Powers.

- a. It will not take or permit any action which would operate to deprive it of any of the rights and powers necessary to perform any or all of the terms, conditions, and assurances in this grant agreement without the written approval of the Secretary, and will act promptly to acquire, extinguish or modify any outstanding rights or claims of right of others which would interfere with such performance by the sponsor. This shall be done in a manner acceptable to the Secretary.

- b. It will not sell, lease, encumber, or otherwise transfer or dispose of any part of its title or other interests in the property shown on Exhibit A to this application or, for a noise compatibility program project, that portion of the property upon which Federal funds have been expended, for the duration of the terms, conditions, and assurances in this grant agreement without approval by the Secretary. If the transferee is found by the Secretary to be eligible under Title 49, United States Code, to assume the obligations of this grant agreement and to have the power, authority, and financial resources to carry out all such obligations, the sponsor shall insert in the contract or document transferring or disposing of the sponsor's interest, and make binding upon the transferee all of the terms, conditions, and assurances contained in this grant agreement.
- c. For all noise compatibility program projects which are to be carried out by another unit of local government or are on property owned by a unit of local government other than the sponsor, it will enter into an agreement with that government. Except as otherwise specified by the Secretary, that agreement shall obligate that government to the same terms, conditions, and assurances that would be applicable to it if it applied directly to the FAA for a grant to undertake the noise compatibility program project. That agreement and changes thereto must be satisfactory to the Secretary. It will take steps to enforce this agreement against the local government if there is substantial non-compliance with the terms of the agreement.
- d. For noise compatibility program projects to be carried out on privately owned property, it will enter into an agreement with the owner of that property which includes provisions specified by the Secretary. It will take steps to enforce this agreement against the property owner whenever there is substantial non-compliance with the terms of the agreement.
- e. If the sponsor is a private sponsor, it will take steps satisfactory to the Secretary to ensure that the airport will continue to function as a public-use airport in accordance with these assurances for the duration of these assurances.
- f. If an arrangement is made for management and operation of the airport by any agency or person other than the sponsor or an employee of the sponsor, the sponsor will reserve sufficient rights and authority to insure that the airport will be operated and maintained in accordance Title 49, United States Code, the regulations and the terms, conditions and assurances in this grant agreement and shall insure that such arrangement also requires compliance therewith.
- g. Sponsors of commercial service airports will not permit or enter into any arrangement that results in permission for the owner or tenant of a property used as a residence, or zoned for residential use, to taxi an aircraft between that property and any location on airport. Sponsors of general aviation airports entering into any arrangement that results in permission for the owner of residential real property adjacent to or near the airport must comply with the requirements of Sec. 136 of Public Law 112-95 and the sponsor assurances.

6. Consistency with Local Plans.

The project is reasonably consistent with plans (existing at the time of submission of this application) of public agencies that are authorized by the State in which the project is located to plan for the development of the area surrounding the airport.

7. Consideration of Local Interest.

It has given fair consideration to the interest of communities in or near where the project may be located.

8. Consultation with Users.

In making a decision to undertake any airport development project under Title 49, United States Code, it has undertaken reasonable consultations with affected parties using the airport at which project is proposed.

9. Public Hearings.

In projects involving the location of an airport, an airport runway, or a major runway extension, it has afforded the opportunity for public hearings for the purpose of considering the economic, social, and environmental effects of the airport or runway location and its consistency with goals and objectives of such planning as has been carried out by the community and it shall, when requested by the Secretary, submit a copy of the transcript of such hearings to the Secretary. Further, for such projects, it has on its management board either voting representation from the communities where the project is located or has advised the communities that they have the right to petition the Secretary concerning a proposed project.

10. Metropolitan Planning Organization.

In projects involving the location of an airport, an airport runway, or a major runway extension at a medium or large hub airport, the sponsor has made available to and has provided upon request to the metropolitan planning organization in the area in which the airport is located, if any, a copy of the proposed amendment to the airport layout plan to depict the project and a copy of any airport master plan in which the project is described or depicted.

11. Pavement Preventive Maintenance.

With respect to a project approved after January 1, 1995, for the replacement or reconstruction of pavement at the airport, it assures or certifies that it has implemented an effective airport pavement maintenance-management program and it assures that it will use such program for the useful life of any pavement constructed, reconstructed or repaired with Federal financial assistance at the airport. It will provide such reports on pavement condition and pavement management programs as the Secretary determines may be useful.

12. Terminal Development Prerequisites.

For projects which include terminal development at a public use airport, as defined in Title 49, it has, on the date of submittal of the project grant application, all the safety equipment required for certification of such airport under section 44706 of Title 49, United States Code, and all the security equipment required by rule or regulation, and

has provided for access to the passenger enplaning and deplaning area of such airport to passengers enplaning and deplaning from aircraft other than air carrier aircraft.

13. Accounting System, Audit, and Record Keeping Requirements.

- a. It shall keep all project accounts and records which fully disclose the amount and disposition by the recipient of the proceeds of this grant, the total cost of the project in connection with which this grant is given or used, and the amount or nature of that portion of the cost of the project supplied by other sources, and such other financial records pertinent to the project. The accounts and records shall be kept in accordance with an accounting system that will facilitate an effective audit in accordance with the Single Audit Act of 1984.
- b. It shall make available to the Secretary and the Comptroller General of the United States, or any of their duly authorized representatives, for the purpose of audit and examination, any books, documents, papers, and records of the recipient that are pertinent to this grant. The Secretary may require that an appropriate audit be conducted by a recipient. In any case in which an independent audit is made of the accounts of a sponsor relating to the disposition of the proceeds of a grant or relating to the project in connection with which this grant was given or used, it shall file a certified copy of such audit with the Comptroller General of the United States not later than six (6) months following the close of the fiscal year for which the audit was made.

14. Minimum Wage Rates.

It shall include, in all contracts in excess of \$2,000 for work on any projects funded under this grant agreement which involve labor, provisions establishing minimum rates of wages, to be predetermined by the Secretary of Labor, in accordance with the Davis-Bacon Act, as amended (40 U.S.C. 276a-276a-5), which contractors shall pay to skilled and unskilled labor, and such minimum rates shall be stated in the invitation for bids and shall be included in proposals or bids for the work.

15. Veteran's Preference.

It shall include in all contracts for work on any project funded under this grant agreement which involve labor, such provisions as are necessary to insure that, in the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to Vietnam era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns owned and controlled by disabled veterans as defined in Section 47112 of Title 49, United States Code. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

16. Conformity to Plans and Specifications.

It will execute the project subject to plans, specifications, and schedules approved by the Secretary. Such plans, specifications, and schedules shall be submitted to the Secretary prior to commencement of site preparation, construction, or other performance under this grant agreement, and, upon approval of the Secretary, shall be incorporated into this grant agreement. Any modification to the approved plans,

specifications, and schedules shall also be subject to approval of the Secretary, and incorporated into this grant agreement.

17. Construction Inspection and Approval.

It will provide and maintain competent technical supervision at the construction site throughout the project to assure that the work conforms to the plans, specifications, and schedules approved by the Secretary for the project. It shall subject the construction work on any project contained in an approved project application to inspection and approval by the Secretary and such work shall be in accordance with regulations and procedures prescribed by the Secretary. Such regulations and procedures shall require such cost and progress reporting by the sponsor or sponsors of such project as the Secretary shall deem necessary.

18. Planning Projects.

In carrying out planning projects:

- a. It will execute the project in accordance with the approved program narrative contained in the project application or with the modifications similarly approved.
- b. It will furnish the Secretary with such periodic reports as required pertaining to the planning project and planning work activities.
- c. It will include in all published material prepared in connection with the planning project a notice that the material was prepared under a grant provided by the United States.
- d. It will make such material available for examination by the public, and agrees that no material prepared with funds under this project shall be subject to copyright in the United States or any other country.
- e. It will give the Secretary unrestricted authority to publish, disclose, distribute, and otherwise use any of the material prepared in connection with this grant.
- f. It will grant the Secretary the right to disapprove the sponsor's employment of specific consultants and their subcontractors to do all or any part of this project as well as the right to disapprove the proposed scope and cost of professional services.
- g. It will grant the Secretary the right to disapprove the use of the sponsor's employees to do all or any part of the project.
- h. It understands and agrees that the Secretary's approval of this project grant or the Secretary's approval of any planning material developed as part of this grant does not constitute or imply any assurance or commitment on the part of the Secretary to approve any pending or future application for a Federal airport grant.

19. Operation and Maintenance.

- a. The airport and all facilities which are necessary to serve the aeronautical users of the airport, other than facilities owned or controlled by the United States, shall be operated at all times in a safe and serviceable condition and in accordance with the minimum standards as may be required or prescribed by applicable Federal,

state and local agencies for maintenance and operation. It will not cause or permit any activity or action thereon which would interfere with its use for airport purposes. It will suitably operate and maintain the airport and all facilities thereon or connected therewith, with due regard to climatic and flood conditions. Any proposal to temporarily close the airport for non-aeronautical purposes must first be approved by the Secretary. In furtherance of this assurance, the sponsor will have in effect arrangements for-

- 1) Operating the airport's aeronautical facilities whenever required;
 - 2) Promptly marking and lighting hazards resulting from airport conditions, including temporary conditions; and
 - 3) Promptly notifying airmen of any condition affecting aeronautical use of the airport. Nothing contained herein shall be construed to require that the airport be operated for aeronautical use during temporary periods when snow, flood or other climatic conditions interfere with such operation and maintenance. Further, nothing herein shall be construed as requiring the maintenance, repair, restoration, or replacement of any structure or facility which is substantially damaged or destroyed due to an act of God or other condition or circumstance beyond the control of the sponsor.
- b. It will suitably operate and maintain noise compatibility program items that it owns or controls upon which Federal funds have been expended.

20. Hazard Removal and Mitigation.

It will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.

21. Compatible Land Use.

It will take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. In addition, if the project is for noise compatibility program implementation, it will not cause or permit any change in land use, within its jurisdiction, that will reduce its compatibility, with respect to the airport, of the noise compatibility program measures upon which Federal funds have been expended.

22. Economic Nondiscrimination.

- a. It will make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the airport.
- b. In any agreement, contract, lease, or other arrangement under which a right or privilege at the airport is granted to any person, firm, or corporation to conduct or

to engage in any aeronautical activity for furnishing services to the public at the airport, the sponsor will insert and enforce provisions requiring the contractor to-

- 1) furnish said services on a reasonable, and not unjustly discriminatory, basis to all users thereof, and
 - 2) charge reasonable, and not unjustly discriminatory, prices for each unit or service, provided that the contractor may be allowed to make reasonable and nondiscriminatory discounts, rebates, or other similar types of price reductions to volume purchasers.
- c. Each fixed-based operator at the airport shall be subject to the same rates, fees, rentals, and other charges as are uniformly applicable to all other fixed-based operators making the same or similar uses of such airport and utilizing the same or similar facilities.
 - d. Each air carrier using such airport shall have the right to service itself or to use any fixed-based operator that is authorized or permitted by the airport to serve any air carrier at such airport.
 - e. Each air carrier using such airport (whether as a tenant, non-tenant, or subtenant of another air carrier tenant) shall be subject to such nondiscriminatory and substantially comparable rules, regulations, conditions, rates, fees, rentals, and other charges with respect to facilities directly and substantially related to providing air transportation as are applicable to all such air carriers which make similar use of such airport and utilize similar facilities, subject to reasonable classifications such as tenants or non-tenants and signatory carriers and non-signatory carriers. Classification or status as tenant or signatory shall not be unreasonably withheld by any airport provided an air carrier assumes obligations substantially similar to those already imposed on air carriers in such classification or status.
 - f. It will not exercise or grant any right or privilege which operates to prevent any person, firm, or corporation operating aircraft on the airport from performing any services on its own aircraft with its own employees [including, but not limited to maintenance, repair, and fueling] that it may choose to perform.
 - g. In the event the sponsor itself exercises any of the rights and privileges referred to in this assurance, the services involved will be provided on the same conditions as would apply to the furnishing of such services by commercial aeronautical service providers authorized by the sponsor under these provisions.
 - h. The sponsor may establish such reasonable, and not unjustly discriminatory, conditions to be met by all users of the airport as may be necessary for the safe and efficient operation of the airport.
 - i. The sponsor may prohibit or limit any given type, kind or class of aeronautical use of the airport if such action is necessary for the safe operation of the airport or necessary to serve the civil aviation needs of the public.

23. Exclusive Rights.

It will permit no exclusive right for the use of the airport by any person providing, or intending to provide, aeronautical services to the public. For purposes of this paragraph, the providing of the services at an airport by a single fixed-based operator shall not be construed as an exclusive right if both of the following apply:

- a. It would be unreasonably costly, burdensome, or impractical for more than one fixed-based operator to provide such services, and
- b. If allowing more than one fixed-based operator to provide such services would require the reduction of space leased pursuant to an existing agreement between such single fixed-based operator and such airport. It further agrees that it will not, either directly or indirectly, grant or permit any person, firm, or corporation, the exclusive right at the airport to conduct any aeronautical activities, including, but not limited to charter flights, pilot training, aircraft rental and sightseeing, aerial photography, crop dusting, aerial advertising and surveying, air carrier operations, aircraft sales and services, sale of aviation petroleum products whether or not conducted in conjunction with other aeronautical activity, repair and maintenance of aircraft, sale of aircraft parts, and any other activities which because of their direct relationship to the operation of aircraft can be regarded as an aeronautical activity, and that it will terminate any exclusive right to conduct an aeronautical activity now existing at such an airport before the grant of any assistance under Title 49, United States Code.

24. Fee and Rental Structure.

It will maintain a fee and rental structure for the facilities and services at the airport which will make the airport as self-sustaining as possible under the circumstances existing at the particular airport, taking into account such factors as the volume of traffic and economy of collection. No part of the Federal share of an airport development, airport planning or noise compatibility project for which a grant is made under Title 49, United States Code, the Airport and Airway Improvement Act of 1982, the Federal Airport Act or the Airport and Airway Development Act of 1970 shall be included in the rate basis in establishing fees, rates, and charges for users of that airport.

