

File No. 230801

Committee Item No. 10

Board Item No. \_\_\_\_\_

## COMMITTEE/BOARD OF SUPERVISORS

### AGENDA PACKET CONTENTS LIST

Committee: Budget and Finance Committee Date October 4, 2023

Board of Supervisors Meeting Date \_\_\_\_\_

#### Cmte Board

- Motion
- Resolution
- Ordinance
- Legislative Digest
- Budget and Legislative Analyst Report
- Youth Commission Report
- Introduction Form
- Department/Agency Cover Letter and/or Report
- MOU
- Grant Information Form
- Grant Budget
- Subcontract Budget
- Contract/Agreement
- Form 126 – Ethics Commission
- Award Letter
- Application
- Public Correspondence

#### OTHER (Use back side if additional space is needed)

- Original Contract 6/14/2020
- Modification No. 1 5/17/2023
- Airport Commission Resolution No. 20-0111 6/16/2020
- Airport Commission Resolution No. 23-0145 6/20/2023
- \_\_\_\_\_
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Completed by: Brent Jalipa Date September 28, 2023

Completed by: Brent Jalipa Date \_\_\_\_\_

1 [Airport Professional Services Agreement Modification - BEUMER Lifecycle Management LLC  
2 - Operations and Maintenance of the Baggage Handling System in the Harvey Milk Terminal -  
3 Not to Exceed \$38,000,000]

3

4 **Resolution approving Modification No. 2 to Airport Professional Services Contract No.**  
5 **50195 between BEUMER Lifecycle Management LLC, and the City and County of San**  
6 **Francisco, acting by and through its Airport Commission, for the operations and**  
7 **maintenance of the baggage handling system in the Harvey Milk Terminal to increase**  
8 **the contract amount by \$17,000,000 for a total not to exceed contract amount of**  
9 **\$38,000,000 and to extend the contract term for one year and six months from**  
10 **December 31, 2023, for a new contract term of August 1, 2020, through June 30, 2025,**  
11 **pursuant to Charter, Section 9.118(b).**

12

13 WHEREAS, On June 16, 2020, by Resolution No. 20-0111, the Airport Commission  
14 awarded the Professional Services Agreement (PSA) for Airport Contract No. 50195 for the  
15 operations and maintenance of the baggage handling system in the Harvey Milk Terminal  
16 (Terminal 1) to BEUMER Lifecycle Management LLC (BEUMER), for a total not to exceed  
17 contract amount of \$21,000,000 for a term of two years and eleven months commencing  
18 August 1, 2020, with Board of Supervisors' approval in accordance with Charter, Section  
19 9.118(b); and

20 WHEREAS, On July 28, 2020, by Resolution No. 356-20, the Board of Supervisors  
21 approved Contract No. 50195; and

22 WHEREAS, On May 17, 2023, the Airport Director administratively modified Contract  
23 No. 50195 to extend the contract term for six months to a new contract end date of December  
24 31, 2023; and

25

1           WHEREAS, Charter, Section 9.118(b), provides that a modification with an impact of  
2 more than \$500,000 to an agreement entered into by a department, board or commission  
3 requiring anticipated expenditures by the City of 10 million dollars or more shall be subject to  
4 approval of the Board of Supervisors by resolution; and

5           WHEREAS, On June 20, 2023, by Resolution No. 23-0145, the Airport Commission  
6 approved Modification No. 2 to Contract No. 50195, increasing the contract amount by  
7 \$17,000,000 for a new not to exceed amount of \$38,000,000 and extending the contract term  
8 by one year and six months for a new contract end date of June 30, 2025; and

9           WHEREAS, Airport staff has monitored BEUMER’s performance against key  
10 performance indicators provided in the contract, and has determined that BEUMER has  
11 satisfactorily provided all aspects of the operations and maintenance of the baggage handling  
12 system in Harvey Milk Terminal 1; and

13           WHEREAS, The original Contract and Modification No. 1 is on file with the Clerk of the  
14 Board of Supervisors in File No. 230801, which is hereby declared to be a part of this  
15 Resolution as if set forth fully herein; now, therefore, be it

16           RESOLVED, That the Board of Supervisors hereby approves Modification No. 2 to  
17 Contract No. 50195 with BEUMER Lifecycle Management, LLC, for the operations and  
18 maintenance of the baggage handling system in the Harvey Milk Terminal to increase the  
19 contract amount by \$17,000,000 for a new not to exceed contract amount of \$38,000,000, and  
20 to extend the contract term for one year and six months from December 31, 2023 for a new  
21 contract term of August 1, 2020, through June 30, 2025; and, be it

22           FURTHER RESOLVED, That within thirty (30) days of the Contract being fully  
23 executed by all parties, the Airport Commission shall provide it to the Clerk of the Board for  
24 inclusion in the official file.

<b>Item 10</b> <b>File 23-0801</b>	<b>Department:</b> San Francisco International Airport
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**EXECUTIVE SUMMARY**

**Legislative Objectives**

- The proposed resolution would approve the second modification to the professional services contract between the City and BEUMER Lifecycle Management LLC for the operations and maintenance of the baggage handling system in the Harvey Milk Terminal 1 to extend the term by one year and six months through June 30, 2025 and to increase the contract amount by \$17 million for a total contract amount of \$38 million.

