# AMENDMENT No. 1 TO CMAR AGREEMENT BETWEEN COUNTY OF SONOMA

# AND GRANITE CONSTRUCTION COMPANY, INC (AIRLINE APRON PHASE 1A)

This Amendment No. 1 to the CMAR Agreement (as defined below) ("Amendment") is made and entered into effective January 7,2025 between County of Sonoma ("County") and Granite Construction Company, Inc ("Contractor"). The County and Contractor may be referred to individually as a "Party," or collectively as the "Parties."

- I. WHEREAS, after a competitive solicitation process pursuant to Public Contract Code section 20146, the County and Contractor entered into a construction manager at-risk ("CMAR") agreement dated September 18, 2023 ("CMAR Agreement") for the Charles M. Schulz Sonoma County Airport Apron C Pavement Reconstruction CMAR("Project"); and
- II. WHEREAS, at the time the Parties executed the CMAR Agreement, the Contractor was only required to perform Preconstruction Services and to procure subcontractors prior to the Parties finalizing a Guaranteed Project Cost for the Project, and, as a result, the CMAR Agreement contained placeholder provisions for Liquidated Damages, exhibits, and other documents, which were to be finalized and agreed to by the Parties at the conclusion of Preconstruction Services; and
- III. WHEREAS, the Contractor has completed Preconstruction Services and the Parties have agreed upon a Guaranteed Project Cost for the Project, and it is now the desire and intention of the Parties to amend the CMAR Agreement as indicated in this Amendment No. 1 to include the finalized Guaranteed Project Cost for Project Phase 1a, final Liquidated Damages amounts, and to amend other provisions of the CMAR Agreement.

**NOW, THEREFORE**, in light of the foregoing facts and in further consideration of the promises and agreements of the Parties set forth herein below, it is mutually agreed as follows:

- A. <u>REPLACE</u> Document 00 01 15 of the CMAR Agreement ("List of Drawings, Specifications, Tables and Schedules") with the Amended Document 00 01 15 attached hereto as Attachment 1.
- B. REPLACE Section 2(b) of Document 00 52 13 of the CMAR Agreement ("Agreement") with the following:
  - **b. Interpretation of Contract Documents/Order of Precedence**: Questions concerning the intent, precedence, or meaning of the Contract Documents, including the Drawings or Specifications, shall be submitted to the County for interpretation. Inconsistencies in the Contract Documents shall be resolved by giving precedence in the following order:
    - (i) Required federal contract provisions
    - (ii) Permits issued by jurisdictional regulatory agencies

- (iii) Change orders
- (iv) Addenda/Amendments
- (v) Contract
- (vi) Notice to proceed
- (vii) Notice of award
- (viii) Project specific requirements for Airport construction
- (ix) Technical specifications
- (x) FAA general contract provisions
- (xi) County's general conditions
- (xii) Drawings/plans

In case of conflict, the greater quantity and/or higher standard of workmanship shall apply unless the County expressly in writing (e.g., via a Change Order) accepts a lesser quantity or lower quality of workmanship and the Contract Price is adjusted accordingly. The decision of the County in the matter shall be final.

- **C. REPLACE** Section 4(c)(ii)(2) of Agreement with the following:
  - (2) The Construction Schedule, developed during the Preconstruction Services, shall control unless revised by mutual agreement of the parties pursuant to all applicable terms of the Contract Documents as set forth in Section 2 hereof.
  - (3) An augmented Construction Schedule relating to any additional work or any subsequent construction phases may be incorporated into this Agreement via amendment or change order.
- **D. REPLACE** Section 6 of Document 00 52 13 of Agreement with the following:
  - **6. Liquidated Damages**: Time is of the essence for all Work to be performed. It is hereby understood and agreed that it is and will be difficult and/or impossible to ascertain and determine the actual damage that County will sustain in the event of and by reason of Contractor's delay; therefore, pursuant to Government Code section 53069.85 and Public Contract Code section 7203, Contractor shall forfeit and pay to County the following sum(s) as liquidated damages ("**Liquidated Damages**"):
    - Daily Milestone No. 1: Two Thousand dollars for the first thirty minutes not achieving reopening for operations to occur for airport and airline. This amount of liquidated damaged is TWO THOUSAND DOLLARS (\$2,000).
    - Daily Milestone No. 2: Five Thousand dollars for each thirty minutes after milestone 1. This
      amount of liquidated damages is FIVE THOUSAND DOLLARS (\$5,000) per each additional thirty
      minutes after milestone 1 is not achieved.
    - **Project Completion:** Three Thousand dollars per day. This amount **THREE THOUSAND DOLLARS** (\$3,000) is for each day's delay beyond the Contract Time to complete all the Work.
    - a. The above liquidated damages have been calculated as final for Phase 1A of the project. Liquidated damages may be recalculated or modified as may relate to future phases or additive change orders.