25. Airport Revenues.

- a. All revenues generated by the airport and any local taxes on aviation fuel established after December 30, 1987, will be expended by it for the capital or operating costs of the airport; the local airport system; or other local facilities which are owned or operated by the owner or operator of the airport and which are directly and substantially related to the actual air transportation of passengers or property; or for noise mitigation purposes on or off the airport. The following exceptions apply to this paragraph:
 - 1) If covenants or assurances in debt obligations issued before September 3, 1982, by the owner or operator of the airport, or provisions enacted before September 3, 1982, in governing statutes controlling the owner or operator's financing, provide for the use of the revenues from any of the airport owner or

operator's facilities, including the airport, to support not only the airport but also the airport owner or operator's general debt obligations or other facilities, then this limitation on the use of all revenues generated by the airport (and, in the case of a public airport, local taxes on aviation fuel) shall not apply.

- 2) If the Secretary approves the sale of a privately owned airport to a public sponsor and provides funding for any portion of the public sponsor's acquisition of land, this limitation on the use of all revenues generated by the sale shall not apply to certain proceeds from the sale. This is conditioned on repayment to the Secretary by the private owner of an amount equal to the remaining unamortized portion (amortized over a 20-year period) of any airport improvement grant made to the private owner for any purpose other than land acquisition on or after October 1, 1996, plus an amount equal to the federal share of the current fair market value of any land acquired with an airport improvement grant made to that airport on or after October 1, 1996.
 - 3) Certain revenue derived from or generated by mineral extraction, production, lease, or other means at a general aviation airport (as defined at Section 47102 of title 49 United States Code), if the FAA determines the airport sponsor meets the requirements set forth in Sec. 813 of Public Law 112-95.
- b. As part of the annual audit required under the Single Audit Act of 1984, the sponsor will direct that the audit will review, and the resulting audit report will provide an opinion concerning, the use of airport revenue and taxes in paragraph (a), and indicating whether funds paid or transferred to the owner or operator are paid or transferred in a manner consistent with Title 49, United States Code and any other applicable provision of law, including any regulation promulgated by the Secretary or Administrator.
 - c. Any civil penalties or other sanctions will be imposed for violation of this assurance in accordance with the provisions of Section 47107 of Title 49, United States Code.

26. Reports and Inspections.

It will:

- a. submit to the Secretary such annual or special financial and operations reports as the Secretary may reasonably request and make such reports available to the public; make available to the public at reasonable times and places a report of the airport budget in a format prescribed by the Secretary;
- b. for airport development projects, make the airport and all airport records and documents affecting the airport, including deeds, leases, operation and use agreements, regulations and other instruments, available for inspection by any duly authorized agent of the Secretary upon reasonable request;
- c. for noise compatibility program projects, make records and documents relating to the project and continued compliance with the terms, conditions, and assurances of this grant agreement including deeds, leases, agreements, regulations, and other instruments, available for inspection by any duly authorized agent of the Secretary upon reasonable request; and

- d. in a format and time prescribed by the Secretary, provide to the Secretary and make available to the public following each of its fiscal years, an annual report listing in detail:
 - 1) all amounts paid by the airport to any other unit of government and the purposes for which each such payment was made; and
 - 2) all services and property provided by the airport to other units of government and the amount of compensation received for provision of each such service and property.

27. Use by Government Aircraft.

It will make available all of the facilities of the airport developed with Federal financial assistance and all those usable for landing and takeoff of aircraft to the United States for use by Government aircraft in common with other aircraft at all times without charge, except, if the use by Government aircraft is substantial, charge may be made for a reasonable share, proportional to such use, for the cost of operating and maintaining the facilities used. Unless otherwise determined by the Secretary, or otherwise agreed to by the sponsor and the using agency, substantial use of an airport by Government aircraft will be considered to exist when operations of such aircraft are in excess of those which, in the opinion of the Secretary, would unduly interfere with use of the landing areas by other authorized aircraft, or during any calendar month that –

- a. Five (5) or more Government aircraft are regularly based at the airport or on land adjacent thereto; or
- b. The total number of movements (counting each landing as a movement) of Government aircraft is 300 or more, or the gross accumulative weight of Government aircraft using the airport (the total movement of Government aircraft multiplied by gross weights of such aircraft) is in excess of five million pounds.

28. Land for Federal Facilities.

It will furnish without cost to the Federal Government for use in connection with any air traffic control or air navigation activities, or weather-reporting and communication activities related to air traffic control, any areas of land or water, or estate therein, or rights in buildings of the sponsor as the Secretary considers necessary or desirable for construction, operation, and maintenance at Federal expense of space or facilities for such purposes. Such areas or any portion thereof will be made available as provided herein within four months after receipt of a written request from the Secretary.

29. Airport Layout Plan.

- a. It will keep up to date at all times an airport layout plan of the airport showing
 - 1) boundaries of the airport and all proposed additions thereto, together with the boundaries of all offsite areas owned or controlled by the sponsor for airport purposes and proposed additions thereto;
 - 2) the location and nature of all existing and proposed airport facilities and structures (such as runways, taxiways, aprons, terminal buildings, hangars and

roads), including all proposed extensions and reductions of existing airport facilities;

- 3) the location of all existing and proposed nonaviation areas and of all existing improvements thereon; and
 - 4) all proposed and existing access points used to taxi aircraft across the airport's property boundary. Such airport layout plans and each amendment, revision, or modification thereof, shall be subject to the approval of the Secretary which approval shall be evidenced by the signature of a duly authorized representative of the Secretary on the face of the airport layout plan. The sponsor will not make or permit any changes or alterations in the airport or any of its facilities which are not in conformity with the airport layout plan as approved by the Secretary and which might, in the opinion of the Secretary, adversely affect the safety, utility or efficiency of the airport.
- b. If a change or alteration in the airport or the facilities is made which the Secretary determines adversely affects the safety, utility, or efficiency of any federally owned, leased, or funded property on or off the airport and which is not in conformity with the airport layout plan as approved by the Secretary, the owner or operator will, if requested, by the Secretary (1) eliminate such adverse effect in a manner approved by the Secretary; or (2) bear all costs of relocating such property (or replacement thereof) to a site acceptable to the Secretary and all costs of restoring such property (or replacement thereof) to the level of safety, utility, efficiency, and cost of operation existing before the unapproved change in the airport or its facilities except in the case of a relocation or replacement of an existing airport facility due to a change in the Secretary's design standards beyond the control of the airport sponsor.

30. Civil Rights.

It will promptly take any measures necessary to ensure that no person in the United States shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in any activity conducted with, or benefiting from, funds received from this grant.

- a. Using the definitions of activity, facility and program as found and defined in §§ 21.23 (b) and 21.23 (e) of 49 CFR § 21, the sponsor will facilitate all programs, operate all facilities, or conduct all programs in compliance with all non-discrimination requirements imposed by, or pursuant to these assurances.
- b. Applicability
 - 1) Programs and Activities. If the sponsor has received a grant (or other federal assistance) for any of the sponsor's program or activities, these requirements extend to all of the sponsor's programs and activities.
 - 2) Facilities. Where it receives a grant or other federal financial assistance to construct, expand, renovate, remodel, alter or acquire a facility, or part of a facility, the assurance extends to the entire facility and facilities operated in connection therewith.

- 3) Real Property. Where the sponsor receives a grant or other Federal financial assistance in the form of, or for the acquisition of real property or an interest in real property, the assurance will extend to rights to space on, over, or under such property.

c. Duration.

The sponsor agrees that it is obligated to this assurance for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the assurance obligates the sponsor, or any transferee for the longer of the following periods:

- 1) So long as the airport is used as an airport, or for another purpose involving the provision of similar services or benefits; or
- 2) So long as the sponsor retains ownership or possession of the property.

d. Required Solicitation Language. It will include the following notification in all solicitations for bids, Requests For Proposals for work, or material under this grant agreement and in all proposals for agreements, including airport concessions, regardless of funding source:

“The **(Name of Sponsor)**, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises and airport concession disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.”

e. Required Contract Provisions.

- 1) It will insert the non-discrimination contract clauses requiring compliance with the acts and regulations relative to non-discrimination in Federally-assisted programs of the DOT, and incorporating the acts and regulations into the contracts by reference in every contract or agreement subject to the non-discrimination in Federally-assisted programs of the DOT acts and regulations.
- 2) It will include a list of the pertinent non-discrimination authorities in every contract that is subject to the non-discrimination acts and regulations.
- 3) It will insert non-discrimination contract clauses as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a sponsor.
- 4) It will insert non-discrimination contract clauses prohibiting discrimination on the basis of race, color, national origin, creed, sex, age, or handicap as a

covenant running with the land, in any future deeds, leases, license, permits, or similar instruments entered into by the sponsor with other parties:

- a) For the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
 - b) For the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.
- f. It will provide for such methods of administration for the program as are found by the Secretary to give reasonable guarantee that it, other recipients, sub-recipients, sub-grantees, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the acts, the regulations, and this assurance.
- g. It agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the acts, the regulations, and this assurance.

31. Disposal of Land.

- a. For land purchased under a grant for airport noise compatibility purposes, including land serving as a noise buffer, it will dispose of the land, when the land is no longer needed for such purposes, at fair market value, at the earliest practicable time. That portion of the proceeds of such disposition which is proportionate to the United States' share of acquisition of such land will be, at the discretion of the Secretary, (1) reinvested in another project at the airport, or (2) transferred to another eligible airport as prescribed by the Secretary. The Secretary shall give preference to the following, in descending order, (1) reinvestment in an approved noise compatibility project, (2) reinvestment in an approved project that is eligible for grant funding under Section 47117(e) of title 49 United States Code, (3) reinvestment in an approved airport development project that is eligible for grant funding under Sections 47114, 47115, or 47117 of title 49 United States Code, (4) transferred to an eligible sponsor of another public airport to be reinvested in an approved noise compatibility project at that airport, and (5) paid to the Secretary for deposit in the Airport and Airway Trust Fund. If land acquired under a grant for noise compatibility purposes is leased at fair market value and consistent with noise buffering purposes, the lease will not be considered a disposal of the land. Revenues derived from such a lease may be used for an approved airport development project that would otherwise be eligible for grant funding or any permitted use of airport revenue.
- b. For land purchased under a grant for airport development purposes (other than noise compatibility), it will, when the land is no longer needed for airport purposes, dispose of such land at fair market value or make available to the Secretary an amount equal to the United States' proportionate share of the fair market value of the land. That portion of the proceeds of such disposition which is proportionate to the United States' share of the cost of acquisition of such land will, (1) upon application to the Secretary, be reinvested or transferred to another

eligible airport as prescribed by the Secretary. The Secretary shall give preference to the following, in descending order: (1) reinvestment in an approved noise compatibility project, (2) reinvestment in an approved project that is eligible for grant funding under Section 47117(e) of title 49 United States Code, (3) reinvestment in an approved airport development project that is eligible for grant funding under Sections 47114, 47115, or 47117 of title 49 United States Code, (4) transferred to an eligible sponsor of another public airport to be reinvested in an approved noise compatibility project at that airport, and (5) paid to the Secretary for deposit in the Airport and Airway Trust Fund.

- c. Land shall be considered to be needed for airport purposes under this assurance if (1) it may be needed for aeronautical purposes (including runway protection zones) or serve as noise buffer land, and (2) the revenue from interim uses of such land contributes to the financial self-sufficiency of the airport. Further, land purchased with a grant received by an airport operator or owner before December 31, 1987, will be considered to be needed for airport purposes if the Secretary or Federal agency making such grant before December 31, 1987, was notified by the operator or owner of the uses of such land, did not object to such use, and the land continues to be used for that purpose, such use having commenced no later than December 15, 1989.
- d. Disposition of such land under (a) (b) or (c) will be subject to the retention or reservation of any interest or right therein necessary to ensure that such land will only be used for purposes which are compatible with noise levels associated with operation of the airport.

32. Engineering and Design Services.

It will 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 or an equivalent qualifications-based requirement prescribed for or by the sponsor of the airport.

33. Foreign Market Restrictions.

It will not allow funds provided under this grant to be used to fund any project which uses any product or service of a foreign country during the period in which such foreign country is listed by the United States Trade Representative as denying fair and equitable market opportunities for products and suppliers of the United States in procurement and construction.

34. Policies, Standards, and Specifications.

It will carry out the project in accordance with policies, standards, and specifications approved by the Secretary including but not limited to the advisory circulars listed in the Current FAA Advisory Circulars for AIP projects, dated _____ (the latest approved version as of this grant offer) and included in this grant, and in accordance

with applicable state policies, standards, and specifications approved by the Secretary.

35. Relocation and Real Property Acquisition.

- a. It will be guided in acquiring real property, to the greatest extent practicable under State law, by the land acquisition policies in Subpart B of 49 CFR Part 24 and will pay or reimburse property owners for necessary expenses as specified in Subpart B.
- b. It will provide a relocation assistance program offering the services described in Subpart C and fair and reasonable relocation payments and assistance to displaced persons as required in Subpart D and E of 49 CFR Part 24.
- c. It will make available within a reasonable period of time prior to displacement, comparable replacement dwellings to displaced persons in accordance with Subpart E of 49 CFR Part 24.

36. Access By Intercity Buses.

The airport owner or operator will permit, to the maximum extent practicable, intercity buses or other modes of transportation to have access to the airport; however, it has no obligation to fund special facilities for intercity buses or for other modes of transportation.