**Key Points**

- Under an existing contract, BEUMER Lifecycle Management LLC (BEUMER) operates and maintains the Harvey Milk Terminal 1 baggage handling system, which transports checked luggage from ticketing counters to departing airplanes and from arriving airplanes to baggage claim or other departing airplanes.
- In July 2020, the Board of Supervisors approved the original professional services contract with BEUMER for an initial not to exceed amount of \$21 million and initial term of two years and eleven months from August 2020 through June 2023. The original operations and maintenance contract provided for one two-year option to extend through June 2025. In May 2023, the Airport administratively modified the contract to extend the term by six months with a new end date of December 2023.

**Fiscal Impact**

- The two-year budget for the proposed extended term is \$17 million and is fully funded in the Airport’s approved FY 2023-25 operating budget. Costs increases in the final year of the contract are due to additional services related to the extension of the baggage handling system in the north part of the terminal. Actual contract spending is below budget due to COVID.

**Policy Consideration**

- The Airport procured installation of the BEUMER baggage handling system through a competitive process. The construction contract, which resulted in the installation of a system that cannot be maintained by another contractor, was not subject to Board of Supervisors’ approval because the Board does not have authority to approve construction contracts under the City Charter. The Board should consider amending the Administrative Code to regulate proprietary software and maintenance provisions in construction contracts or initiate a Charter amendment to require Board of Supervisors’ approval for construction contracts.

**Recommendations**

- Amend the proposed resolution to reduce the not-to-exceed amount from \$38 million to \$35 million to account for contract savings under the existing term and approve the resolution, as amended.



**MANDATE STATEMENT**

City Charter Section 9.118(b) states that any contract entered into by a department, board or commission that (1) has a term of more than ten years, (2) requires expenditures of \$10 million or more, or (3) requires a modification of more than \$500,000 is subject to Board of Supervisors approval.

**BACKGROUND**

Under an existing contract, BEUMER Lifecycle Management LLC (BEUMER) operates and maintains the Harvey Milk Terminal 1 baggage handling system, which transports checked luggage from ticketing counters to departing airplanes and from arriving airplanes to baggage claim or other departing airplanes.<sup>1</sup> In July 2020, the Board of Supervisors approved the original professional services contract with BEUMER for an initial not to exceed amount of \$21 million and initial term of two years and eleven months from August 2020 through June 2023 (File 20-0698). The original operations and maintenance contract provided for one two-year option to extend through June 2025.

In May 2023, the San Francisco International Airport (Airport) administratively modified the contract to: (a) extend the term by six months with a new end date of December 2023 with no change to the contract amount; (b) add a subcontractor; and (c) update standard contract language. The subcontractor (Lloyd W. Aubry Inc.) performs repairs that are beyond the contractor's expertise on an as-needed basis according to Airport staff. Repair work performed by the subcontractor typically includes major repairs due to structural failure or extensive damage.

**Selection**

The design-build contract<sup>2</sup> with Beumer Corporation for the Terminal 1 Baggage Handling System Project stated that the Airport would enter into an operations and maintenance contract with the baggage handling system provider through the Guarantee to Repair Period, for up to five years after the start of system operation. In April 2020, the baggage handling system became operational, and BEUMER began providing operations and maintenance under the original

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<sup>1</sup> According to Airport staff, the baggage handling systems in Terminal 2 are operated by a contractor and by United Airlines in Terminal 3. In the international terminal, the Airport owns the baggage handling system, but it is operated by a consortium of airlines.

<sup>2</sup> In July 2015, the Airport Commission approved a design-build contract for the Terminal 1 Baggage Handling System Project following a competitive process in the initial amount of \$28,149,000, funded in part by the federal Transportation Security Administration (TSA), with a forecasted total contract amount of \$180,300,000. Subsequently, Hensel Phelps Construction replaced Beumer Corporation on the design-build contract as part of the larger Terminal 1 renovation project. The contract was not subject to Board of Supervisors' approval because it was a construction contract.

design-build contract until the term of the original professional services contract began in August 2020. The baggage handling system is owned by the Airport.

The Office of Contract Administration (OCA) approved a sole-source waiver for the professional services contract because the baggage handling system operates with proprietary software that only BEUMER can service and support. OCA also waived Local Business Enterprise subcontracting requirements due to the absence of any subcontracting opportunities.

## **DETAILS OF PROPOSED LEGISLATION**

The proposed resolution would approve the second modification to the professional services contract between the City and BEUMER Lifecycle Management LLC for the operations and maintenance of the baggage handling system in the Harvey Milk Terminal 1 to extend the term by one year and six months through June 30, 2025 and to increase the contract amount by \$17 million for a total contract amount of \$38 million.

Under the proposed modification, BEUMER would continue to provide baggage handling maintenance services, including labor, materials, parts, and equipment. The scope of services includes scheduled and preventive maintenance, on-call unscheduled maintenance, and various reports.