- b. Each portion of the Liquidated Damages shall be calculated cumulatively. For example, if Contractor is late in completing two milestones and the entire Project, Contractor will forfeit and pay three separate Liquidated Damages amounts. It is hereby understood and agreed that neither the total cumulative Liquidate Damages amount nor any portion of the Liquidated Damage amount are penalties.
- c. County may deduct Liquidated Damages from money due or that may become due Contractor under this Agreement. Contractor's forfeiture of Liquidated Damages to County, and County right to retain Liquidated Damages, are as indicated in Government Code section 53069.85 and as indicated herein and in the General Conditions. Liquidated Damages are automatically and without notice of any kind forfeited and payable by Contractor upon the accrual of each day of delay. Neither County's failure or delay in deducting Liquidated Damages from payments otherwise due the Contractor, nor County's failure or delay in notifying Contractor of the forfeiture and payment of Liquidated Damages, shall be deemed a waiver of County's right to Liquidated Damages and/or the County's right to withhold Liquidated Damages from any amounts that would otherwise be payable to the Contractor.
- d. Contractor and Surety shall be liable for and pay to County the entire amount of Liquidated Damages including any portion that exceeds the amount of the Contract Price then held, retained or controlled by County.
- e. Liquidated Damages shall be in addition, and not in lieu of, County's right to charge Contractor for the County's cost of completing or correcting items of the Work.
- **E. REPLACE** Section 2 of Exhibit A to Agreement with the following:

<u>Scope of Contractor's Construction Services</u>. Contractor, as the County's development consultant and authorized representative as contemplated by Business and Professions Code 7040, agrees to perform the services described herein.

Contractor shall perform management and coordination services, including but not limited to the following ("Construction Services"):

Contractor shall complete Phase 1A of the Charles M Schulz – Sonoma County Airport Terminal Apron Reconstruction Project. Phase 1A includes demolition and preparation work for the future construction phases, and improvements to the underground storm drain infrastructure that will serve the future apron pavement. The demolition work will primarily focus on the area north of the existing parking position 1 and will feature removal of existing asphalt and concrete pavements, tie-down anchors, Security Identification Display Area (SIDA) fence, and underground storm drain infrastructure. As part of Phase 1A, the existing earthen berm between Apron A and the ground support equipment (GSE) staging areas will be removed to prepare the area for construction of the new apron pavement. Improvements to the underground storm drain infrastructure will consist of the installation of catch basins and pipes to collect and convey surface runoff, and installation of an underground filtration and detention system including an oil water separator, bio filtration vault, and an underground detention chamber.

As indicated in Section 1.4 of the RFQ/P, due to FAA funding limitations, the Project will be phased over a two-year period. Contractor shall complete Phase 1A, the Contractor's scope and budget for which account for a multi-phase Project.

- **F. ADD TO** Section 1 of Exhibit B to Agreement the following, as Section 1.4:
  - 1.4 Preconstruction work for further phases of the Project may be completed upon the Direction of the Director of Sonoma Public Infrastructure, under the existing maximum Preconstruction Services Payment amount set forth in Section 1.1, or as per agreed additive change order.
- **G.** <u>DELETE FROM</u> Section 2 of Exhibit B to Agreement all language contained therein. Section 2 shall remain as a blank section.
- **H. REPLACE** Section 3 of Exhibit B to Agreement with the following:

Guaranteed Maximum Price (or Guaranteed Project Cost). Contractor will cause the Phase 1A of the Project, as described in Exhibit A hereto to be constructed for a guaranteed maximum price ("Guaranteed Project Cost" or "GPC" or "Guaranteed Maximum Price" or "GMP" or "Contract Price") of Three Million Nine Hundred Ninety Three Thousand Two Hundred Ninety Seven Dollars (\$3,993,297.00). Except as indicated herein for modifications to the Project approved by the County, Contractor will not seek additional compensation from County in excess of GMP. County shall pay the GMP to Contractor as provided in the Contract Documents. The GMP includes the following components and as further detailed herein:

\*Section 3.1- ending in subsection 3.1.6 is unmodified\*

- <u>DELETE FROM</u> Section 3, Subsection 3.2 of Exhibit B to Agreement all language contained therein. Subsection 3.2 shall remain as a blank section.
- J. <u>REPLACE</u> the Section entitled "Construction Schedule" on Exhibit C to Agreement with the following:

<u>Construction Schedule.</u> The Construction Schedules shall be as set forth in Attachment C-1 hereto. In addition to Phase IA work, the Contractor shall develop a schedule for construction of the second phase of work to be implemented.

- K. <u>ADD</u> to Exhibit C as Attachment C-1 there the document attached to this Amendment as Attachment 2.
- L. <u>REPLACE</u> the text of Exhibit D to Agreement with the following text, and attach to Exhibit D as Attachment D-1 the document attached hereto as Attachment 3 to this Amendment:

#### **SCHEDULE OF VALUES**

Attachment D-1 hereto shall be the Schedule of Values that comply with the requirements of the General Conditions, for all work to be completed as Phase 1A and as part of the Guaranteed Maximum Price for Phase 1A.

M. <u>REPLACE</u> the text of Supplementary Condition 2(a) in Document 00 73 00 with the following:

<u>CEQA</u>. Contractor shall comply will all applicable mitigation measures, if any, adopted by any public agency with respect to this Project pursuant to the California Environmental Quality Act. (Public Resources Code section 21000 et. seq.) No mitigation measures have been adopted for Phase 1A of the project.

- **N.** <u>REPLACE</u> the text of Supplementary Condition 11(b) in Document 00 73 00 with the following:
  - **b.** <u>Certain Fees Not Part of Permits.</u> Notwithstanding the above requirements, County shall oversee the obtaining and payment of the following permits, fees or charges, but Contractor shall assist in those efforts as requested by the County at no additional cost to County:

#### **GRADING PERMITS**

- O. Board Approval. The Parties acknowledge that this Amendment No. 1 is subject to approval or ratification by the County Board of Supervisors ("Board"). In the event that the Board rejects this Amendment No. 1, none of the Parties shall be deemed to have waived any rights with respect to the CMAR Agreement.
- **P. No Other Changes.** All other provisions of the CMAR Agreement shall remain in full force and effect and are reaffirmed. If there is any conflict between this Amendment No. 1 and any provision of CMAR Agreement, the provisions of this Amendment No. 1 shall control.
- Q. Integration Clause. This Amendment No. 1, including any attachment, exhibits or items incorporated by reference into this Amendment No. 1, which shall include the CMAR Agreement, as amended hereby, is considered a completely integrated agreement, supersedes all previous contracts of any kind, oral or written, and constitutes the entire understanding and agreement of the Parties hereto. No extrinsic evidence of any kind or character may be admitted to vary or supplement the terms of this completely integrated agreement, unless evidenced by an amendment to the CMAR Agreement superseding this Amendment No. 1. Contractor shall be entitled to no other benefits than those specified herein. No changes, amendments or alterations shall be effective unless in writing and signed by both Parties. Contractor specifically acknowledges that in entering this Amendment No. 1, Contractor relies solely upon the provisions contained in this Agreement.