37. Disadvantaged Business Enterprises.

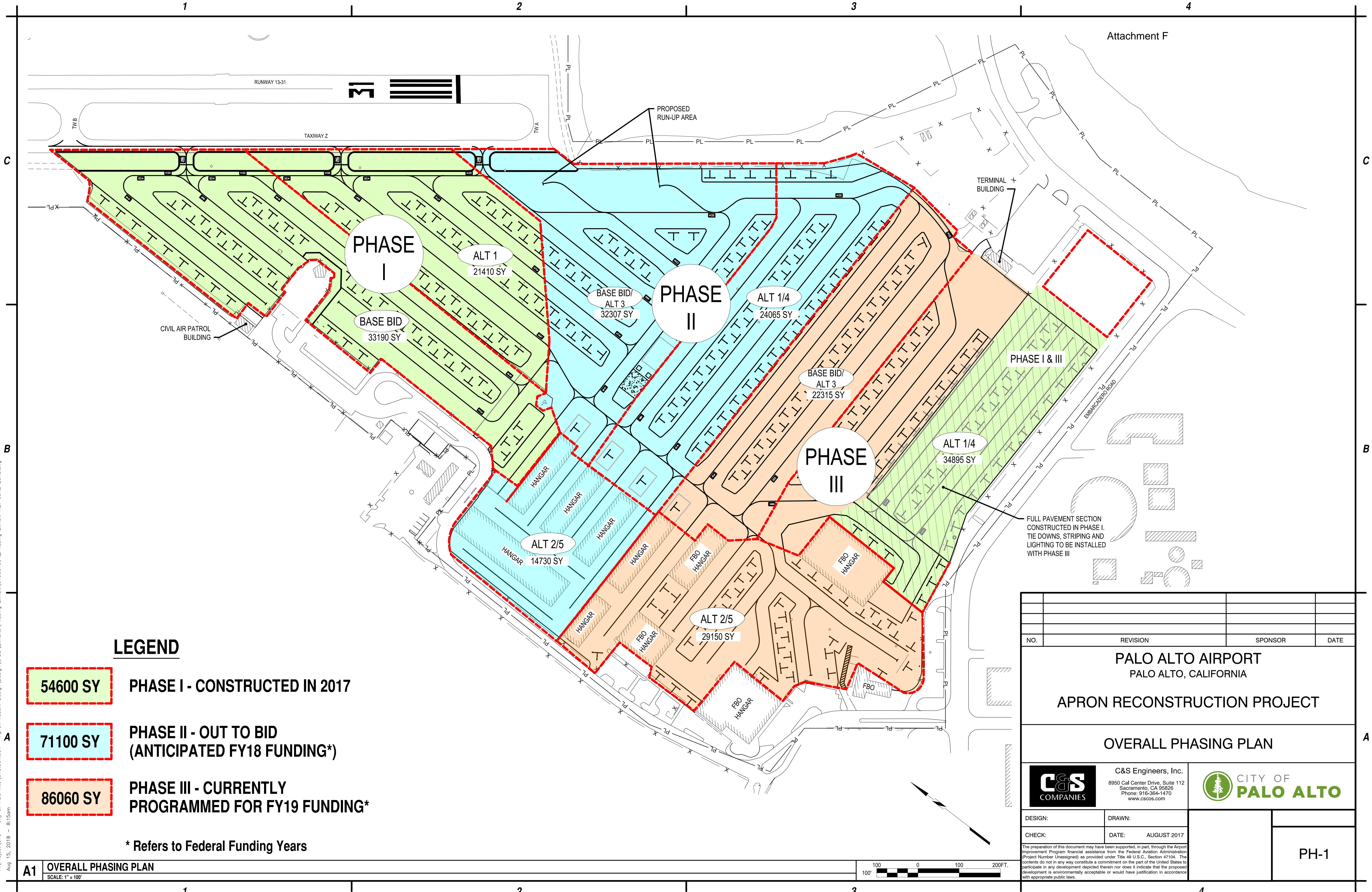
The sponsor shall not discriminate on the basis of race, color, national origin or sex in the award and performance of any DOT-assisted contract covered by 49 CFR Part 26, or in the award and performance of any concession activity contract covered by 49 CFR Part 23. In addition, the sponsor shall not discriminate on the basis of race, color, national origin or sex in the administration of its DBE and ACDBE programs or the requirements of 49 CFR Parts 23 and 26. The sponsor shall take all necessary and reasonable steps under 49 CFR Parts 23 and 26 to ensure nondiscrimination in the award and administration of DOT-assisted contracts, and/or concession contracts. The sponsor's DBE and ACDBE programs, as required by 49 CFR Parts 26 and 23, and as approved by DOT, are incorporated by reference in this agreement. Implementation of these programs is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the sponsor of its failure to carry out its approved program, the Department may impose sanctions as provided for under Parts 26 and 23 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1936 (31 U.S.C. 3801).

38. Hangar Construction.

If the airport owner or operator and a person who owns an aircraft agree that a hangar is to be constructed at the airport for the aircraft at the aircraft owner's expense, the airport owner or operator will grant to the aircraft owner for the hangar a long term lease that is subject to such terms and conditions on the hangar as the airport owner or operator may impose.

39. Competitive Access.


- a. If the airport owner or operator of a medium or large hub airport (as defined in section 47102 of title 49, U.S.C.) has been unable to accommodate one or more requests by an air carrier for access to gates or other facilities at that airport in order to allow the air carrier to provide service to the airport or to expand service at the airport, the airport owner or operator shall transmit a report to the Secretary that-
 - 1) Describes the requests;
 - 2) Provides an explanation as to why the requests could not be accommodated; and
 - 3) Provides a time frame within which, if any, the airport will be able to accommodate the requests.
- b. Such report shall be due on either February 1 or August 1 of each year if the airport has been unable to accommodate the request(s) in the six month period prior to the applicable due date.



LEGEND

- 54600 SY** PHASE I - CONSTRUCTED IN 2017
- 71100 SY** PHASE II - OUT TO BID (ANTICIPATED FY18 FUNDING*)
- 86060 SY** PHASE III - CURRENTLY PROGRAMMED FOR FY19 FUNDING*

* Refers to Federal Funding Years

NO.	REVISION	SPONSOR	DATE
PALO ALTO AIRPORT PALO ALTO, CALIFORNIA			
APRON RECONSTRUCTION PROJECT			
OVERALL PHASING PLAN			
 C&S COMPANIES		C&S Engineers, Inc. 8950 Cal Center Drive, Suite 112 Sacramento, CA 95826 Phone: 916-364-1470 www.cscos.com	
DESIGN:		DRAWN:	
CHECK:		DATE: AUGUST 2017	
<small>The preparation of this document may have been supported, in part, through the Airport Improvement Program financial assistance from the Federal Aviation Administration (Project Number Unassigned) as provided under Title 49 U.S.C., Section 47104. The contents do not in any way constitute a commitment on the part of the United States to participate in any development depicted therein nor does it indicate that the proposed development is environmentally acceptable or would have justification in accordance with appropriate public laws.</small>		PH-1	

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Aug 15, 2018 - 8:15am



PALO ALTO AIRPORT APRON RECONSTRUCTION PROJECT, PHASE II FAA AIP PROJECT NO. 3-06-0182-010-2015 IFB NO. 171727					ENGINEERS' OPINION OF CONSTRUCTION COST		DeSilva Gates Construction LP		Granite Rock Company	
					C&S Engineers, Inc. 8950 Cal Center Drive, #102 Sacramento, CA 95826		11555 Dublin Blvd. Dublin, CA 94568		5225 Hellyer Avenue, #220 San Jose, CA 95138	
ITEM NO.	FAA SPEC NO.	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
BASE BID										
001	P-151	CLEARING AND GRUBBING	0.2	ACRE	\$5,000.00	\$1,000.00	\$100,000.00	\$20,000.00	\$100,000.00	\$20,000.00
002	P-156	COMPLIANCE WITH POLLUTION, EROSION, AND SILTATION CONTROL	1.0	LS	\$120,000.00	\$120,000.00	\$40,000.00	\$40,000.00	\$80,000.00	\$80,000.00
003	P-160	PULVERIZED ASPHALT	34,000	SY	\$2.00	\$68,000.00	\$2.50	\$85,000.00	\$1.20	\$40,800.00
004	P-608	EMULSIFIED ASPHALT SEAL COAT	2,750	SY	\$11.00	\$30,250.00	\$8.00	\$22,000.00	\$10.00	\$27,500.00
005	P-612	FIELD OFFICE	1	LS	\$25,000.00	\$25,000.00	\$5,000.00	\$5,000.00	\$431,000.00	\$431,000.00
006	P-620	MARKING REMOVAL	400	SF	\$10.00	\$4,000.00	\$25.00	\$10,000.00	\$37.50	\$15,000.00
007	P-620	PAINTSTRIPING (YELLOW, REFLECTORIZED)	4,200	SF	\$5.00	\$21,000.00	\$10.00	\$42,000.00	\$12.00	\$50,400.00
008	P-620	PAINTSTRIPING (WHITE, REFLECTORIZED)	2,200	SF	\$5.00	\$11,000.00	\$10.00	\$22,000.00	\$12.00	\$26,400.00
009	P-620	PAINTSTRIPING (GREEN, NON-REFLECTORIZED)	11,100	SF	\$5.00	\$55,500.00	\$7.00	\$77,700.00	\$5.00	\$55,500.00
010	P-620	SURFACE PAINTED TAXILANE MARKINGS	11	EACH	\$700.00	\$7,700.00	\$2,000.00	\$22,000.00	\$2,475.00	\$27,225.00
011	P-620	TIE-DOWN NUMBERING	56	EACH	\$50.00	\$2,800.00	\$100.00	\$5,600.00	\$112.00	\$6,272.00
012	D-701	15" HDPE STORM DRAIN	225	LF	\$150.00	\$33,750.00	\$120.00	\$27,000.00	\$200.00	\$45,000.00
013	D-751	ADJUST CATCH BASIN TO GRADE	7	EACH	\$4,000.00	\$28,000.00	\$2,000.00	\$14,000.00	\$4,000.00	\$28,000.00
014	D-751	ADJUST MANHOLE TO GRADE	7	EACH	\$2,500.00	\$17,500.00	\$2,000.00	\$14,000.00	\$2,000.00	\$14,000.00
015	D-751	48" MANHOLE	4	EACH	\$8,000.00	\$32,000.00	\$7,000.00	\$28,000.00	\$7,500.00	\$30,000.00
016	D-751	CATCH BASIN (CALTRANS D73, G1)	1	EACH	\$6,000.00	\$6,000.00	\$5,000.00	\$5,000.00	\$6,000.00	\$6,000.00
017	SP-3	VERTICAL FLOW CLARIFIER	1	EACH	\$10,000.00	\$10,000.00	\$20,000.00	\$20,000.00	\$143,000.00	\$143,000.00
018	SP-4	CATCH BASIN FILTRATION SYSTEM	8	EACH	\$15,000.00	\$120,000.00	\$10,000.00	\$80,000.00	\$2,500.00	\$20,000.00
019	SP-9	CONCRETE RIBBON CURB	100	LF	\$80.00	\$8,000.00	\$100.00	\$10,000.00	\$120.00	\$12,000.00
020	SP-11	BOLLARD	2	EACH	\$800.00	\$1,600.00	\$2,000.00	\$4,000.00	\$1,500.00	\$3,000.00
021	SP-13	JOINT SEALING	2,300	LF	\$15.00	\$34,500.00	\$8.00	\$18,400.00	\$8.00	\$18,400.00
022	SP-14	ADJUST UTILITY VAULT TO GRADE	2	EACH	\$4,000.00	\$8,000.00	\$5,000.00	\$10,000.00	\$5,000.00	\$10,000.00
023	SP-15	ADJUST JUNCTION BOX/HANDHOLE TO GRADE	6	EACH	\$3,000.00	\$18,000.00	\$5,000.00	\$30,000.00	\$1,300.00	\$7,800.00
024	SP-16	REMOVE EXISTING TIE-DOWN ANCHORS	207	EACH	\$250.00	\$51,750.00	\$100.00	\$20,700.00	\$75.00	\$15,525.00
025	SP-17	MILLING	4,900	SY	\$20.00	\$98,000.00	\$10.00	\$49,000.00	\$8.00	\$39,200.00
026	SP-23	POLLUTION CONTROL FACILITY AND APPURTENANCES	1	EACH	\$150,000.00	\$150,000.00	\$50,000.00	\$50,000.00	\$65,000.00	\$65,000.00
027	SP-24	6" SEWERLINE	470	LF	\$150.00	\$70,500.00	\$100.00	\$47,000.00	\$185.00	\$86,950.00
028	SP-25	SEWER CLEAN OUT	1	EACH	\$6,000.00	\$6,000.00	\$800.00	\$800.00	\$1,900.00	\$1,900.00
029	SP-26	10" WELDED HDPE WATERLINE	1,600	LF	\$300.00	\$480,000.00	\$115.00	\$184,000.00	\$190.00	\$304,000.00
030	SP-26	6" WELDED HDPE WATERLINE	130	LF	\$250.00	\$32,500.00	\$100.00	\$13,000.00	\$225.00	\$29,250.00
031	SP-27	10" GATE VALVE	4	EACH	\$5,500.00	\$22,000.00	\$4,000.00	\$16,000.00	\$5,500.00	\$22,000.00
032	SP-27	6" GATE VALVE	1	EACH	\$5,000.00	\$5,000.00	\$2,000.00	\$2,000.00	\$3,500.00	\$3,500.00
033	SP-28	FIRE HYDRANT & APPURTENANCES	1	EACH	\$10,000.00	\$10,000.00	\$7,000.00	\$7,000.00	\$10,000.00	\$10,000.00
034	SP-29	DOUBLE DETECTOR CHECK VALVE	1	EACH	\$25,000.00	\$25,000.00	\$30,000.00	\$30,000.00	\$31,000.00	\$31,000.00
035	T-906	HYDRO-SEEDING	500	SY	\$2.00	\$1,000.00	\$4.00	\$2,000.00	\$8.00	\$4,000.00
036	L-100	REMOVAL OF EXISTING LIGHT POLE ASSEMBLY (POLE, FIXTURE, PULL BOXES AND FOUNDATION)	5	EACH	\$6,000.00	\$30,000.00	\$8,000.00	\$40,000.00	\$7,000.00	\$35,000.00
037	L-100	NEW 30-FOOT APRON AREA LIGHT POLE WITH MOUNTING APPARATUS AND MAINTENANCE HINGES	4	EACH	\$25,000.00	\$100,000.00	\$25,000.00	\$100,000.00	\$75,000.00	\$300,000.00
038	L-100	NEW LED APRON AREA LIGHTING FIXTURE	8	EACH	\$7,000.00	\$56,000.00	\$10,000.00	\$80,000.00	\$8,000.00	\$64,000.00
039	L-100	NEW LED OBSTRUCTION LIGHTING FIXTURE (DOUBLE-HEAD)	4	EACH	\$2,500.00	\$10,000.00	\$2,500.00	\$10,000.00	\$2,000.00	\$8,000.00
040	L-100	TRANSFORMER AND ENCLOSURE FOR OBSTRUCTION LIGHTING FIXTURE	4	EACH	\$3,000.00	\$12,000.00	\$1,000.00	\$4,000.00	\$2,000.00	\$8,000.00
041	L-100	1" RIGID GALVANIZED STEEL CONDUIT	20	LF	\$150.00	\$3,000.00	\$150.00	\$3,000.00	\$125.00	\$2,500.00
042	L-100	NO. 6 AWG, 600V, TYPE THWN CABLE	4,000	LF	\$4.00	\$16,000.00	\$5.00	\$20,000.00	\$4.25	\$17,000.00
043	L-100	NO. 8 AWG, 600V, TYPE THWN CABLE	1,300	LF	\$2.50	\$3,250.00	\$5.00	\$6,500.00	\$3.00	\$3,900.00
044	L-108	NO. 6 AWG, BARE COUNTERPOISE WIRE	13,000	LF	\$4.00	\$52,000.00	\$5.00	\$65,000.00	\$4.25	\$55,250.00
045	L-110	2" CONCRETE-ENCASED SCHEDULE-40 PVC CONDUIT IN PAVEMENT	340	LF	\$40.00	\$13,600.00	\$40.00	\$13,600.00	\$35.00	\$11,900.00
046	L-110	1" PVC CONCRETE ENCASED CONDUIT	650	LF	\$6.00	\$3,900.00	\$4.00	\$2,600.00	\$6.00	\$3,900.00
047	L-110	2-2" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	380	LF	\$60.00	\$22,800.00	\$100.00	\$38,000.00	\$90.00	\$34,200.00
048	L-110	4-4" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	150	LF	\$120.00	\$18,000.00	\$200.00	\$30,000.00	\$145.00	\$21,750.00
049	L-100	36"X36" PULL BOX	9	EACH	\$7,000.00	\$63,000.00	\$15,000.00	\$135,000.00	\$13,000.00	\$117,000.00
050	L-100	36"X60" PULL BOX	2	EACH	\$8,000.00	\$16,000.00	\$15,000.00	\$30,000.00	\$13,000.00	\$26,000.00
051	L-100	36"X72" PULL BOX	1	EACH	\$9,000.00	\$9,000.00	\$15,000.00	\$15,000.00	\$7,000.00	\$7,000.00
052	L-100	48"X48" PULL BOX	1	EACH	\$11,000.00	\$11,000.00	\$15,000.00	\$15,000.00	\$8,000.00	\$8,000.00
053	L-110	2-4" & 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	510	LF	\$70.00	\$35,700.00	\$200.00	\$102,000.00	\$185.00	\$94,350.00
054	L-110	3-4" 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	490	LF	\$80.00	\$39,200.00	\$250.00	\$122,500.00	\$225.00	\$110,250.00