### **Expanded Scope of Services & Increases in Inflation and Prevailing Wages**

Under the proposed modification, costs increase in the final year of the contract due to additional services related to the extension of the baggage handling system in the north part of the terminal (HMT1 North). According to Airport staff, the new components in HMT1 North will be put into service in FY 2024-25 and will increase the system's size and number of elements requiring services by 33 percent.

According to a memo from the Airport Director to the Airport Commission on the proposed modification, the increase of \$17 million exceeds prior estimates at the time of contract award by \$3 million due to higher than anticipated rates of inflation and higher than anticipated increases in prevailing wage rates.

### **Performance Monitoring**

According to Airport staff, the Airport monitors performance of the contractor by: (a) reviewing Daily, Weekly, and Monthly performance reports submitted by BEUMER and discussing any issues with the Site Manager; and (b) through weekly meetings with the Site Manager and bi-weekly meetings with the Service Division North America Manager. In addition, the Airport can generate performance reports on demand, and the contract provides for non-performance penalties. Airport staff report that there have been no performance issues to date, and the Airport has not assessed any penalties for non-performance.

Exhibit 2 shows the contract's performance objectives and actual performance over the last year (August 2022 through July 2023). As shown below, the contractor met four out of five performance objectives, with the exception of the Sortation Sub-System Tracking Accuracy Standard, which reflects the accuracy of baggage tracking in the sortation sub-system, which

sorts baggage to flights, based on laser readers that read barcodes on baggage. We compiled performance from monthly reports over the period with the exception of the Sortation Sub-System Tracking Accuracy Standard, which is reported in daily reports but not in the monthly report although the contract states that the standard be included in monthly reports. Airport staff report that accuracy was 95.51 percent for outbound scanners (for baggage from outbound flights) over the period compared to an objective of 98 percent although we did not review supporting documentation.<sup>3</sup>

## Exhibit 2: Contract Performance Objectives

Standard	Objective	12-Month Avg (Aug 2022 – Jul 2023)
Availability	99.00%	99.99%
Checked Baggage Inspection System Tracking Accuracy *	98.00%	100.00%
		95.51%
		(Outbound Scanners only)
Sortation Sub-System Tracking Accuracy *	97.00%	
Preventive Maintenance Workorder Completion Rate	98.00%	99.57%
Routine Inspection Completion Rate	98.00%	99.43%

Sources: BEUMER Monthly Reports, Airport Staff

\*The baggage handled system is assessed by the accuracy of two sub-systems: the security screening areas (“checked baggage inspection systems”) and the system that sorts baggage to flights (“sortation sub-system”)

According to Airport staff, the Airport has not assessed performance penalties for not meeting the Sortation Sub-System Tracking Accuracy Standard because the issues are due to the design and installation of the measuring equipment (i.e., the laser readers were not properly positioned to scan barcodes) not due to operations and maintenance of the equipment under the contract. There was a dispute between the BEUMER Corporation (the contractor under the design-build contract) and their subcontractor as to whether this was a design issue, but the dispute has been resolved and the two firms are implementing solutions, such as relocating laser heads and installing new firmware, to address the issue. The Airport anticipates these solutions will be completed with the installation of new components in HMT1 North. No penalties have been assessed under the construction contract, and the issue is not impacting operations according to Airport staff. If a baggage tag is not read by the scanner, there is a manual process to ensure that the bag can be tracked.

<sup>3</sup> The accuracy for inbound scanners was lower than the accuracy of outbound scanners in the sample daily report we reviewed (79.30 percent compared to 95.65 percent).

### Potential Future Sole Source Contracting

According to Airport staff, the Airport may seek another sole source waiver from OCA to enter into a new contract with BEUMER after the existing contract expires as components of the expanded baggage handling system in HMT1 North will still be under a two-year warranty with BEUMER. In addition, BEUMER provides proprietary software to operate and maintain the baggage handling system, and changing to a new contractor would require giving them access to BEUMER's proprietary information.

### FISCAL IMPACT

The proposed resolution would increase the contract amount by \$17 million for the extended term, for a total not to exceed amount of \$38 million. Exhibit 2 below shows the \$17 million budget for the two-year extended term, which includes a 10.1 percent contingency.

#### Exhibit 2: Proposed Extension Budget

Item	FY 2023-24	FY 2024-25	Two-Year Total
<u>Labor</u>			
Management and Staff (FTE)	\$1,982,863 (11.0 FTE)	\$2,034,335 (11.0 FTE)	\$4,017,198
Technicians and Laborers (FTE)	4,045,391 (20.0 FTE)	4,993,159 (24.0 FTE)	9,038,550
Labor Overhead (2%)	120,565	140,549	261,114
Subtotal, Labor	6,148,819	7,168,043	13,316,862
Profit (10% of Labor)	602,825	702,749	1,305,574
Subtotal, Labor & Profit	6,751,644	7,870,792	14,622,436
<u>Non-Labor</u>			
Site Overhead	95,999	99,839	195,838
Help Desk and Software Licenses	91,000	91,000	182,000
Parts and Materials	125,000	156,250	281,250
Subtotal, Non-Labor	311,999	347,089	659,088
Total	\$7,063,643	\$8,217,881	\$15,281,524
Contingency (10%)			1,718,476
<b>Total Not-To-Exceed Amount</b>			<b>\$17,000,000</b>