[SIGNATURES ON THE FOLLOWING PAGE]

#### **ACCEPTED AND AGREED** on the date indicated below:

CONTRACTOR: GRANITE CONSTRUCTION	COUNTY: COUNTY OF SONOMA
Ву:	
Name:	By: Johannes Hoevertsz Director, Sonoma Public Infrastructure
Date:	Date:
	CERTIFICATES OF INSURANCE ON FILE WITH AND APPROVED AS TO SUBSTANCE FOR COUNTY:
	By: Department Head/Airport Division Manager
	Date:
	APPROVED AS TO FORM FOR COUNTY:
	By: County Counsel
	Date:

## **ATTACHMENT 1 TO AMENDMENT**

#### **DOCUMENT 00 01 15**

#### **LIST OF DRAWINGS, TABLES AND SCHEDULES**

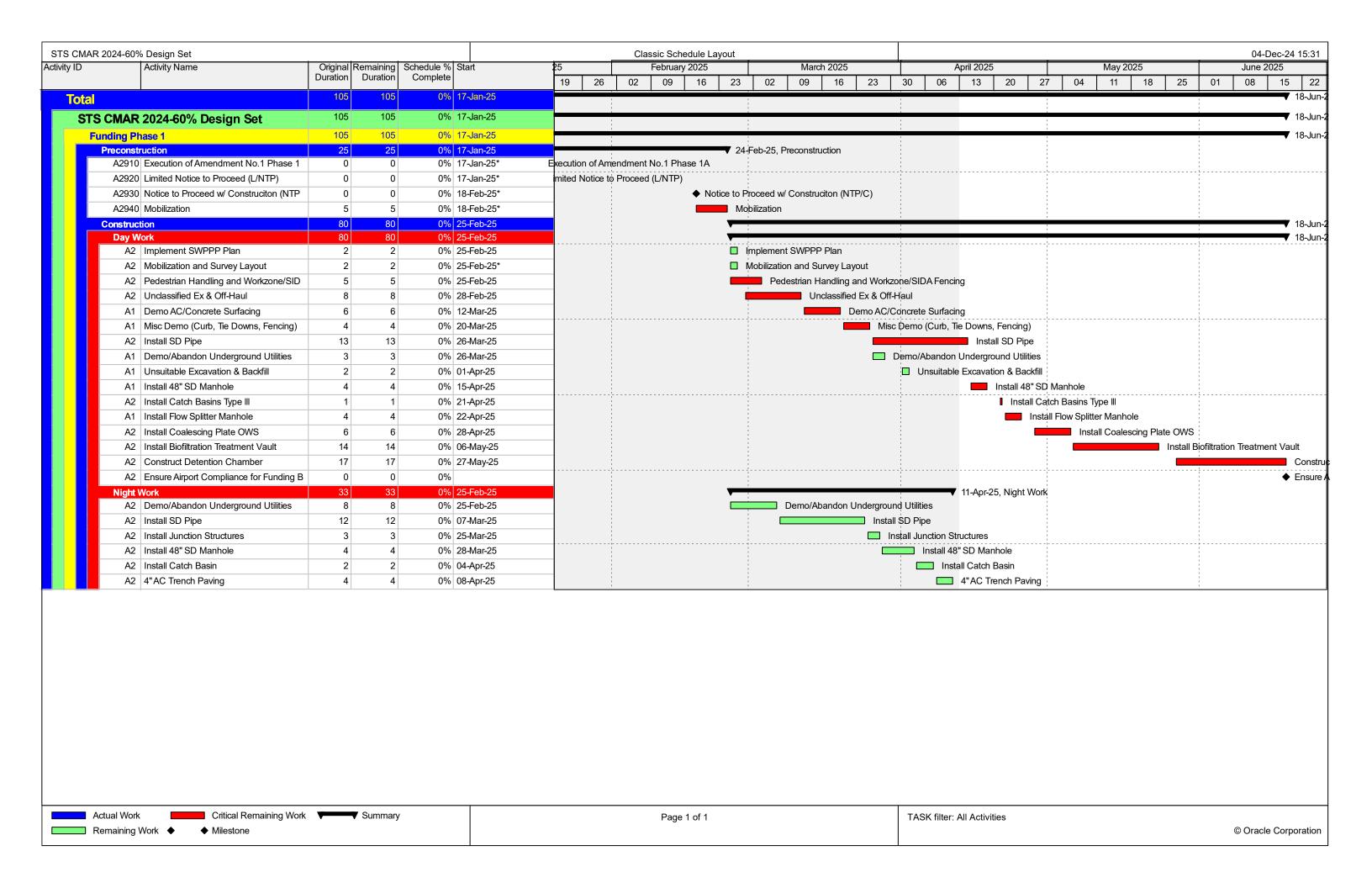
#### **DRAWINGS**

Exhibits illustrating Project elements are attached to this document. These elements are subject to change as the design is finalized, upon agreement of the Parties hereto.