PALO ALTO AIRPORT APRON RECONSTRUCTION PROJECT, PHASE II FAA AIP PROJECT NO. 3-06-0182-010-2015 IFB NO. 171727					ENGINEERS' OPINION OF CONSTRUCTION COST C&S Engineers, Inc. 8950 Cal Center Drive, #102 Sacramento, CA 95826		DeSilva Gates Construction LP 11555 Dublin Blvd. Dublin, CA 94568		Granite Rock Company 5225 Hellyer Avenue, #220 San Jose, CA 95138	
ITEM NO.	FAA SPEC NO.	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
055	L-110	4-4" & 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	150	LF	\$90.00	\$13,500.00	\$250.00	\$37,500.00	\$235.00	\$35,250.00
056	L-110	8-4" & 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	210	LF	\$150.00	\$31,500.00	\$400.00	\$84,000.00	\$345.00	\$72,450.00
057	L-110	2-5" PVC CONCRETE-ENCASED CONDUIT ELECTRICAL DUCT BANK	190	LF	\$80.00	\$15,200.00	\$250.00	\$47,500.00	\$195.00	\$37,050.00
058	L-110	3-5" PVC CONDUIT DUCT BANK	150	LF	\$100.00	\$15,000.00	\$250.00	\$37,500.00	\$215.00	\$32,250.00
059	L-115	ELECTRICAL PULL BOX, H20 TRAFFIC RATED	5	EACH	\$6,000.00	\$30,000.00	\$8,000.00	\$40,000.00	\$6,500.00	\$32,500.00
060	L-115	ELECTRICAL PULL BOX, AIRCRAFT-RATED, 36" BY 36" BY 30"	3	EACH	\$13,000.00	\$39,000.00	\$15,000.00	\$45,000.00	\$15,000.00	\$45,000.00
061	L-115	ELECTRICAL MANHOLE	1	EACH	\$10,000.00	\$10,000.00	\$60,000.00	\$60,000.00	\$65,000.00	\$65,000.00
062	L-125	TAXIWAY EDGE LIGHTING BASE CAN	10	EACH	\$3,500.00	\$35,000.00	\$2,500.00	\$25,000.00	\$2,200.00	\$22,000.00
063	L-126	INSTALL TIE-DOWN ANCHORS	168	EACH	\$900.00	\$151,200.00	\$1,000.00	\$168,000.00	\$1,100.00	\$184,800.00
064	U-200	UTILITY RELOCATION	1	LS	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00
065	M-100	MAINTENANCE AND PROTECTION OF TRAFFIC	1	LS	\$300,000.00	\$300,000.00	\$15,000.00	\$15,000.00	\$250,000.00	\$250,000.00
066	M-150	PROJECT SURVEY AND STAKEOUT	1	LS	\$40,000.00	\$40,000.00	\$20,000.00	\$20,000.00	\$100,000.00	\$100,000.00
067	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$173,247.00	\$173,247.00	\$150,000.00	\$150,000.00	\$210,000.00	\$210,000.00
SUBTOTAL ADDITIVE BASE BID (ITEMS 001 THROUGH 067)						\$3,058,447.00		\$2,693,300.00		\$3,818,922.00
ADDITIVE BID ALTERNATE #1										
068	P-151	CLEARING AND GRUBBING	0.3	ACRE	\$5,000.00	\$1,250.00	\$100,000.00	\$30,000.00	\$100,000.00	\$30,000.00
069	P-160	PULVERIZED ASPHALT	26,550	SY	\$2.00	\$53,100.00	\$2.50	\$66,375.00	\$1.20	\$31,860.00
070	P-156	COMPLIANCE WITH POLLUTION, EROSION, AND SILTATION CONTROL	1	LS	\$80,000.00	\$80,000.00	\$20,000.00	\$20,000.00	\$15,000.00	\$15,000.00
071	T-906	HYDRO-SEEDING	650	SY	\$2.00	\$1,300.00	\$4.00	\$2,600.00	\$8.00	\$5,200.00
072	P-612	FIELD OFFICE	1	LS	\$25,000.00	\$25,000.00	\$2,000.00	\$2,000.00	\$45,000.00	\$45,000.00
073	P-620	MARKING REMOVAL	120	SF	\$10.00	\$1,200.00	\$25.00	\$3,000.00	\$37.50	\$4,500.00
074	P-620	PAINTSTRIPING (YELLOW, REFLECTORIZED)	3,100	SF	\$5.00	\$15,500.00	\$10.00	\$31,000.00	\$8.00	\$24,800.00
075	P-620	PAINTSTRIPING (WHITE, REFLECTORIZED)	2,350	SF	\$5.00	\$11,750.00	\$10.00	\$23,500.00	\$12.00	\$28,200.00
076	P-620	SURFACE PAINTED TAXILANE MARKINGS	7	EACH	\$700.00	\$4,900.00	\$2,000.00	\$14,000.00	\$2,475.00	\$17,325.00
077	P-620	TIE-DOWN NUMBERING	44	EACH	\$50.00	\$2,200.00	\$100.00	\$4,400.00	\$112.00	\$4,928.00
078	D-701	15" HDPE STORM DRAIN	425	LF	\$150.00	\$63,750.00	\$120.00	\$51,000.00	\$235.00	\$99,875.00
079	D-751	ADJUST CATCH BASIN TO GRADE	4	EACH	\$4,000.00	\$16,000.00	\$2,000.00	\$8,000.00	\$3,000.00	\$12,000.00
080	D-751	CATCH BASIN (CALTRANS D73, G1)	2	EACH	\$6,000.00	\$12,000.00	\$5,000.00	\$10,000.00	\$6,000.00	\$12,000.00
081	D-751	ADJUST MANHOLE TO GRADE	4	EACH	\$2,500.00	\$10,000.00	\$2,000.00	\$8,000.00	\$1,000.00	\$4,000.00
082	SP-4	CATCH BASIN FILTRATION SYSTEM	4	EACH	\$3,000.00	\$12,000.00	\$10,000.00	\$40,000.00	\$2,500.00	\$10,000.00
083	SP-9	CONCRETE RIBBON CURB	125	LF	\$80.00	\$10,000.00	\$100.00	\$12,500.00	\$120.00	\$15,000.00
084	SP-16	REMOVE EXISTING TIE-DOWN ANCHORS	208	EACH	\$250.00	\$52,000.00	\$100.00	\$20,800.00	\$75.00	\$15,600.00
085	SP-17	MILLING	4,650	SY	\$20.00	\$93,000.00	\$10.00	\$46,500.00	\$8.00	\$37,200.00
086	SP-26	10" WELDED HDPE WATERLINE	575	LF	\$300.00	\$172,500.00	\$115.00	\$66,125.00	\$190.00	\$109,250.00
087	SP-27	10" GATE VALVE	1	EACH	\$5,500.00	\$5,500.00	\$4,000.00	\$4,000.00	\$5,500.00	\$5,500.00
088	SP-33	ABANDON EXISTING TIE-DOWN ANCHORS	5	EACH	\$100.00	\$500.00	\$300.00	\$1,500.00	\$75.00	\$375.00
089	SP-13	JOINT SEALING	975	LF	\$15.00	\$14,625.00	\$8.00	\$7,800.00	\$8.00	\$7,800.00
090	SP-14	ADJUST UTILITY VAULT TO GRADE	3	EACH	\$4,000.00	\$12,000.00	\$5,000.00	\$15,000.00	\$5,000.00	\$15,000.00
091	SP-15	ADJUST JUNCTION BOX/HANDHOLE TO GRADE	7	EACH	\$3,000.00	\$21,000.00	\$4,000.00	\$28,000.00	\$1,300.00	\$9,100.00
092	L-100	REMOVAL OF EXISTING LIGHT POLE ASSEMBLY (POLE, FIXTURE, PULL BOXES AND FOUNDATION)	11	EACH	\$6,000.00	\$66,000.00	\$8,000.00	\$88,000.00	\$7,000.00	\$77,000.00
093	L-100	NEW 30-FOOT APRON AREA LIGHT POLE WITH MOUNTING APPARATUS AND MAINTENANCE HINGES	4	EACH	\$25,000.00	\$100,000.00	\$30,000.00	\$120,000.00	\$50,000.00	\$200,000.00
094	L-100	NEW LED APRON AREA LIGHTING FIXTURE	7	EACH	\$7,000.00	\$49,000.00	\$10,000.00	\$70,000.00	\$8,000.00	\$56,000.00
095	L-100	NEW LED OBSTRUCTION LIGHTING FIXTURE (DOUBLE-HEAD)	4	EACH	\$2,500.00	\$10,000.00	\$2,500.00	\$10,000.00	\$2,000.00	\$8,000.00
096	L-100	TRANSFORMER AND ENCLOSURE FOR OBSTRUCTION LIGHTING FIXTURE	4	EACH	\$2,000.00	\$8,000.00	\$1,000.00	\$4,000.00	\$2,000.00	\$8,000.00
097	L-100	1" RIGID GALVANIZED STEEL CONDUIT	20	LF	\$150.00	\$3,000.00	\$150.00	\$3,000.00	\$125.00	\$2,500.00
098	L-100	2" CONCRETE-ENCASED SCHEDULE-40 PVC CONDUIT IN PAVEMENT	1,100	LF	\$40.00	\$44,000.00	\$40.00	\$44,000.00	\$35.00	\$38,500.00
099	L-100	NO. 6 AWG, 600V, TYPE THWN CABLE	5,000	LF	\$4.00	\$20,000.00	\$5.00	\$25,000.00	\$4.25	\$21,250.00
100	L-100	NO. 8 AWG, 600V, TYPE THWN CABLE	1,600	LF	\$2.50	\$4,000.00	\$5.00	\$8,000.00	\$3.00	\$4,800.00
101	L-100	36"X36" PULL BOX	11	EACH	\$7,000.00	\$77,000.00	\$15,000.00	\$165,000.00	\$15,000.00	\$165,000.00
102	L-100	36"X60" PULL BOX	2	EACH	\$8,000.00	\$16,000.00	\$15,000.00	\$30,000.00	\$15,000.00	\$30,000.00
103	L-100	36"X72" PULL BOX	1	EACH	\$9,000.00	\$9,000.00	\$15,000.00	\$15,000.00	\$7,000.00	\$7,000.00
104	L-100	48"X48" PULL BOX	1	EACH	\$11,000.00	\$11,000.00	\$15,000.00	\$15,000.00	\$8,000.00	\$8,000.00
105	L-108	NO. 6 AWG, BARE COUNTERPOISE WIRE	1,100	LF	\$4.00	\$4,400.00	\$5.00	\$5,500.00	\$2.00	\$2,200.00
106	L-110	1" PVC CONCRETE ENCASED CONDUIT	1,100	LF	\$6.00	\$6,600.00	\$40.00	\$44,000.00	\$6.00	\$6,600.00
107	L-110	2-4" & 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	700	LF	\$70.00	\$49,000.00	\$200.00	\$140,000.00	\$200.00	\$140,000.00