Source: Airport

The FY 2023-24 budget is \$7.06 million, of which the majority is for labor expenses (\$6.15 million, 87.0 percent), and the remaining amounts are for profit (\$602,825, 8.5 percent) and non-labor expenses (\$311,999, 4.4 percent). The budget increases by \$1.15 million (16.3 percent) in FY 2024-25 largely due to higher labor costs from the addition of four positions to service new components in HMT1 North. According to Airport staff, the proposed contract extension is fully funded in the Airport's approved FY 2023-25 operating budget.

According to Airport staff, the proposed two-year budget funds 31.0 full-time equivalent (FTE) in FY 2023-24, increasing to 35.0 FTE in FY 2024-25. The Management and Staff category includes 11.0 FTE in both years. The Technicians and Laborers category includes 20.0 FTE in FY 2023-24, increasing to 24.0 FTE in FY 2024-25. The FY 2024-25 budget adds one Senior Technician (for a total of 9.0 FTE in this classification) and 3.0 FTE Laborers (for a total of 9.0 FTE in this classification).

### **Actual Spending**

According to Airport staff, actual spending under the existing contract totaled \$17.9 million through June 2023 with \$3.1 million (14.9 percent) remaining. Contract savings were due to reduced airline flight activity from the COVID-19 pandemic, which resulted in reduced passenger and baggage traffic and necessitated a one-year delay to the expansion of the Harvey Milk Terminal 1. As a result, staffing levels and wage increases for non-prevailing wage staff did not increase as planned, and some non-labor expenses were frozen to control spending.

Because the proposed modification fully funds the remaining two years of the contract and includes a 10.1 percent contingency, we recommend reducing the proposed not-to-exceed amount by \$3 million to \$35 million to account for contract savings under the existing term.

### **POLICY CONSIDERATION**

The Airport procured installation of the BEUMER baggage handling system through a competitive process. However, the resulting design build construction contract did not include a maintenance and operations component. Instead, the construction contract stated that the Airport would enter into an operations and maintenance contract with BEUMER for up to five years.<sup>4</sup> Once installed, the Airport entered into a sole source operations and maintenance contract with BEUMER because the baggage handling system operates with proprietary software that only BEUMER can service and support. According to the Airport's development plan, baggage handling systems have a useful life of approximately 15 years. Therefore, Airport staff will likely seek another sole source waiver to extend the proposed BEUMER operations and maintenance contract.

The construction contract, which resulted in the installation of a system that cannot be maintained by another contractor, was not subject to Board of Supervisors' approval. Providing the Board of Supervisors authority to review construction contracts would require a voter-approved change to the City Charter. The Board should consider amending the Administrative Code to regulate proprietary software and maintenance provisions in construction contracts or

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<sup>4</sup> According to Airport staff, it is a common practice for construction contracts to include an exclusive maintenance period that results in separate maintenance contracts. We note however that the Municipal Transportation Agency is in the process of procuring a single contractor to design, deliver, and support a train control system in part to better control infrastructure costs.

initiate a Charter amendment to require Board of Supervisors' approval for construction contracts.

## **RECOMMENDATIONS**

1. Amend the proposed resolution to reduce the not-to-exceed amount from \$38 million to \$35 million to account for contract savings under the existing term.
2. Approve the proposed resolution as amended.

DocuSigned by:  
*Garry Alley*  
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DocuSigned by:  
*Eva Cheong*  
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DocuSigned by:  
*Jeff Littlefield*  
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**City and County of San Francisco  
Airport Commission  
P.O. Box 8097  
San Francisco, California 94128**

**Modification No. 2**

This Modification is made this 20th day of June, 2023, in the City and County of San Francisco, State of California, by and between: **BEUMER Lifecycle Management LLC, 800 Apgar Drive, Somerset, NJ 08873** (the “Contractor”) and the City and County of San Francisco, a municipal corporation (the “City”), acting by and through its Airport Commission (the “Commission”).

**Recitals**

- A. City and Contractor have entered into the Agreement for the San Francisco International Airport (the “Airport” or “SFO”) (as defined below); and
- B. On February 4, 2020, the Office of Contract Administration approved this Agreement under San Francisco Administrative Code Chapter 21.5(d), Proprietary Article No. 12 for the procurement of repairs for equipment, including service and parts, when repairs must be done by the manufacturer of the system; and
- C. On June 16, 2020, by Resolution No. 20-0111, the Commission awarded this Agreement to the Contractor for a term commencing August 1, 2020, and ending June 30, 2023, and a not-to-exceed amount of \$21,000,000; and
- D. On July 28, 2020, by Resolution No. 356-20, the Board of Supervisors approved the Agreement under San Francisco Charter Section 9.118; and
- E. On May 17, 2023, City and Contractor administratively modified the Agreement through Modification No. 1 to extend the term of the agreement under San Francisco Administrative Code 21.24 to December 31, 2023, add a subcontractor, modify Contractor’s responsibilities related to installed software and hardware, adjust the labor rates effective July 1, 2023 through December 31, 2023, and to update standard contract language; and
- F. City and Contractor desire to modify the Agreement to extend the contract term by one and one half years to a new end date of June 30, 2025, and to increase the not-to-exceed contract amount by \$17,000,000, for a new not-to-exceed contract amount of \$38,000,000; and
- G. On June 20, 2023, by Resolution No. 23-0145, the Commission approved Modification No. 2 exercising the option to extend the Agreement by one and one half years for a new contract end date of June 30, 2025, and increasing the contract amount by \$17,000,000, for a new not-to-exceed contract amount of \$38,000,000; and