The following plan sheets are included in the Contract documents.

Sheet number	Description
G-001	Cover Sheet
G-002	Sheet Index, Legend, and Abbreviations
G-021	Project Layout Plan
G-041	Survey Control Plan
G-081	Construction Safety and Phasing Plan – Phase 1
G-082	Construction Safety and Phasing Plan – Phase 2
G-083	Construction Safety and Phasing Plan – Phase 3
G-084	Construction Safety and Phasing Details and Notes
B-051	Plan and Log of Soil Borings
C-021	Erosion Control Plan
C-031	Erosion Control Details
C-051	Demolition Plan
C-061	Demolition Details
C-101	Grading and Paving Plan – 1
C-102	Grading and Paving Plan – 2
C-301	Typical Sections
C-311	Paving Details
C-341	PCC Jointing Details
C-441	Storm Drain Plan and Profiles – 1
C-442	Storm Drain Plan and Profiles – 2
C-451	Storm Drain Details
C-452	Storm Water Mitigation Plan and Details
C-601	Fencing Plan
C-631	Fencing Details
C-651	Temporary Pavement Marking Plan – Phase 1
C-652	Temporary Pavement Marking Plan – Phase 2
C-653	Temporary Pavement Marking Plan – Phase 3
C-654	Final Pavement Marking Plan
C-671	Pavement Marking Details
E-101	Electrical Removals Plan – 1
E-102	Electrical Removals Plan – 2
E-201	Electrical Layout Plan – 1
E-202	Electrical Layout Plan – 2
E-501	Wiring Diagrams
E-502	Panel Schedules
E-601	Electrical Details – 1
E-602	Electrical Details – 2