PALO ALTO AIRPORT APRON RECONSTRUCTION PROJECT, PHASE II FAA AIP PROJECT NO. 3-06-0182-010-2015 IFB NO. 171727					ENGINEERS' OPINION OF CONSTRUCTION COST C&S Engineers, Inc. 8950 Cal Center Drive, #102 Sacramento, CA 95826		DeSilva Gates Construction LP 11555 Dublin Blvd. Dublin, CA 94568		Granite Rock Company 5225 Hellyer Avenue, #220 San Jose, CA 95138	
ITEM NO.	FAA SPEC NO.	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
108	L-110	3-4" & 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	450	LF	\$80.00	\$36,000.00	\$250.00	\$112,500.00	\$225.00	\$101,250.00
109	L-110	4-4" & 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	320	LF	\$90.00	\$28,800.00	\$250.00	\$80,000.00	\$235.00	\$75,200.00
110	L-110	6-4" & 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	115	LF	\$120.00	\$13,800.00	\$350.00	\$40,250.00	\$315.00	\$36,225.00
111	L-110	10-4" & 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	270	LF	\$200.00	\$54,000.00	\$400.00	\$108,000.00	\$385.00	\$103,950.00
112	L-110	15-4" & 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	270	LF	\$250.00	\$67,500.00	\$550.00	\$148,500.00	\$525.00	\$141,750.00
113	L-115	ELECTRICAL PULL BOX, H20 TRAFFIC RATED	5	EACH	\$6,000.00	\$30,000.00	\$8,000.00	\$40,000.00	\$6,500.00	\$32,500.00
114	L-126	INSTALL TIE-DOWN ANCHORS	144	EACH	\$900.00	\$129,600.00	\$1,000.00	\$144,000.00	\$1,100.00	\$158,400.00
115	U-200	UTILITY RELOCATION	1	LS	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00
116	M-100	MAINTENANCE AND PROTECTION OF TRAFFIC	1	LS	\$300,000.00	\$300,000.00	\$10,000.00	\$10,000.00	\$44,000.00	\$44,000.00
117	M-150	PROJECT SURVEY AND STAKEOUT	1	LS	\$40,000.00	\$40,000.00	\$20,000.00	\$20,000.00	\$12,900.00	\$12,900.00
118	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$115,066.50	\$115,066.50	\$120,000.00	\$120,000.00	\$120,000.00	\$120,000.00
SUBTOTAL ADDITIVE ALTERNATE BID 1 (ITEMS 068 THROUGH 118)						\$2,032,841.50		\$2,175,850.00		\$2,210,538.00
ADDITIVE BID ALTERNATE #2										
119	P-160	PULVERIZED ASPHALT	7,900	SY	\$2.00	\$15,800.00	\$2.50	\$19,750.00	\$1.00	\$7,900.00 *
120	P-156	COMPLIANCE WITH POLLUTION, EROSION, AND SILTATION CONTROL	1	LS	\$20,000.00	\$20,000.00	\$10,000.00	\$10,000.00	\$5,000.00	\$5,000.00 *
121	P-612	FIELD OFFICE	1	LS	\$15,000.00	\$15,000.00	\$2,000.00	\$2,000.00	\$5,000.00	\$5,000.00 *
122	P-620	PAINTSTRIPING (YELLOW, REFLECTORIZED)	850	SF	\$5.00	\$4,250.00	\$10.00	\$8,500.00	\$8.00	\$6,800.00 *
123	D-701	8" HDPE STORM DRAIN	310	LF	\$100.00	\$31,000.00	\$125.00	\$38,750.00	\$270.00	\$83,700.00
124	D-701	12" HDPE STORM DRAIN	210	LF	\$150.00	\$31,500.00	\$125.00	\$26,250.00	\$240.00	\$50,400.00
125	D-701	21" HDPE STORM DRAIN	420	LF	\$200.00	\$84,000.00	\$150.00	\$63,000.00	\$225.00	\$94,500.00
126	D-751	CATCH BASIN (CALTRANS D73, G1)	9	EACH	\$6,000.00	\$54,000.00	\$5,000.00	\$45,000.00	\$6,000.00	\$54,000.00
127	D-751	ADJUST MANHOLE TO GRADE	1	EACH	\$2,500.00	\$2,500.00	\$1,600.00	\$1,600.00	\$2,500.00	\$2,500.00
128	D-751	48" MANHOLE	4	EACH	\$8,000.00	\$32,000.00	\$7,000.00	\$28,000.00	\$7,000.00	\$28,000.00
129	SP-4	CATCH BASIN FILTRATION SYSTEM	9	EACH	\$3,000.00	\$27,000.00	\$10,000.00	\$90,000.00	\$2,500.00	\$22,500.00
130	SP-9	CONCRETE RIBBON CURB	2300	LF	\$80.00	\$184,000.00	\$50.00	\$115,000.00	\$62.00	\$142,600.00
131	SP-10	TRENCH DRAIN	2,230	LF	\$50.00	\$111,500.00	\$160.00	\$356,800.00	\$95.00	\$211,850.00
132	SP-13	JOINT SEALING	60	LF	\$15.00	\$900.00	\$8.00	\$480.00	\$50.00	\$3,000.00
133	SP-24	6" SEWERLINE	560	LF	\$150.00	\$84,000.00	\$125.00	\$70,000.00	\$200.00	\$112,000.00
134	U-200	UTILITY RELOCATION	1	LS	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00
135	U-201	STORM DRAIN REMOVAL	1	LS	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00
136	M-100	MAINTENANCE AND PROTECTION OF TRAFFIC	1	LS	\$100,000.00	\$100,000.00	\$1,000.00	\$1,000.00	\$20,000.00	\$20,000.00
137	M-150	PROJECT SURVEY AND STAKEOUT	1	LS	\$40,000.00	\$40,000.00	\$15,000.00	\$15,000.00	\$12,000.00	\$12,000.00
138	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$57,747.00	\$57,747.00	\$60,967.80	\$60,967.80 *	\$30,000.00	\$30,000.00
SUBTOTAL ADDITIVE ALTERNATE BID 2 (ITEMS 119 THROUGH 138)						\$1,020,197.00		\$1,077,097.80 *		\$1,016,750.00
ADDITIVE BID ALTERNATE #3										
139	P-152	UNCLASSIFIED EXCAVATION	2,600	CY	\$50.00	\$130,000.00	\$50.00	\$130,000.00	\$95.00	\$247,000.00
140	P-160	CEMENT TREATED SUBGRADE (12" THICK)	34,000	SY	\$18.00	\$612,000.00	\$5.50	\$187,000.00	\$4.00	\$136,000.00
141	P-160	PORTLAND CEMENT (4% CEMENT CONTENT FOR CTS)	730	TON	\$150.00	\$109,500.00	\$175.00	\$127,750.00	\$165.00	\$120,450.00
142	P-208	AGGREGATE BASE COURSE (6" THICK)	35,000	SY	\$30.00	\$1,050,000.00	\$20.00	\$700,000.00	\$18.00	\$630,000.00
143	P-403	HMA SURFACE COURSE	6,700	TON	\$200.00	\$1,340,000.00	\$130.00	\$871,000.00	\$95.00	\$636,500.00
144	P-602	BITUMINOUS PRIME COAT	47	TON	\$1,500.00	\$70,500.00	\$1,000.00	\$47,000.00	\$500.00	\$23,500.00
145	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$198,720.00	\$198,720.00	\$123,765.00	\$123,765.00 *	\$50,000.00	\$50,000.00
SUBTOTAL ADDITIVE ALTERNATE BID 3 (ITEMS 139 THROUGH 145)						\$3,510,720.00		\$2,186,515.00 *		\$1,843,450.00
ADDITIVE BID ALTERNATE #4										
146	P-152	UNCLASSIFIED EXCAVATION	850	CY	\$50.00	\$42,500.00	\$50.00	\$42,500.00	\$145.00	\$123,250.00
147	P-160	CEMENT TREATED SUBGRADE (12" THICK)	26,550	SY	\$18.00	\$477,900.00	\$5.50	\$146,025.00	\$4.00	\$106,200.00
148	P-160	PORTLAND CEMENT (4% CEMENT CONTENT FOR CTS)	570	TON	\$150.00	\$85,500.00	\$175.00	\$99,750.00	\$165.00	\$94,050.00
149	P-208	AGGREGATE BASE COURSE (6" THICK)	26,550	SY	\$30.00	\$796,500.00	\$20.00	\$531,000.00	\$18.00	\$477,900.00
150	P-403	HMA SURFACE COURSE	5,300	TON	\$200.00	\$1,060,000.00	\$130.00	\$689,000.00	\$95.00	\$503,500.00
151	P-602	BITUMINOUS PRIME COAT	35	TON	\$1,500.00	\$52,500.00	\$1,000.00	\$35,000.00	\$500.00	\$17,500.00
152	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$150,894.00	\$150,894.00	\$92,596.50	\$92,596.50 *	\$40,000.00	\$40,000.00
SUBTOTAL ADDITIVE ALTERNATE BID 4 (ITEMS 146 THROUGH 152)						\$2,665,794.00		\$1,635,871.50 *		\$1,362,400.00
ADDITIVE BID ALTERNATE #5										
153	P-152	UNCLASSIFIED EXCAVATION	1,900	CY	\$50.00	\$95,000.00	\$50.00	\$95,000.00	\$64.00	\$121,600.00
154	P-160	CEMENT TREATED SUBGRADE (12" THICK)	8,100	SY	\$18.00	\$145,800.00	\$5.50	\$44,550.00	\$4.00	\$32,400.00
155	P-160	PORTLAND CEMENT (4% CEMENT CONTENT FOR CTS)	180	TON	\$150.00	\$27,000.00	\$175.00	\$31,500.00	\$165.00	\$29,700.00
156	P-208	AGGREGATE BASE COURSE (6" THICK)	8,100	SY	\$30.00	\$243,000.00	\$20.00	\$162,000.00	\$20.50	\$166,050.00
157	P-403	HMA SURFACE COURSE	1,600	TON	\$200.00	\$320,000.00	\$130.00	\$208,000.00	\$95.00	\$152,000.00
158	P-602	BITUMINOUS PRIME COAT	10	TON	\$1,500.00	\$15,000.00	\$1,000.00	\$10,000.00	\$500.00	\$5,000.00
159	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$50,748.00	\$50,748.00	\$30,000.00	\$30,000.00	\$15,000.00	\$15,000.00
SUBTOTAL ADDITIVE ALTERNATE BID 5 (ITEMS 153 THROUGH 159)						\$896,548.00		\$581,050.00		\$521,750.00



PALO ALTO AIRPORT APRON RECONSTRUCTION PROJECT, PHASE II FAA AIP PROJECT NO. 3-06-0182-010-2015 IFB NO. 171727					ENGINEERS OPINION OF CONSTRUCTION COST C&S Engineers, Inc. 8950 Cal Center Drive, #102 Sacramento, CA 95826		DeSilva Gates Construction LP 11555 Dublin Blvd. Dublin, CA 94568		Granite Rock Company 5225 Hellyer Avenue, #220 San Jose, CA 95138	
ITEM NO.	FAA SPEC NO.	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
ADDITIVE BID ALTERNATE #6										
160	P-152	UNCLASSIFIED EXCAVATION	2,600	CY	\$50.00	\$130,000.00	\$50.00	\$130,000.00	\$93.00	\$241,800.00
161	P-160	CEMENT TREATED SUBGRADE (18" THICK)	34,000	SY	\$6.00	\$204,000.00	\$6.00	\$204,000.00	\$4.00	\$136,000.00
162	P-160	PORTLAND CEMENT (5% CEMENT CONTENT FOR CTS)	1,000	TON	\$100.00	\$100,000.00	\$175.00	\$175,000.00	\$165.00	\$165,000.00
163	P-208	AGGREGATE BASE COURSE (6" THICK)	35,000	SY	\$20.00	\$700,000.00	\$20.00	\$700,000.00	\$18.25	\$638,750.00
164	P-403	HMA SURFACE COURSE	6,700	TON	\$200.00	\$1,340,000.00	\$130.00	\$871,000.00	\$95.00	\$636,500.00
165	P-602	BITUMINOUS PRIME COAT	47	TON	\$1,500.00	\$70,500.00	\$1,000.00	\$47,000.00	\$500.00	\$23,500.00
166	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$152,670.00	\$152,670.00	\$127,620.00	\$127,620.00 *	\$55,000.00	\$55,000.00
SUBTOTAL ADDITIVE ALTERNATE BID 6 (ITEMS 160 THROUGH 166)						\$2,697,170.00		\$2,254,620.00 *		\$1,896,550.00
ADDITIVE BID ALTERNATE #7										
167	P-152	UNCLASSIFIED EXCAVATION	850	CY	\$45.00	\$38,250.00	\$50.00	\$42,500.00	\$140.00	\$119,000.00
168	P-160	CEMENT TREATED SUBGRADE (18" THICK)	26,550	SY	\$6.00	\$159,300.00	\$6.00	\$159,300.00	\$4.00	\$106,200.00
169	P-160	PORTLAND CEMENT (5% CEMENT CONTENT FOR CTS)	900	TON	\$100.00	\$90,000.00	\$175.00	\$157,500.00	\$165.00	\$148,500.00
170	P-208	AGGREGATE BASE COURSE (6" THICK)	26,550	SY	\$20.00	\$531,000.00	\$20.00	\$531,000.00	\$18.00	\$477,900.00
171	P-403	HMA SURFACE COURSE	5,300	TON	\$150.00	\$795,000.00	\$130.00	\$689,000.00	\$95.00	\$503,500.00
172	P-602	BITUMINOUS PRIME COAT	35	TON	\$1,500.00	\$52,500.00	\$1,000.00	\$35,000.00	\$500.00	\$17,500.00
173	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$99,963.00	\$99,963.00	\$96,858.00	\$96,858.00 *	\$40,000.00	\$40,000.00
SUBTOTAL ADDITIVE ALTERNATE BID 7 (ITEMS 167 THROUGH 173)						\$1,766,013.00		\$1,711,158.00 *		\$1,412,600.00
ADDITIVE BID ALTERNATE #8										
174	P-152	UNCLASSIFIED EXCAVATION	1,900	CY	\$45.00	\$85,500.00	\$50.00	\$95,000.00	\$64.00	\$121,600.00
175	P-160	CEMENT TREATED SUBGRADE (18" THICK)	8,100	SY	\$6.00	\$48,600.00	\$6.00	\$48,600.00	\$4.00	\$32,400.00
176	P-160	PORTLAND CEMENT (5% CEMENT CONTENT FOR CTS)	240	TON	\$100.00	\$24,000.00	\$175.00	\$42,000.00	\$165.00	\$39,600.00
177	P-208	AGGREGATE BASE COURSE (6" THICK)	8,100	SY	\$20.00	\$162,000.00	\$20.00	\$162,000.00	\$19.00	\$153,900.00
178	P-403	HMA SURFACE COURSE	1,600	TON	\$150.00	\$240,000.00	\$130.00	\$208,000.00	\$95.00	\$152,000.00
179	P-602	BITUMINOUS PRIME COAT	10	TON	\$1,500.00	\$15,000.00	\$1,000.00	\$10,000.00	\$500.00	\$5,000.00
180	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$34,506.00	\$34,506.00	\$30,000.00	\$30,000.00	\$15,000.00	\$15,000.00
SUBTOTAL ADDITIVE ALTERNATE BID 8 (ITEMS 174 THROUGH 180)						\$ 609,606.00		\$595,600.00		\$519,500.00
ADDITIVE BID ALTERNATE #9										
181	SP-31	54" OUTFALL PIPE JOINT REPAIR	35	EACH	\$5,000.00	\$175,000.00	\$8,000.00	\$280,000.00	\$22,800.00	\$798,000.00
182	SP-26	6" WELDED HDPE WATERLINE	225	LF	\$250.00	\$56,250.00	\$100.00	\$22,500.00	\$265.00	\$59,625.00
183	SP-28	FIRE HYDRANT & APPURTENANCES	2	EACH	\$10,000.00	\$20,000.00	\$7,500.00	\$15,000.00	\$10,000.00	\$20,000.00
184	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$15,075.00	\$15,075.00	\$19,050.00	\$19,050.00 *	\$20,000.00	\$20,000.00
SUBTOTAL ADDITIVE ALTERNATE BID 9 (ITEMS 181 THROUGH 184)						\$ 266,325.00		\$336,550.00 *		\$897,625.00
ADDITIVE BID ALTERNATE #10										
185	SP-31	54" OUTFALL PIPE JOINT REPAIR	20	EACH	\$5,000.00	\$100,000.00	\$8,000.00	\$160,000.00	\$22,800.00	\$456,000.00
186	SP-26	6" WELDED HDPE WATERLINE	35	LF	\$250.00	\$8,750.00	\$100.00	\$3,500.00	\$250.00	\$8,750.00
187	SP-28	FIRE HYDRANT	1	EACH	\$10,000.00	\$10,000.00	\$7,500.00	\$7,500.00	\$10,000.00	\$10,000.00
188	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$7,125.00	\$7,125.00	\$10,000.00	\$10,000.00	\$12,000.00	\$12,000.00
SUBTOTAL ADDITIVE ALTERNATE BID 10 (ITEMS 185 THROUGH 188)						\$ 125,875.00		\$181,000.00		\$486,750.00
*DENOTES MATH ERROR. CORRECTED AMOUNT SHOWN.							* Math error - Mobilization higher than 6% on Additive Bid Alternates 2, 3, 4, 6, 7 and 9 * Mobilization error changed Alternates 2, 3, 4, 6, 7 and 9 Bid Totals (corrected amounts for Mobilization and Alternate Totals shown on bid tab)			