H. On \_\_\_\_\_, by Resolution No. \_\_\_\_\_, the Board of Supervisors approved Modification No. 2 under San Francisco Charter Section 9.118; and

I. There is no Local Business Entity (“LBE”) subcontracting participation requirement for this Agreement; and

J. Approval for the Agreement was obtained when the Civil Service Commission approved PSC No. 47310-19/20 on January 6, 2020; and

NOW, THEREFORE, Contractor and the City agree as follows:

**1. Article 1, Definitions, Section 1.1** is replaced in its entirety as follows:

1.1 “Agreement” means the contract document dated June 16, 2020 and Modification No. 1 dated May 17, 2023, including all attached appendices, and all applicable city ordinances and “Mandatory City Requirements” which are specifically incorporated by reference into the Agreement.

**2. Article 2, Term of the Agreement, Section 2.1** is amended to extend the term of the Agreement for a new ending date of June 30, 2025.

**3. Article 3, Financial Matters, Section 3.3.1 Payment** is amended to change the not-to-exceed amount of this Agreement from Twenty-One Million Dollars (\$21,000,000) to Thirty-Eight Million Dollars (\$38,000,000).

**4. Appendix B, Calculation of Charges, Attachment 1, Staffing Levels and Allocation Plan** has been amended as follows to include Airport approval for changes to the Staffing Levels and Allocation Plan, and to establish a new Staffing Level and Allocation Plan effective July 1, 2024:

**Attachment 1 - Staffing Level and Allocation Plan**

The Staffing Level and Allocation Plan below is the basis for adequate coverage of all shifts with appropriate skills and responsibilities. The shift times and staffing levels may be adjusted by the Contractor to meet operational requirements and resource availability with approval of the Airport. The total hours per classification invoiced each month are subject to the requirements of Section 2 of this Appendix B.

Effective July 1, 2024:



Classification Position #								
	Start/End	Start/End	Start/End	Start/End	Start/End	Start/End	Start/End	Hours
Site Manager	Off	0800-1630	0800-1630	0800-1630	0800-1630	0800-1630	Off	40
Admin' Assist''	Off	0800-1630	0800-1630	0800-1630	0800-1630	0800-1630	Off	40
CMMS/Spares	Off	0800-1630	0800-1630	0800-1630	0800-1630	0800-1630	Off	40
Cntl's Specialist'	Off	0800-1630	0800-1630	0800-1630	0800-1630	0800-1630	Off	40
Supervisor #1	0800-1630	0800-1630	0800-1630	0800-1630	0800-	Off	Off	40
<b>Shift 1 Supervisor Total Weekly Hours</b>								40
Supervisor #2	Off	Off	1400-2230	1400-2230	1400-2230	1400-2230	1400-223	
<b>Shift 2 Supervisor Total Weekly Hours</b>								40
Supervisor #3	Off	Off	2200-0630	2200-0630	2200-0630	2200-0630	2200-063	
<b>Shift 3 Supervisor Total Weekly Hours</b>								40
Cntl' Rm' Op' #1	0600-1430	0600-1430	0600-1430	0600-1430	0600-1430	Off	Off	
Cntl' Rm' Op' #2	Off	Off	0600-1430	0600-1430	0600-1430	0600-1430	0600-1430	
<b>Shift 1 Control Room Operator Total Weekly Hours</b>								80
Cntl' Rm' Op' #3	1400-223	1400-223	off	off	1400-2230	1400-2230	1400-2230	
<b>Shift 2 Control Room Operator Total Weekly Hours</b>								40
Cntl' Rm' Op' #4	2200-0630	2200-0630	2200-0630	2200-0630	2200-0630	Off	Off	
<b>Shift 3 Control Room Operator Total Weekly Hours</b>								40
Sr. Tech' #1	0600-1430	0600-1430	0600-1430	0600-1430	0600-1430	Off	Off	
Sr. Tech' #2	Off	Off	0600-1430	0600-1430	0600-1430	0600-1430	0600-1430	
Sr. Tech' #3	0600-1430	0600-1430	Off	Off	0600-1430	0600-1430	0600-1430	
<b>Shift 1 Senior Technician Total Weekly Hours</b>								120
Sr. Tech' #4	Off	Off	1400-2230	1400-2230	1400-2230	1400-2230	1400-2230	
Sr. Tech' #5	1400-2230	1400-2230	1400-223	Off	Off	1400-2230	1400-2230	
Sr. Tech' #6	1400-2230	1400-2230	1400-223	1400-223	1400-2230	Off	Off	
<b>Shift 2 Senior Technician Total Weekly Hours</b>								120
Sr. Tech' #7	2200-0630	2200-0630	2200-0630	2200-0630	2200-0630	Off	Off	