#### **ATTACHMENT 2 TO AMENDMENT**



## **ATTACHMENT 3 TO AMENDMENT**

				Phase 1A	<b>\</b>	<del></del>				
Item	Description	Quantity	UM	Labor	Equipment	Materials	Subcontract	Total Cost	Unit Price	Total
	1 Airfield Safety and Traffic Control	1	LS					\$176,384	\$203,600.00	\$203,600.00
	Fingerprinting/Online Training	15	ea	\$10,361	\$312	\$0	\$0	\$10,673		
	Gatekeeper	50	day	\$41,513	\$10,375	\$0	\$0	\$51,888		
	Install/Maintain/Remove Barricades and Lights	825	lf ,	\$19,614	\$5,013	\$17,250	\$0	\$41,877		
	Daily Sweeping	50	day	\$17,443	\$14,603	\$0	\$22,800	\$54,846		
	Fence Barrier	570	lf	\$0	\$0	\$0	\$17,100	\$17,100		
	2 Construction Staking & Survey Layout	1	LS	\$2,478	\$415		\$20,000	\$22,894	\$25,400.00	\$25,400.00
	3 Contractor Quality Control Program	1	LS	\$0	·		\$20,100	\$20,100	\$22,110.00	\$22,110.00
	Includes: QC plans for Phase 1A, Asphalt Concrete Mix Design Verification and Field Testing for Compaction; Aggregate Base Verification and Field Testing for Verification									
	4 Prepare SWPPP	1	LS				\$2,500	\$2,500	\$2,750.00	\$2,750.00
	5 Implement SWPPP	1	LS	\$14,842	\$2,425	\$250	\$37,200	\$54,718	\$61,400.00	\$61,400.00
	6 Airport Access & Haul Route Repair	3900	SY	\$16,331	\$11,836	\$85,215	\$21,740	\$135,122	\$40.00	\$156,000.00
	7 Mobilization	1	LS	\$254,709	\$46,040	\$39,576	\$0	\$340,326	\$398,800.00	\$398,800.00
	Staffing Includes: Partial Project Manager, Full Time Engineer and Partial Superintendent. Part Time QC manager and Safety Manager. See below for staffing rates per RFQ Proposal									
	Site Mobilization/Demobilization Includes but is not limited to: Moving Equipment on an off the site as needed, Subcontractor mobilizations, Safety & Sanitation, Bonds, Insurance, Temporary Site Facilities									
	8 Asphalt Pavement/Underlying Base Removal	6400	SY	\$25,694	\$15,004	\$19,163	\$51,752	\$111,613	\$19.85	\$127,040.00
	9 Concrete Pavement Removal	700	SY	\$6,996	\$4,377	\$5,795	\$5,440	\$22,608	\$37.00	\$25,900.00
	10 Removal of Storm Drain Pipe	870	LF	\$43,669	\$24,909	\$57,116	\$40,000	\$165,694	\$219.00	\$190,530.00
	Includes: Excavation and removal of existing 18" through 36" storm drain pipe, Didposal of pipe and debris offsite, Disposal of soils and dirt at airport dumpsite, Furnish and install structure backfill and CLSM to provide compacted fill in trenches, Grind and pave top 4" with Caltrans Type A HMA to bring flush with adjacent surfacing where needed									
	11 Removal of Storm Drain Structure	5	EA	\$3,537	\$2,322	\$800	\$3,400	\$10,059	\$2,300.00	\$11,500.00
	12 Removal of Electrical Drain Pipe	140	LF	\$4,726	\$2,553	\$3,234	\$3,250	\$13,763	\$113.00	\$15,820.00
	13 Removal of Electrical Drain Cleanout	1	EA	\$725	\$360	\$0	\$0	\$1,085	\$1,270.00	\$1,270.00
	14 Removal of Asphalt Curb	890	LF	\$3,012	\$1,219	\$133	\$966	\$5,330	\$7.00	\$6,230.00
	15 Removal of Concrete Curb	290	LF	\$1,645	\$666	\$166	\$704	\$3,181	\$12.70	\$3,683.00
	16 Removal of PCC Tie Downs	20	EA	\$3,521	\$2,542	\$400	\$1,360	\$7,823	\$453.00	\$9,060.00
	17 Removal of Fence & Gate	550	LF	\$3,749	\$850	\$782	\$1,329	\$6,710	\$14.00	\$7,700.00
	18 Unclassified Excavation & Offhaul	5100	CY	\$66,642	\$37,146	\$13,874	\$44,138	\$161,800	\$36.50	\$186,150.00
	19 Electrical Drain Pipe, 4" PVC	190	LF	\$6,843	\$2,026	\$6,248	\$1,960	\$17,078	\$104.50	\$19,855.00

				Phase 1A	1					
Item	Description	Quantity	UM	Labor	Equipment	Materials	Subcontract	Total Cost	Unit Price	Total
20	12" PVC Storm Drain	80	LF	\$11,054	\$3,350	\$15,552	\$3,050	\$33,006	\$480.00	\$38,400.00
	Furnish and install 12" C900 PVC pipe between structures in 4 locations, 1 run 6' deep and 3 runs 10' to 12' deep, Backfill with bedding and CLSM to top of trench, connect to new structures, Shoring, trench plating, and dewater during construction, Haul									
21	and dispose of trench spoils at airport disposal site  12" HDPE Storm Drain	70	LF	\$3,685	\$1,117	\$12,184	\$3,050	\$20,035	\$332.00	\$23,240.00
21	Furnish and install 12" HDPE pipe between structures in 1 location 12' deep, connect to new structures, Backfill with bedding and CLSM to top of trench, Shoring, trench plating, and dewater during construction, Haul and dispose of trench spoils at airport disposal site	170		<i>\$3,003</i>	<b>\$1,117</b>	712,104	\$3,030	<del>720,033</del>	<b>\$332.00</b>	723,240.00
22	18" RCP Storm Drain	520	LF	\$39,262	\$12,136	\$93,216	\$21,205	\$165,819	\$370.00	\$192,400.00
	Furnish and install 18" RCP pipe between structures in 3 locations 6' deep, connect to new structures, Backfill with bedding and CLSM to top of trench, Shoring, trench plating, and dewater during construction, Haul and dispose of trench spoils at airport disposal site, work at night due to locations in apron footprint									
23	24" HDPE Storm Drain	320	LF	\$37,397	\$10,380	\$75,302	\$16,925	\$140,004	\$508.00	\$162,560.00
	Furnish and install 24" HDPE pipe between structures in 2 locations 9' deep, connect to new structures, Backfill with bedding and CLSM to top of trench, Shoring, trench plating, and dewater during construction, Haul and dispose of trench spoils at airport disposal site, work at night due to locations in apron footprint									
24	24" RCP Storm Drain	30	LF	\$5,624	\$1,549	\$7,666	\$1,813	\$16,652	\$645.00	\$19,350.00
	Furnish and install 24" RCP pipe between structures in 2 locations 9' deep, connect to new structures, Backfill with bedding and CLSM to top of trench, Shoring, trench plating, and dewater during construction, Haul and dispose of trench spoils at airport disposal site, work at night due to locations in apron footprint									
25	36" HDPE Storm Drain	450	LF	\$71,940	\$16,781	\$203,890	\$36,011	\$328,622	\$850.00	\$382,500.00
	Furnish and install 36" HDPE pipe between structures in 2 locations 14' deep, connect to new structures,Backfill with bedding and CLSM to top of trench, Shoring, trench plating, and dewater during construction, Haul and dispose of trench spoils at airport disposal site, work at night due to locations in apron footprint									
26	Storm Drain Pipe Bend 12" PCV C-900	1	EA	\$0	\$0	\$492	\$0	\$492	\$575.00	\$575.00
				,			,			