PALO ALTO AIRPORT APRON RECONSTRUCTION PROJECT, PHASE II FAA AIP PROJECT NO. 3-06-0182-010-2015 IFB NO. 171727					Ghilotti Construction Company, Inc. 246 Ghilotti Avenue Santa Rosa, CA 95407		A. Teichert & Son, Inc. dba Teichert Construction 5200 Franklin Drive Suite 115 Pleasanton, CA 94588		Proven Management, Inc. 225 3rd Street Oakland, CA 94607	
ITEM NO.	FAA SPEC NO.	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
BASE BID										
001	P-151	CLEARING AND GRUBBING	0.2	ACRE	\$25,000.00	\$5,000.00	\$235,000.00	\$47,000.00	\$42,500.00	\$8,500.00
002	P-156	COMPLIANCE WITH POLLUTION, EROSION, AND SILTATION CONTROL	1.0	LS	\$78,000.00	\$78,000.00	\$125,000.00	\$125,000.00	\$32,400.00	\$32,400.00
003	P-160	PULVERIZED ASPHALT	34,000	SY	\$2.00	\$68,000.00	\$3.00	\$102,000.00	\$10.50	\$357,000.00
004	P-608	EMULSIFIED ASPHALT SEAL COAT	2,750	SY	\$7.50	\$20,625.00	\$3.00	\$8,250.00	\$40.60	\$111,650.00
005	P-612	FIELD OFFICE	1	LS	\$15,000.00	\$15,000.00	\$30,000.00	\$30,000.00	\$39,800.00	\$39,800.00
006	P-620	MARKING REMOVAL	400	SF	\$30.00	\$12,000.00	\$6.00	\$2,400.00	\$4.00	\$1,600.00
007	P-620	PAINTSTRIPING (YELLOW, REFLECTORIZED)	4,200	SF	\$11.00	\$46,200.00	\$20.00	\$84,000.00	\$9.75	\$40,950.00
008	P-620	PAINTSTRIPING (WHITE, REFLECTORIZED)	2,200	SF	\$11.00	\$24,200.00	\$20.00	\$44,000.00	\$9.75	\$21,450.00
009	P-620	PAINTSTRIPING (GREEN, NON-REFLECTORIZED)	11,100	SF	\$8.00	\$88,800.00	\$15.00	\$166,500.00	\$9.75	\$108,225.00
010	P-620	SURFACE PAINTED TAXILANE MARKINGS	11	EACH	\$525.00	\$5,775.00	\$4,200.00	\$46,200.00	\$776.00	\$8,536.00
011	P-620	TIE-DOWN NUMBERING	56	EACH	\$100.00	\$5,600.00	\$185.00	\$10,360.00	\$194.00	\$10,864.00
012	D-701	15" HDPE STORM DRAIN	225	LF	\$250.00	\$56,250.00	\$160.00	\$36,000.00	\$700.00	\$157,500.00
013	D-751	ADJUST CATCH BASIN TO GRADE	7	EACH	\$4,500.00	\$31,500.00	\$1,800.00	\$12,600.00	\$1,200.00	\$8,400.00
014	D-751	ADJUST MANHOLE TO GRADE	7	EACH	\$1,500.00	\$10,500.00	\$1,800.00	\$12,600.00	\$1,400.00	\$9,800.00
015	D-751	48" MANHOLE	4	EACH	\$15,000.00	\$60,000.00	\$10,000.00	\$40,000.00	\$30,046.00	\$120,184.00
016	D-751	CATCH BASIN (CALTRANS D73, G1)	1	EACH	\$7,500.00	\$7,500.00	\$5,600.00	\$5,600.00	\$16,024.00	\$16,024.00
017	SP-3	VERTICAL FLOW CLARIFIER	1	EACH	\$40,000.00	\$40,000.00	\$55,000.00	\$55,000.00	\$339,500.00	\$339,500.00
018	SP-4	CATCH BASIN FILTRATION SYSTEM	8	EACH	\$6,400.00	\$51,200.00	\$12,000.00	\$96,000.00	\$6,578.00	\$52,624.00
019	SP-9	CONCRETE RIBBON CURB	100	LF	\$50.00	\$5,000.00	\$68.00	\$6,800.00	\$150.00	\$15,000.00
020	SP-11	BOLLARD	2	EACH	\$1,100.00	\$2,200.00	\$1,500.00	\$3,000.00	\$1,586.00	\$3,172.00
021	SP-13	JOINT SEALING	2,300	LF	\$8.00	\$18,400.00	\$6.00	\$13,800.00	\$23.80	\$54,740.00
022	SP-14	ADJUST UTILITY VAULT TO GRADE	2	EACH	\$4,500.00	\$9,000.00	\$6,000.00	\$12,000.00	\$7,575.00	\$15,150.00
023	SP-15	ADJUST JUNCTION BOX/HANDHOLE TO GRADE	6	EACH	\$850.00	\$5,100.00	\$6,000.00	\$36,000.00	\$3,787.00	\$22,722.00
024	SP-16	REMOVE EXISTING TIE-DOWN ANCHORS	207	EACH	\$100.00	\$20,700.00	\$250.00	\$51,750.00	\$203.00	\$42,021.00
025	SP-17	MILLING	4,900	SY	\$6.00	\$29,400.00	\$4.00	\$19,600.00	\$3.00	\$14,700.00
026	SP-23	POLLUTION CONTROL FACILITY AND APPURTENANCES	1	EACH	\$50,000.00	\$50,000.00	\$65,000.00	\$65,000.00	\$66,137.00	\$66,137.00
027	SP-24	6" SEWERLINE	470	LF	\$275.00	\$129,250.00	\$185.00	\$86,950.00	\$701.00	\$329,470.00
028	SP-25	SEWER CLEAN OUT	1	EACH	\$1,500.00	\$1,500.00	\$1,600.00	\$1,600.00	\$1,002.00	\$1,002.00
029	SP-26	10" WELDED HDPE WATERLINE	1,600	LF	\$175.00	\$280,000.00	\$260.00	\$416,000.00	\$401.00	\$641,600.00
030	SP-26	6" WELDED HDPE WATERLINE	130	LF	\$150.00	\$19,500.00	\$175.00	\$22,750.00	\$300.00	\$39,000.00
031	SP-27	10" GATE VALVE	4	EACH	\$3,000.00	\$12,000.00	\$4,000.00	\$16,000.00	\$6,009.00	\$24,036.00
032	SP-27	6" GATE VALVE	1	EACH	\$2,000.00	\$2,000.00	\$4,000.00	\$4,000.00	\$3,004.00	\$3,004.00
033	SP-28	FIRE HYDRANT & APPURTENANCES	1	EACH	\$9,000.00	\$9,000.00	\$11,000.00	\$11,000.00	\$40,062.00	\$40,062.00
034	SP-29	DOUBLE DETECTOR CHECK VALVE	1	EACH	\$20,000.00	\$20,000.00	\$50,000.00	\$50,000.00	\$30,046.00	\$30,046.00
035	T-906	HYDRO-SEEDING	500	SY	\$3.00	\$1,500.00	\$3.00	\$1,500.00	\$16.00	\$8,000.00
036	L-100	REMOVAL OF EXISTING LIGHT POLE ASSEMBLY (POLE, FIXTURE, PULL BOXES AND FOUNDATION)	5	EACH	\$7,000.00	\$35,000.00	\$7,000.00	\$35,000.00	\$5,215.00	\$26,075.00
037	L-100	NEW 30-FOOT APRON AREA LIGHT POLE WITH MOUNTING APPARATUS AND MAINTENANCE HINGES	4	EACH	\$50,000.00	\$200,000.00	\$30,000.00	\$120,000.00	\$22,156.00	\$88,624.00
038	L-100	NEW LED APRON AREA LIGHTING FIXTURE	8	EACH	\$8,000.00	\$64,000.00	\$10,000.00	\$80,000.00	\$36,300.00	\$290,400.00
039	L-100	NEW LED OBSTRUCTION LIGHTING FIXTURE (DOUBLE-HEAD)	4	EACH	\$2,000.00	\$8,000.00	\$2,500.00	\$10,000.00	\$5,532.00	\$22,128.00
040	L-100	TRANSFORMER AND ENCLOSURE FOR OBSTRUCTION LIGHTING FIXTURE	4	EACH	\$800.00	\$3,200.00	\$1,000.00	\$4,000.00	\$9,953.00	\$39,812.00
041	L-100	1" RIGID GALVANIZED STEEL CONDUIT	20	LF	\$120.00	\$2,400.00	\$140.00	\$2,800.00	\$43.00	\$860.00
042	L-100	NO. 6 AWG, 600V, TYPE THWN CABLE	4,000	LF	\$4.25	\$17,000.00	\$0.45	\$1,800.00	\$5.90	\$23,600.00
043	L-100	NO. 8 AWG, 600V, TYPE THWN CABLE	1,300	LF	\$4.00	\$5,200.00	\$4.25	\$5,525.00	\$6.40	\$8,320.00
044	L-108	NO. 6 AWG, BARE COUNTERPOISE WIRE	13,000	LF	\$4.25	\$55,250.00	\$4.50	\$58,500.00	\$6.20	\$80,600.00
045	L-110	2" CONCRETE-ENCASED SCHEDULE-40 PVC CONDUIT IN PAVEMENT	340	LF	\$35.00	\$11,900.00	\$42.00	\$14,280.00	\$44.00	\$14,960.00
046	L-110	1" PVC CONCRETE ENCASED CONDUIT	650	LF	\$30.00	\$19,500.00	\$35.00	\$22,750.00	\$44.00	\$28,600.00
047	L-110	2-2" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	380	LF	\$90.00	\$34,200.00	\$105.00	\$39,900.00	\$88.00	\$33,440.00
048	L-110	4-4" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	150	LF	\$145.00	\$21,750.00	\$200.00	\$30,000.00	\$175.00	\$26,250.00
049	L-100	36"x36" PULL BOX	9	EACH	\$13,000.00	\$117,000.00	\$16,000.00	\$144,000.00	\$45,356.00	\$408,204.00
050	L-100	36"x60" PULL BOX	2	EACH	\$13,000.00	\$26,000.00	\$16,000.00	\$32,000.00	\$46,500.00	\$93,000.00
051	L-100	36"x72" PULL BOX	1	EACH	\$13,000.00	\$13,000.00	\$16,000.00	\$16,000.00	\$65,000.00	\$65,000.00
052	L-100	48"x48" PULL BOX	1	EACH	\$13,000.00	\$13,000.00	\$16,000.00	\$16,000.00	\$46,347.00	\$46,347.00
053	L-110	2-4" & 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	510	LF	\$185.00	\$94,350.00	\$215.00	\$109,650.00	\$357.00	\$182,070.00
054	L-110	3-4" 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	490	LF	\$225.00	\$110,250.00	\$275.00	\$134,750.00	\$402.00	\$196,980.00