<b>Sr. Tech' #8</b>	2200-063	2200-063	2200-0630	2200-0630	Off	Off	2200-0630	
<b>Sr. Tech' #9</b>	2200-0630	2200-0630	Off	Off	2200-0630	2200-0630	2200-0630	
<b>Shift 3 Senior Technician Total Weekly Hours</b>								120
<b>Jr. Tech' #1</b>	0600-1430	0600-1430	0600-1430	0600-1430	0600-1430	Off	Off	
<b>Jr. Tech' #2</b>	Off	Off	0600-1430	0600-1430	0600-1430	0600-1430	0600-1430	
<b>Shift 1 Junior Technician Total Weekly Hours</b>								80
<b>Jr. Tech' #3</b>	1400-2230	1400-2230	1400-2230	1400-2230	1400-2230			
<b>Jr. Tech' #4</b>	1400-2230	1400-2230	Off	Off	1400-2230	1400-2230	1400-2230	
<b>Shift 2 Junior Technician Total Weekly Hours</b>								80
<b>Jr. Tech' #5</b>	2200-0630	2200-0630	2200-0630	2200-0630	2200-0630	Off	Off	
<b>Jr. Tech' #6</b>	Off	Off	2200-0630	2200-0630	2200-0630	2200-0630	2200-0630	
<b>Shift 3 Junior Technician Total Weekly Hours</b>								80
<b>System Sup' #1</b>	0600-1430	Off	Off	0600-1430	0600-1430	0600-1430	0600-1430	
<b>System Sup' #2</b>	0600-1430	0600-1430	Off	Off	0600-1430	0600-1430	0600-1430	
<b>System Sup' #3</b>	off	0600-1430	0600-1430	0600-1430	0600-1430	0600-1430	off	
<b>Shift 1 System Support Total Weekly Hours</b>								120
<b>System Sup' #4</b>	1400-2230	1400-2230	1400-2230	1400-2230	Off	Off	1400-2230	
<b>System Sup' #5</b>	1400-2230	Off	Off	1400-2230	1400-2230	1400-2230	1400-2230	
<b>System Sup' #6</b>	Off	Off	1400-2230	1400-2230	1400-2230	1400-2230	1400-2230	
<b>Shift 2 System Support Total Weekly Hours</b>								120
<b>System Sup' #7</b>	2200-0630	2200-0630	Off	Off	2200-0630	2200-0630	2200-0630	
<b>System Sup' #8</b>	Off	2200-0630	2200-0630	2200-0630	2200-0630	2200-0630	Off	
<b>System Sup' #9</b>	2200-0630	2200-0630	2200-0630	2200-0630	Off	Off	2200-0630	
<b>Shift 3 System Support Total Weekly Hours</b>								120

**5. Appendix B, Calculation of Charges, Attachment 2, Labor Rates and Attachment 3, Invoice Pricing Details** are amended to incorporate the following labor rates and invoice pricing for the period January 1, 2024 through June 30, 2025. The staffing levels and allocation plan is effective July 1, 2024.

<b>Effective January 1, 2024 through June 30, 2024</b>				
<b>Classification</b>	<b>Shift</b>	<b>Hourly Wage</b>	<b>Burden</b>	<b>Hourly Rate (Wage + Burden)</b>
Site Manager	1	\$68.95	\$48.27	\$117.22
Controls Specialist	1	\$65.67	\$45.97	\$111.63
CMSS and Spares	1	\$37.85	\$26.50	\$64.35
Administrative Assistant	1	\$32.45	\$22.71	\$55.16
Supervisor	1	\$65.67	\$45.97	\$111.63
Supervisor	2	\$68.23	\$47.76	\$115.99
Supervisor	3	\$71.18	\$49.83	\$121.01
Control Room Operator	1	\$36.23	\$25.36	\$61.58
Control Room Operator	2	\$37.64	\$26.35	\$63.98
Control Room Operator	3	\$39.27	\$27.49	\$66.76
Senior Technician	1	\$88.13	\$17.63	\$105.76
Senior Technician	2	\$91.74	\$18.35	\$110.09
Senior Technician	3	\$95.01	\$19.00	\$114.01
Junior Technician	1	\$74.14	\$14.83	\$88.97
Junior Technician	2	\$77.38	\$15.48	\$92.86
Junior Technician	3	\$78.69	\$15.74	\$94.43
System Support	1	\$64.81	\$12.96	\$77.77
System Support	2	\$67.81	\$13.56	\$81.37
System Support	3	\$67.81	\$13.56	\$81.37