					Phase 1	A					
tem		Description	Quantity	UM	Labor	Equipment	Materials	Subcontract	Total Cost	Unit Price	Total
	27	Catch Basin, Type III Aircraft Rated ( 4' deep)	2	EA	\$4,009	\$1,210	\$13,662	\$300	\$19,181	\$11,200.00	\$22,400.00
		Includes: Excavation, Temporary Shoring, Furnish and									
		Installation of Precast Inlet, Grout Pipe Openings, Set and									
		Adjust Top to Grade, Haul and dispose of trench spoils at									
		airport disposal site									
	28	Catch Basin, Type III H20 Rated (5' deep)	1	EA	\$2,040	\$605	\$6,631	\$150	\$9,426	\$11,000.00	\$11,000.00
		Includes: Excavation, Temporary Shoring, Furnish and									
		Installation of Precast Inlet, Grout Pipe Openings, Set and									
		Adjust Top to Grade, Haul and dispose of trench spoils at									
		airport disposal site									
	29	Junction Structure, Type III Aircraft Rated (4' deep)	2	EA	\$4,009	\$1,167	\$13,690	\$300	\$19,166	\$11,200.00	\$22,400.00
		Includes: Excavation, Temporary Shoring, Furnish and									
		Installation of Precast Inlet, Grout Pipe Openings, Set and									
		Adjust Top to Grade, Haul and dispose of trench spoils at									
		airport disposal site									
	30	Junction Structure, Type III H20 Rated (5' deep)	1	EA	\$2,040	\$605	\$7,177	\$150	\$9,972	\$11,650.00	\$11,650.00
		Includes: Excavation, Temporary Shoring, Furnish and									
		Installation of Precast Inlet, Grout Pipe Openings, Set and									
		Adjust Top to Grade, Haul and dispose of trench spoils at									
		airport disposal site									
	31	48" Storm Drain Manhole, Cone Aircraft Rated (14' deep)	1	EA	\$14,653	\$4,043	\$18,475	\$1,510	\$38,682	\$45,200.00	\$45,200.00
		Includes: Excavation, Temporary Shoring, Dewatering, Cast in									
		place Base, Stack and Set Barrel Sections, Grout Pipe Openings,									
		Set and Adjust Top to Grade, Haul and dispose of trench spoils									
		at airport disposal site									
	32	48" Storm Drain Manhole, Cone H20 Rated (14' deep)	1	EA	\$14,653	\$4,043	\$18,475	\$1,510	\$38,682	\$45,200.00	\$45,200.00
		Includes: Excavation, Temporary Shoring, Dewatering, Cast in									
		place Base, Stack and Set Barrel Sections, Grout Pipe Openings,									
		Set and Adjust Top to Grade, Haul and dispose of trench spoils									
		at airport disposal site									
	33	Electrical Drain Cleanout	1	EA	\$767	\$52	\$595	\$0	\$1,413	\$1,650.00	\$1,650.00
	34	Connect to Existing Drainage Vault	1	EA	\$2,159	\$490	\$712	\$0	\$3,361	\$3,940.00	\$3,940.00
	35	Flow Splitter Manhole	1	EA	\$16,911	\$3,862	\$10,092	\$490	\$31,354	\$36,650.00	\$36,650.00
		Includes: Excavation, Temporary Shoring, Dewatering, Cast in									
		place Base, Stack and Set Barrel Sections, Grout Pipe Openings,									
		Form and pour splitter weir and hardware inside manhole, Set									
		and Adjust Top to Grade, Haul and dispose of trench spoils at									
		airport disposal site									
	36	Coalescing Plate OWS	1	EA	\$34,345	\$10,383	\$138,469	\$9,530	\$192,727	\$224,820.00	\$224,820.00
		Includes: Excavation, Temporary Shoring for piping,									
		Dewatering, Install precast unit in hole, plumb piping, Install									
		filter materials inside unit, Set and Adjust Vault Covers to									
	_	Grade, Haul and dispose of trench spoils at airport disposal site									
	37	Biofiltration Treatment Vault	1	EA	\$153,801	\$35,111	\$382,263	\$28,000	\$599,175	\$699,100.00	\$699,100.00