PALO ALTO AIRPORT APRON RECONSTRUCTION PROJECT, PHASE II FAA AIP PROJECT NO. 3-06-0182-010-2015 IFB NO. 171727					Ghilotti Construction Company, Inc. 246 Ghilotti Avenue Santa Rosa, CA 95407		A. Teichert & Son, Inc. dba Teichert Construction 5200 Franklin Drive Suite 115 Pleasanton, CA 94588		Proven Management, Inc. 225 3rd Street Oakland, CA 94607	
ITEM NO.	FAA SPEC NO.	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
055	L-110	4-4" & 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	150	LF	\$235.00	\$35,250.00	\$300.00	\$45,000.00	\$506.00	\$75,900.00
056	L-110	8-4" & 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	210	LF	\$345.00	\$72,450.00	\$400.00	\$84,000.00	\$650.00	\$136,500.00
057	L-110	2-5" PVC CONCRETE-ENCASED CONDUIT ELECTRICAL DUCT BANK	190	LF	\$195.00	\$37,050.00	\$230.00	\$43,700.00	\$385.00	\$73,150.00
058	L-110	3-5" PVC CONDUIT DUCT BANK	150	LF	\$215.00	\$32,250.00	\$250.00	\$37,500.00	\$460.00	\$69,000.00
059	L-115	ELECTRICAL PULL BOX, H20 TRAFFIC RATED	5	EACH	\$6,500.00	\$32,500.00	\$8,000.00	\$40,000.00	\$12,446.00	\$62,230.00
060	L-115	ELECTRICAL PULL BOX, AIRCRAFT-RATED, 36" BY 36" BY 30"	3	EACH	\$13,000.00	\$39,000.00	\$25,000.00	\$75,000.00	\$46,825.00	\$140,475.00
061	L-115	ELECTRICAL MANHOLE	1	EACH	\$52,009.00	\$52,009.00	\$75,000.00	\$75,000.00	\$48,154.00	\$48,154.00
062	L-125	TAXIWAY EDGE LIGHTING BASE CAN	10	EACH	\$2,200.00	\$22,000.00	\$2,600.00	\$26,000.00	\$5,100.00	\$51,000.00
063	L-126	INSTALL TIE-DOWN ANCHORS	168	EACH	\$700.00	\$117,600.00	\$1,500.00	\$252,000.00	\$1,609.00	\$270,312.00
064	U-200	UTILITY RELOCATION	1	LS	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00
065	M-100	MAINTENANCE AND PROTECTION OF TRAFFIC	1	LS	\$498,000.00	\$498,000.00	\$515,087.50	\$515,087.50	\$141,000.00	\$141,000.00
066	M-150	PROJECT SURVEY AND STAKEOUT	1	LS	\$77,580.00	\$77,580.00	\$88,000.00	\$88,000.00	\$76,117.00	\$76,117.00
067	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$180,000.00	\$180,000.00	\$238,470.15	\$238,470.15	\$203,000.00	\$203,000.00
SUBTOTAL ADDITIVE BASE BID (ITEMS 001 THROUGH 067)						\$3,362,389.00		\$4,212,972.65		\$5,891,977.00
ADDITIVE BID ALTERNATE #1										
068	P-151	CLEARING AND GRUBBING	0.3	ACRE	\$25,000.00	\$7,500.00	\$75,000.00	\$22,500.00	\$41,382.00	\$12,414.60
069	P-160	PULVERIZED ASPHALT	26,550	SY	\$2.00	\$53,100.00	\$2.00	\$53,100.00	\$4.54	\$120,537.00
070	P-156	COMPLIANCE WITH POLLUTION, EROSION, AND SILTATION CONTROL	1	LS	\$22,000.00	\$22,000.00	\$35,000.00	\$35,000.00	\$6,000.00	\$6,000.00
071	T-906	HYDRO-SEEDING	650	SY	\$3.00	\$1,950.00	\$2.25	\$1,462.50	\$16.00	\$10,400.00
072	P-612	FIELD OFFICE	1	LS	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$12,163.00	\$12,163.00
073	P-620	MARKING REMOVAL	120	SF	\$40.00	\$4,800.00	\$6.00	\$720.00	\$28.00	\$3,360.00
074	P-620	PAINTSTRIPING (YELLOW, REFLECTORIZED)	3,100	SF	\$11.00	\$34,100.00	\$20.00	\$62,000.00	\$9.45	\$29,295.00
075	P-620	PAINTSTRIPING (WHITE, REFLECTORIZED)	2,350	SF	\$11.00	\$25,850.00	\$20.00	\$47,000.00	\$9.40	\$22,090.00
076	P-620	SURFACE PAINTED TAXILANE MARKINGS	7	EACH	\$525.00	\$3,675.00	\$4,200.00	\$29,400.00	\$755.00	\$5,285.00
077	P-620	TIE-DOWN NUMBERING	44	EACH	\$100.00	\$4,400.00	\$185.00	\$8,140.00	\$189.00	\$8,316.00
078	D-701	15" HDPE STORM DRAIN	425	LF	\$250.00	\$106,250.00	\$175.00	\$74,375.00	\$660.00	\$280,500.00
079	D-751	ADJUST CATCH BASIN TO GRADE	4	EACH	\$4,500.00	\$18,000.00	\$1,800.00	\$7,200.00	\$1,887.00	\$7,548.00
080	D-751	CATCH BASIN (CALTRANS D73, G1)	2	EACH	\$7,500.00	\$15,000.00	\$5,600.00	\$11,200.00	\$15,097.00	\$30,194.00
081	D-751	ADJUST MANHOLE TO GRADE	4	EACH	\$1,500.00	\$6,000.00	\$1,800.00	\$7,200.00	\$1,321.00	\$5,284.00
082	SP-4	CATCH BASIN FILTRATION SYSTEM	4	EACH	\$6,400.00	\$25,600.00	\$15,000.00	\$60,000.00	\$6,198.00	\$24,792.00
083	SP-9	CONCRETE RIBBON CURB	125	LF	\$50.00	\$6,250.00	\$60.00	\$7,500.00	\$141.00	\$17,625.00
084	SP-16	REMOVE EXISTING TIE-DOWN ANCHORS	208	EACH	\$100.00	\$20,800.00	\$200.00	\$41,600.00	\$191.00	\$39,728.00
085	SP-17	MILLING	4,650	SY	\$6.00	\$27,900.00	\$4.00	\$18,600.00	\$2.00	\$9,300.00
086	SP-26	10" WELDED HDPE WATERLINE	575	LF	\$175.00	\$100,625.00	\$2.65	\$1,523.75	\$377.00	\$216,775.00
087	SP-27	10" GATE VALVE	1	EACH	\$3,000.00	\$3,000.00	\$1,500.00	\$1,500.00	\$7,550.00	\$7,550.00
088	SP-33	ABANDON EXISTING TIE-DOWN ANCHORS	5	EACH	\$500.00	\$2,500.00	\$400.00	\$2,000.00	\$1,141.00	\$5,705.00
089	SP-13	JOINT SEALING	975	LF	\$8.00	\$7,800.00	\$6.00	\$5,850.00	\$30.00	\$29,250.00
090	SP-14	ADJUST UTILITY VAULT TO GRADE	3	EACH	\$4,500.00	\$13,500.00	\$5,200.00	\$15,600.00	\$10,700.00	\$32,100.00
091	SP-15	ADJUST JUNCTION BOX/HANDHOLE TO GRADE	7	EACH	\$1,500.00	\$10,500.00	\$4,200.00	\$29,400.00	\$4,078.00	\$28,546.00
092	L-100	REMOVAL OF EXISTING LIGHT POLE ASSEMBLY (POLE, FIXTURE, PULL BOXES AND FOUNDATION)	11	EACH	\$7,000.00	\$77,000.00	\$10,000.00	\$110,000.00	\$8,977.00	\$98,747.00
093	L-100	NEW 30-FOOT APRON AREA LIGHT POLE WITH MOUNTING APPARATUS AND MAINTENANCE HINGES	4	EACH	\$50,000.00	\$200,000.00	\$30,000.00	\$120,000.00	\$20,873.00	\$83,492.00
094	L-100	NEW LED APRON AREA LIGHTING FIXTURE	7	EACH	\$8,000.00	\$56,000.00	\$10,000.00	\$70,000.00	\$34,198.00	\$239,386.00
095	L-100	NEW LED OBSTRUCTION LIGHTING FIXTURE (DOUBLE-HEAD)	4	EACH	\$2,000.00	\$8,000.00	\$2,500.00	\$10,000.00	\$4,500.00	\$18,000.00
096	L-100	TRANSFORMER AND ENCLOSURE FOR OBSTRUCTION LIGHTING FIXTURE	4	EACH	\$800.00	\$3,200.00	\$1,000.00	\$4,000.00	\$8,854.00	\$35,416.00
097	L-100	1" RIGID GALVANIZED STEEL CONDUIT	20	LF	\$120.00	\$2,400.00	\$140.00	\$2,800.00	\$41.00	\$820.00
098	L-100	2" CONCRETE-ENCASED SCHEDULE-40 PVC CONDUIT IN PAVEMENT	1,100	LF	\$35.00	\$38,500.00	\$42.00	\$46,200.00	\$41.00	\$45,100.00
099	L-100	NO. 6 AWG, 600V, TYPE THWN CABLE	5,000	LF	\$4.25	\$21,250.00	\$4.50	\$22,500.00	\$5.50	\$27,500.00
100	L-100	NO. 8 AWG, 600V, TYPE THWN CABLE	1,600	LF	\$4.00	\$6,400.00	\$4.25	\$6,800.00	\$6.00	\$9,600.00
101	L-100	36"X36" PULL BOX	11	EACH	\$13,000.00	\$143,000.00	\$18,000.00	\$198,000.00	\$42,729.00	\$470,019.00
102	L-100	36"X60" PULL BOX	2	EACH	\$13,000.00	\$26,000.00	\$18,000.00	\$36,000.00	\$43,788.00	\$87,576.00
103	L-100	36"X72" PULL BOX	1	EACH	\$13,000.00	\$13,000.00	\$18,000.00	\$18,000.00	\$61,185.00	\$61,185.00
104	L-100	48"X48" PULL BOX	1	EACH	\$13,000.00	\$13,000.00	\$15,000.00	\$15,000.00	\$43,664.00	\$43,664.00
105	L-108	NO. 6 AWG, BARE COUNTERPOISE WIRE	1,100	LF	\$4.25	\$4,675.00	\$4.50	\$4,950.00	\$5.90	\$6,490.00
106	L-110	1" PVC CONCRETE ENCASED CONDUIT	1,100	LF	\$30.00	\$33,000.00	\$35.00	\$38,500.00	\$41.00	\$45,100.00
107	L-110	2-4" & 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	700	LF	\$185.00	\$129,500.00	\$215.00	\$150,500.00	\$331.00	\$231,700.00