<b>Effective July 1, 2024 through June 30, 2025</b>				
<b>Classification</b>	<b>Shift</b>	<b>Hourly Wage</b>	<b>Burden</b>	<b>Hourly Rate (Wage + Burden)</b>
Site Manager	1	\$71.02	\$49.72	\$120.74
Controls Specialist	1	\$67.64	\$47.35	\$114.98
CMSS and Spares	1	\$38.99	\$27.29	\$66.28
Administrative Assistant	1	\$33.42	\$23.39	\$56.81
Supervisor	1	\$67.64	\$45.97	\$113.60
Supervisor	2	\$70.27	\$49.19	\$119.47
Supervisor	3	\$73.32	\$51.32	\$124.64
Control Room Operator	1	\$37.31	\$26.12	\$63.43
Control Room Operator	2	\$38.77	\$27.14	\$65.90
Control Room Operator	3	\$40.45	\$28.31	\$68.76
Senior Technician	1	\$92.39	\$20.33	\$112.72
Senior Technician	2	\$96.00	\$21.12	\$117.12
Senior Technician	3	\$99.27	\$21.84	\$121.11
Junior Technician	1	\$77.40	\$17.03	\$94.43
Junior Technician	2	\$80.65	\$17.74	\$98.39
Junior Technician	3	\$81.95	\$18.03	\$99.98
System Support	1	\$67.41	\$14.83	\$82.24

System Support	2	\$70.41	\$15.49	\$85.90
System Support	3	\$70.41	\$15.49	\$85.90

<b>January 1, 2024 through June 30, 2024</b>				
			<b>Annual Total</b>	<b>Monthly Total</b>
<b>LABOR</b>				
<b>Wages and Benefits</b>	Basic Labor		\$3,014,130	\$502,355
Adjustments for hours not worked	Deduction \$			Actual monthly
<b>Wages and Benefits – Adjusted</b>				Actual monthly
<b>SFO Requested Overtime</b>				Actual monthly
<b>Labor Overhead 2% of Wages and Benefits – Adjusted</b>				Actual monthly
<b>Total Monthly Cost for Labor</b>				Actual monthly
<b>Service Fee – 10% of Total Monthly Cost for Labor</b>				Actual monthly
<b>NON - LABOR</b>				
<b>Site Overhead</b>			\$48,000	\$8,000
<b>Parts, Materials, Software Licenses and Support Fees</b>				Actual monthly
<b>Beumer Help Desk Fee</b>			\$45,501	\$7,584
<b>As Needed Services</b>	Per Task Order			Actual monthly
<b>Travel Expenses</b>				Actual monthly
<b>Deductions for Performance Non-Compliance</b>	Deduction \$			Actual monthly
<b>Total Monthly Invoice Value</b>				Actual monthly

<b>July 1, 2024 through June 30, 2025</b>				
			<b>Annual Total</b>	<b>Monthly Total</b>
<b>LABOR</b>				

<b>Wages and Benefits</b>	Basic Labor	\$7,027,495	\$585,625
Adjustments for hours not worked	Deduction \$		Actual monthly
<b>Wages and Benefits – Adjusted</b>			Actual monthly
<b>SFO Requested Overtime</b>			Actual monthly
<b>Labor Overhead 2% of Wages and Benefits – Adjusted</b>			Actual monthly
<b>Total Monthly Cost for Labor</b>			Actual monthly
<b>Service Fee – 10% of Total Monthly Cost for Labor</b>			Actual monthly
<b>NON - LABOR</b>			
<b>Site Overhead</b>		\$99,839	\$8,320
<b>Parts, Materials, Software Licenses and Support Fees</b>			Actual monthly
<b>Beumer Help Desk Fee</b>		\$45,501	\$7,584
<b>As Needed Services</b>	Per Task Order		Actual monthly
<b>Travel Expenses</b>			Actual monthly
<b>Deductions for Performance Non-Compliance</b>	Deduction \$		Actual monthly
<b>Total Monthly Invoice Value</b>			Actual monthly

**6. Effective Date.** Each of the changes set forth in this Modification shall be effective as of the date of this Modification.

**7. Legal Effect.** Except as expressly changed by this Modification, all of the terms and conditions of the Agreement shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day first mentioned above.

<b>CITY</b>	<b>CONTRACTOR</b>
AIRPORT COMMISSION CITY AND COUNTY OF SAN FRANCISCO	
By: _____ Ivar C. Satero, Airport Director	<p>DocuSigned by: <u>Mark J. Sibley</u> 92F59B33D88B437... Authorized Signature</p>
Attest:	<u>Mark J. Sibley</u> Printed Name
By _____ Kantrice Ogletree, Secretary Airport Commission	<u>President</u> Title
Resolution No: <u>23-0145</u>	<u>BEUMER Lifecycle Management, LLC</u> Company Name
Adopted on: <u>June 20, 2023</u>	<u>0000040977</u> City Supplier Number
Approved as to Form:	<u>800 Apgar Drive</u> Address
David Chiu City Attorney	<u>Somerset, NJ 08873</u> City, State, ZIP
By _____ Sallie Gibson Deputy City Attorney	<u>732-893-2800</u> Telephone Number
	<u>82-3745033</u> Federal Employer ID Number

**City and County of San Francisco  
Airport Commission  
P.O. Box 8097  
San Francisco, California 94128**

**Agreement between the City and County of San Francisco and**

**BEUMER Lifecycle Management, LLC**

**Contract No. 50195**

This Agreement is made this 16th day of June, 2020, in the City and County of San Francisco, State of California, by and between: **BEUMER Lifecycle Management LLC, 800 Apgar Drive, Somerset, NJ 08873** (the "Contractor") and the City and County of San Francisco, a municipal corporation (the "City"), acting by and through its Airport Commission (the "Commission").