				Phase 1A	\					
em	Description	Quantity	UM	Labor	Equipment	Materials	Subcontract	Total Cost	Unit Price	Total
	Includes: Excavation, Temporary Shoring for piping,									
	Dewatering, Furnish and grade rock base pad, Install precast									
	concrete slab, wall, and roof components, plumb piping and									
	install media materials inside structure, grout seams, Backfill									
	with rock products and fabric layers, Set and Adjust Vault									
	Covers to Grade, Haul and dispose of trench spoils at airport									
	disposal site									
	38 Detention Chamber	1	EA	\$116,834	\$42,099	\$103,852	\$38,220	\$301,005	\$349,500.00	\$349,500.00
	Includes: Excavation, Temporary Shoring for piping,	1	LA	7110,834	342,033	7103,632	730,220	7301,003	\$343,300.00	Ş3 <del>4</del> 2,300.00
	Dewatering, Furnish and grade rock base pad, Install HDPE									
	chambers and distribution boxes, plumb piping, Backfill all									
	zones with rock products and fabric layers, Set and Adjust Vault									
	Covers to Grade, Haul and dispose of trench spoils at airport									
	disposal site									
	uisposai site									
;	39 4" Asphalt Concrete Trench Paving	1810	LF	\$41,510	\$20,063	\$50,255	\$41,760	\$153,588	\$97.80	\$177,018.00
	Includes: Remove Trench Plates, Grind 6' wide minimum and									
	Clean Up for 4" AC, Pave back Trenches at Night									
,	40 Unsuitable Excavation & Backfill	265	СУ	\$14,866	\$5,375	\$14,814	\$7,200	\$42,256	\$184.70	\$48,945.50
	Subtotal Direct Cost			\$1,139,610	\$359,413	\$1,437,466	\$506,913	\$3,443,402		\$3,993,296.5
	Markup %			12%	12%	12%	5%			
	Fee/Overhead & Profit			5%	5%	5%	5%			
	Total			\$1,333,344	\$420,513	\$1,681,835	\$557,604	\$3,993,297		
	PROJECT DURATION		DAYS							
	STAFFING RATES FOR CONSTRUCTION SERVICES		LY RATE	% ON JOB	HOURS	TOTAL				
	Project Manager	\$200	PER HR	50%	320	\$64,000				
	Project Engineer	\$165	PER HR	100%	640	\$105,600				
	Superintendent	\$185	PER HR	50%	320	\$59,200				
	Quality Control Manager	\$210	PER HR	5%	32	\$6,720				
	Safety Manager	\$160	PER HR	5%	32	\$5,120				
	TOTAL					\$240,640				