PALO ALTO AIRPORT APRON RECONSTRUCTION PROJECT, PHASE II FAA AIP PROJECT NO. 3-06-0182-010-2015 IFB NO. 171727					Ghiotti Construction Company, Inc. 246 Ghiotti Avenue Santa Rosa, CA 95407		A. Teichert & Son, Inc. dba Teichert Construction 5200 Franklin Drive Suite 115 Pleasanton, CA 94588		Proven Management, Inc. 225 3rd Street Oakland, CA 94607	
ITEM NO.	FAA SPEC NO.	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
108	L-110	3-4" & 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	450	LF	\$225.00	\$101,250.00	\$275.00	\$123,750.00	\$377.00	\$169,650.00
109	L-110	4-4" & 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	320	LF	\$235.00	\$75,200.00	\$300.00	\$96,000.00	\$430.00	\$137,600.00
110	L-110	6-4" & 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	115	LF	\$315.00	\$36,225.00	\$375.00	\$43,125.00	\$542.00	\$62,330.00
111	L-110	10-4" & 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	270	LF	\$385.00	\$103,950.00	\$450.00	\$121,500.00	\$595.00	\$160,650.00
112	L-110	15-4" & 1" PVC CONCRETE-ENCASED ELECTRICAL DUCT BANK	270	LF	\$525.00	\$141,750.00	\$625.00	\$168,750.00	\$788.00	\$212,760.00
113	L-115	ELECTRICAL PULL BOX, H20 TRAFFIC RATED	5	EACH	\$6,500.00	\$32,500.00	\$8,000.00	\$40,000.00	\$5,082.00	\$25,410.00
114	L-126	INSTALL TIE-DOWN ANCHORS	144	EACH	\$700.00	\$100,800.00	\$1,500.00	\$216,000.00	\$1,490.00	\$214,560.00
115	U-200	UTILITY RELOCATION	1	LS	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00
116	M-100	MAINTENANCE AND PROTECTION OF TRAFFIC	1	LS	\$22,000.00	\$22,000.00	\$250,000.00	\$250,000.00	\$41,867.00	\$41,867.00
117	M-150	PROJECT SURVEY AND STAKEOUT	1	LS	\$12,900.00	\$12,900.00	\$18,000.00	\$18,000.00	\$9,435.00	\$9,435.00
118	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$118,656.00	\$118,656.00	\$151,694.78	\$151,694.78	\$47,177.00	\$47,177.00
SUBTOTAL ADDITIVE ALTERNATE BID 1 (ITEMS 068 THROUGH 118)						\$2,096,256.00		\$2,679,941.00		\$3,599,991.60
ADDITIVE BID ALTERNATE #2										
119	P-160	PULVERIZED ASPHALT	7,900	SY	\$3.00	\$23,700.00	\$3.00	\$23,700.00	\$19.00	\$150,100.00
120	P-156	COMPLIANCE WITH POLLUTION, EROSION, AND SILTATION CONTROL	1	LS	\$5,000.00	\$5,000.00	\$40,000.00	\$40,000.00	\$3,893.00	\$3,893.00
121	P-612	FIELD OFFICE	1	LS	\$3,000.00	\$3,000.00	\$45,000.00	\$45,000.00	\$3,953.00	\$3,953.00
122	P-620	PAINTSTRIPING (YELLOW, REFLECTORIZED)	850	SF	\$11.00	\$9,350.00	\$4.00	\$3,400.00	\$23.00	\$19,550.00
123	D-701	8" HDPE STORM DRAIN	310	LF	\$225.00	\$69,750.00	\$135.00	\$41,850.00	\$383.00	\$118,730.00
124	D-701	12" HDPE STORM DRAIN	210	LF	\$250.00	\$52,500.00	\$145.00	\$30,450.00	\$407.00	\$85,470.00
125	D-701	21" HDPE STORM DRAIN	420	LF	\$275.00	\$115,500.00	\$250.97	\$105,407.40	\$500.00	\$210,000.00
126	D-751	CATCH BASIN (CALTRANS D73, G1)	9	EACH	\$7,500.00	\$67,500.00	\$6,000.00	\$54,000.00	\$9,788.00	\$88,092.00
127	D-751	ADJUST MANHOLE TO GRADE	1	EACH	\$1,500.00	\$1,500.00	\$12,000.00	\$12,000.00	\$872.00	\$872.00
128	D-751	48" MANHOLE	4	EACH	\$15,000.00	\$60,000.00	\$5,500.00	\$22,000.00	\$18,338.00	\$73,352.00
129	SP-4	CATCH BASIN FILTRATION SYSTEM	9	EACH	\$6,400.00	\$57,600.00	\$11,000.00	\$99,000.00	\$4,029.00	\$36,261.00
130	SP-9	CONCRETE RIBBON CURB	2300	LF	\$50.00	\$115,000.00	\$30.00	\$69,000.00	\$43.00	\$98,900.00
131	SP-10	TRENCH DRAIN	2,230	LF	\$125.00	\$278,750.00	\$320.00	\$713,600.00	\$143.00	\$318,890.00
132	SP-13	JOINT SEALING	60	LF	\$8.00	\$480.00	\$5.00	\$300.00	\$106.00	\$6,360.00
133	SP-24	6" SEWERLINE	560	LF	\$275.00	\$154,000.00	\$100.39	\$56,218.40	\$445.00	\$249,200.00
134	U-200	UTILITY RELOCATION	1	LS	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00
135	U-201	STORM DRAIN REMOVAL	1	LS	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00
136	M-100	MAINTENANCE AND PROTECTION OF TRAFFIC	1	LS	\$55,000.00	\$55,000.00	\$130,000.00	\$130,000.00	\$53,106.00	\$53,106.00
137	M-150	PROJECT SURVEY AND STAKEOUT	1	LS	\$12,000.00	\$12,000.00	\$22,000.00	\$22,000.00	\$6,110.00	\$6,110.00
138	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$60,000.00	\$60,000.00	\$82,722.15	\$82,722.15	\$30,467.00	\$30,467.00
SUBTOTAL ADDITIVE ALTERNATE BID 2 (ITEMS 119 THROUGH 138)						\$1,265,630.00		\$1,675,647.95		\$1,678,306.00
ADDITIVE BID ALTERNATE #3										
139	P-152	UNCLASSIFIED EXCAVATION	2,600	CY	\$120.00	\$312,000.00	\$60.00	\$156,000.00	\$12.35	\$32,110.00
140	P-160	CEMENT TREATED SUBGRADE (12" THICK)	34,000	SY	\$3.00	\$102,000.00	\$8.00	\$272,000.00	\$3.25	\$110,500.00
141	P-160	PORTLAND CEMENT (4% CEMENT CONTENT FOR CTS)	730	TON	\$165.00	\$120,450.00	\$180.00	\$131,400.00	\$217.00	\$158,410.00
142	P-208	AGGREGATE BASE COURSE (6" THICK)	35,000	SY	\$19.00	\$665,000.00	\$20.00	\$700,000.00	\$30.00	\$1,050,000.00
143	P-403	HMA SURFACE COURSE	6,700	TON	\$115.00	\$770,500.00	\$155.00	\$1,038,500.00	\$186.00	\$1,246,200.00
144	P-602	BITUMINOUS PRIME COAT	47	TON	\$900.00	\$42,300.00	\$2,000.00	\$94,000.00	\$1,400.00	\$66,800.00
145	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$120,000.00	\$120,000.00	\$102,920.05	\$102,920.05	\$30,467.00	\$30,467.00
SUBTOTAL ADDITIVE ALTERNATE BID 3 (ITEMS 139 THROUGH 145)						\$2,132,250.00		\$2,494,820.05		\$2,693,487.00
ADDITIVE BID ALTERNATE #4										
146	P-152	UNCLASSIFIED EXCAVATION	850	CY	\$250.00	\$212,500.00	\$60.00	\$51,000.00	\$10.00	\$8,500.00
147	P-160	CEMENT TREATED SUBGRADE (12" THICK)	26,550	SY	\$3.00	\$79,650.00	\$8.00	\$212,400.00	\$3.25	\$86,287.50
148	P-160	PORTLAND CEMENT (4% CEMENT CONTENT FOR CTS)	570	TON	\$165.00	\$94,050.00	\$180.00	\$102,600.00	\$444.00	\$253,080.00
149	P-208	AGGREGATE BASE COURSE (6" THICK)	26,550	SY	\$19.00	\$504,450.00	\$20.00	\$531,000.00	\$25.66	\$681,273.00
150	P-403	HMA SURFACE COURSE	5,300	TON	\$115.00	\$609,500.00	\$155.00	\$821,500.00	\$177.00	\$938,100.00
151	P-602	BITUMINOUS PRIME COAT	35	TON	\$900.00	\$31,500.00	\$1,500.00	\$52,500.00	\$1,400.00	\$49,000.00
152	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$90,000.00	\$90,000.00	\$106,260.00	\$106,260.00	\$30,467.00	\$30,467.00
SUBTOTAL ADDITIVE ALTERNATE BID 4 (ITEMS 146 THROUGH 152)						\$1,621,650.00		\$1,877,260.00		\$2,046,707.50
ADDITIVE BID ALTERNATE #5										
153	P-152	UNCLASSIFIED EXCAVATION	1,900	CY	\$135.00	\$256,500.00	\$30.00	\$57,000.00	\$10.25	\$19,475.00
154	P-160	CEMENT TREATED SUBGRADE (12" THICK)	8,100	SY	\$4.00	\$32,400.00	\$12.00	\$97,200.00	\$3.25	\$26,325.00
155	P-160	PORTLAND CEMENT (4% CEMENT CONTENT FOR CTS)	180	TON	\$165.00	\$29,700.00	\$180.00	\$32,400.00	\$217.00	\$39,060.00
156	P-208	AGGREGATE BASE COURSE (6" THICK)	8,100	SY	\$19.00	\$153,900.00	\$25.00	\$202,500.00	\$18.40	\$149,040.00
157	P-403	HMA SURFACE COURSE	1,600	TON	\$115.00	\$184,000.00	\$165.00	\$264,000.00	\$177.00	\$283,200.00
158	P-602	BITUMINOUS PRIME COAT	10	TON	\$900.00	\$9,000.00	\$2,000.00	\$20,000.00	\$1,400.00	\$14,000.00
159	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$35,000.00	\$35,000.00	\$40,386.00	\$40,386.00	\$30,467.00	\$30,467.00
SUBTOTAL ADDITIVE ALTERNATE BID 5 (ITEMS 153 THROUGH 159)						\$700,500.00		\$713,486.00		\$561,567.00



PALO ALTO AIRPORT APRON RECONSTRUCTION PROJECT, PHASE II FAA AIP PROJECT NO. 3-06-0182-010-2015 IFB NO. 171727					Ghiotti Construction Company, Inc. 246 Ghiotti Avenue Santa Rosa, CA 95407		A. Teichert & Son, Inc. dba Teichert Construction 5200 Franklin Drive Suite 115 Pleasanton, CA 94588		Proven Management, Inc. 225 3rd Street Oakland, CA 94607	
ITEM NO.	FAA SPEC NO.	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
ADDITIVE BID ALTERNATE #6										
160	P-152	UNCLASSIFIED EXCAVATION	2,600	CY	\$145.00	\$377,000.00	\$70.00	\$182,000.00	\$12.34	\$32,084.00
161	P-160	CEMENT TREATED SUBGRADE (18" THICK)	34,000	SY	\$3.00	\$102,000.00	\$20.00	\$680,000.00	\$3.25	\$110,500.00
162	P-160	PORTLAND CEMENT (5% CEMENT CONTENT FOR CTS)	1,000	TON	\$165.00	\$165,000.00	\$180.00	\$180,000.00	\$217.00	\$217,000.00
163	P-208	AGGREGATE BASE COURSE (6" THICK)	35,000	SY	\$19.00	\$665,000.00	\$25.00	\$875,000.00	\$29.00	\$1,015,000.00
164	P-403	HMA SURFACE COURSE	6,700	TON	\$115.00	\$770,500.00	\$200.00	\$1,340,000.00	\$177.00	\$1,185,900.00
165	P-602	BITUMINOUS PRIME COAT	47	TON	\$900.00	\$42,300.00	\$2,000.00	\$94,000.00 *	\$1,400.00	\$65,800.00
166	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$30,467.00	\$30,467.00
SUBTOTAL ADDITIVE ALTERNATE BID 6 (ITEMS 160 THROUGH 166)						\$2,221,800.00		\$3,451,000.00		\$2,656,751.00
ADDITIVE BID ALTERNATE #7										
167	P-152	UNCLASSIFIED EXCAVATION	850	CY	\$250.00	\$212,500.00	\$105.00	\$89,250.00	\$34.11	\$28,993.50
168	P-160	CEMENT TREATED SUBGRADE (18" THICK)	26,550	SY	\$3.00	\$79,650.00	\$20.00	\$531,000.00	\$3.24	\$86,022.00
169	P-160	PORTLAND CEMENT (5% CEMENT CONTENT FOR CTS)	900	TON	\$165.00	\$148,500.00	\$180.00	\$162,000.00	\$216.00	\$194,400.00
170	P-208	AGGREGATE BASE COURSE (6" THICK)	26,550	SY	\$19.00	\$504,450.00	\$25.00	\$663,750.00	\$28.50	\$756,675.00
171	P-403	HMA SURFACE COURSE	5,300	TON	\$115.00	\$609,500.00	\$140.00	\$742,000.00	\$177.00	\$938,100.00
172	P-602	BITUMINOUS PRIME COAT	35	TON	\$900.00	\$31,500.00	\$1,850.00	\$64,750.00	\$1,400.00	\$49,000.00
173	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$80,000.00	\$80,000.00	\$100,000.00	\$100,000.00	\$30,467.00	\$30,467.00
SUBTOTAL ADDITIVE ALTERNATE BID 7 (ITEMS 167 THROUGH 173)						\$1,666,100.00		\$2,352,750.00		\$2,083,657.50
ADDITIVE BID ALTERNATE #8										
174	P-152	UNCLASSIFIED EXCAVATION	1,900	CY	\$135.00	\$256,500.00	\$42.00	\$79,800.00	\$27.56	\$52,364.00
175	P-160	CEMENT TREATED SUBGRADE (18" THICK)	8,100	SY	\$3.00	\$24,300.00	\$22.00	\$178,200.00	\$20.58	\$166,698.00
176	P-160	PORTLAND CEMENT (5% CEMENT CONTENT FOR CTS)	240	TON	\$165.00	\$39,600.00	\$180.00	\$43,200.00	\$234.25	\$56,220.00
177	P-208	AGGREGATE BASE COURSE (6" THICK)	8,100	SY	\$19.00	\$153,900.00	\$20.00	\$162,000.00	\$38.20	\$309,420.00
178	P-403	HMA SURFACE COURSE	1,600	TON	\$115.00	\$184,000.00	\$175.00	\$280,000.00	\$194.00	\$310,400.00
179	P-602	BITUMINOUS PRIME COAT	10	TON	\$900.00	\$9,000.00	\$1,850.00	\$18,500.00	\$2,454.00	\$24,540.00
180	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$30,000.00	\$30,000.00	\$45,702.00	\$45,702.00 *	\$30,467.00	\$30,467.00
SUBTOTAL ADDITIVE ALTERNATE BID 8 (ITEMS 174 THROUGH 180)						\$697,300.00		\$807,402.00 *		\$950,109.00
ADDITIVE BID ALTERNATE #9										
181	SP-31	54" OUTFALL PIPE JOINT REPAIR	35	EACH	\$15,000.00	\$525,000.00	\$9,000.00	\$315,000.00	\$7,575.00	\$265,125.00
182	SP-26	6" WELDED HDPE WATERLINE	225	LF	\$175.00	\$39,375.00	\$95.00	\$21,375.00	\$261.00	\$58,725.00
183	SP-28	FIRE HYDRANT & APPURTENANCES	2	EACH	\$9,000.00	\$18,000.00	\$7,000.00	\$14,000.00	\$24,390.00	\$48,780.00
184	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$20,000.00	\$20,000.00	\$21,022.50	\$21,022.50 *	\$22,357.80	\$22,357.80 *
SUBTOTAL ADDITIVE ALTERNATE BID 9 (ITEMS 181 THROUGH 184)						\$602,375.00		\$371,397.50 *		\$394,987.80 *
ADDITIVE BID ALTERNATE #10										
185	SP-31	54" OUTFALL PIPE JOINT REPAIR	20	EACH	\$15,000.00	\$300,000.00	\$9,000.00	\$180,000.00	\$7,239.00	\$144,780.00
186	SP-26	6" WELDED HDPE WATERLINE	35	LF	\$175.00	\$6,125.00	\$150.00	\$5,250.00	\$261.00	\$9,135.00
187	SP-28	FIRE HYDRANT	1	EACH	\$9,000.00	\$9,000.00	\$7,000.00	\$7,000.00	\$24,391.00	\$24,391.00
188	GP-105	MOBILIZATION (6% MAXIMUM)	1	LS	\$18,907.50	\$18,907.50	\$11,535.00	\$11,535.00 *	\$10,698.36	\$10,698.36 *
SUBTOTAL ADDITIVE ALTERNATE BID 10 (ITEMS 185 THROUGH 188)						\$315,125.00		\$203,785.00 *		\$189,004.36 *
* DENOTES MATH ERROR. CORRECTED AMOUNT SHOWN.					* Math error - Bid Total for Alternate 1 was incorrect, causing Mobilization for Alternate 1 to be higher than 6%. Corrected amounts shown.		* Bid Totals not written/typed on bid forms.		* Math error - Alternate 3, Bid Item 142, Total Price incorrect. This error resulted in incorrect Alternate 3 Bid Total. Corrected amounts shown.	
					* Math error - Mobilization for Alternate 10 was higher than 6% (this caused Bid Total for Alternate 10 to also be incorrect). Corrected amounts shown.		* Math error - Mobilization for Base Bid, and Alternates 1, 4, 5, 8, 9 and 10 higher than 6% (mobilization error resulted in Bid Total errors). Corrected amounts shown.		Math error - Mobilization: higher than 6% on Alternates 9 and 10 (mobilization error resulted in Bid Total error). Corrected amounts shown.	
							* Math error - Alternate 1, Bid Item 086, Total Price incorrect. Corrected amount shown.			
							* Math error - Alternate 2, Bid Item 122, Total Price incorrect. Corrected amount shown.			
							* Math error - Alternate 3, Bid Item 144, Total Price incorrect. Corrected amount shown.			
							* Math error - Alternate 6, Bid Item 165, Total Price incorrect. Corrected amount shown.			

C&S ENGINEERS, INC.

I CERTIFY THAT THIS IS A TRUE AND CORRECT TABULATION OF BIDS RECEIVED JULY 26, 2018

SIGNED: 

DATE: 30-Jul-18