**Recitals**

- A. The Commission wishes to hire the contractor to provide operation and maintenance services for the new Baggage Handling System ("BHS") in the Harvey Milk Terminal ("Terminal 1"), as described in Appendix A attached hereto, for the San Francisco International Airport (the "Airport" or "SFO"); and,
- B. The Commission is authorized to enter into all contracts which relate to matters under its jurisdiction; and
- C. On February 4, 2020, the Office of Contract Administration approved Proprietary Article No. 12 for this Agreement for the procurement of repairs for equipment, including service and parts when repairs must be done by the manufacturer of the system, under San Francisco Administrative Code Chapter 21.5(d); and
- D. On **June 16, 2020**, by Resolution No. 20-0111, the Commission awarded this Agreement to the Contractor for a term commencing August 1, 2020, and ending June 30, 2023, in a not-to-exceed amount of \$21,000,000; and
- E. On July 28, 2020, by Resolution No. 356 -20, the Board of Supervisors approved the Agreement under San Francisco Charter Section 9.118
- F. There is no Local Business Entity ("LBE") subcontracting participation requirement for this Agreement; and
- G. Approval for this Agreement was obtained when the Civil Service Commission approved PSC No. 47310-19/20 on January 6, 2020; and
- H. The Contractor represents and warrants that it is qualified to perform the services required by City under this Agreement;

Now, THEREFORE, the parties agree as follows:

## Article 1 Definitions

The following definitions apply to this Agreement:

1.1 "Agreement" means this contract document, including all attached appendices, and all applicable City Ordinances and Mandatory City Requirements which are specifically incorporated by reference into this Agreement.

1.2 "Baggage Handling System (BHS)" means all BHS related structures, including mechanical and electrical equipment and components that are associated with the specified Individual Carrier System (ICS) and conveyor lines of the facility and that were provided and installed by BEUMER Corporation. This encompasses all types of check-in collection conveyors, associated doors or hatches, load/unload conveyors, transport conveyor segments, power turns, merges, make-up devices, fire/security doors, control panels, field control devices (e.g. photo eyes, limit switches, control stations/devices, audio/visual alarms, etc.), motors, motor starters, disconnects, push buttons, ICS specific components and including related BHS computers, controls and control hardware and software, with management and support services required to operate and maintain the specified BHS as described by these documents.

1.3 "Baggage Tub" means a tub formed of molded plastic or other material in to which non-conveyable items are placed while in the BHS.

1.4 "BLM", "BEUMER", "Contractor" or "Consultant" means BEUMER Lifecycle Management LLC, 800 Apgar Drive, Somerset, NJ 08873, The Contractor.

1.5 "City" or "the City" means the City and County of San Francisco, a municipal corporation, acting by and through both its Director of the Office of Contract Administration, referred to as "Purchasing," or the Director's designated agent, Airport Commission.

1.6 "City Data" or "Data" includes, but is not limited to, all data collected, used, maintained, processed, stored, or generated by or on behalf of the City in connection with this Agreement. This includes data that is provided by a third-party for use under this Agreement.

1.7 "CMD" means the Contract Monitoring Division of the City.

1.8 "Confidential Information" means (a) information designated as confidential (or similar) by the party disclosing such information or which a reasonable person would deem confidential given the nature of the information disclosed; and (b) personally-identifiable information ("PII"), protected health information ("PHI"), or individual financial information (collectively, "Proprietary or Confidential Information") that is subject to local, state or federal laws restricting the use and disclosure of such information, including, but not limited to, Article 1, Section 1 of the California Constitution; the California Information Practices Act (Civil Code § 1798 et seq.); the California Confidentiality of Medical Information Act (Civil Code § 56 et seq.); the federal Gramm-Leach-Bliley Act (15 U.S.C. §§ 6801(b) and 6805(b)(2)); the privacy and information security aspects of the Administrative Simplification provisions of the federal Health Insurance Portability and Accountability Act (45 CFR Part 160 and Subparts A, C, and E of part 164); and San Francisco Administrative Code Chapter 12M (Chapter 12M) and Security Sensitive Information as that term is defined under applicable law ("SSI"). Confidential Information shall not include any information that (i) (ii) is disclosed to the receiving party by a third party who had the right to make such disclosure without any confidentiality restrictions; (iii) is, or through no fault of the receiving party has become, generally available to the public; or (iv) is



independently developed by the receiving party without access to, or use of, the disclosing party's Confidential Information.

1.9 "Consumable" means material or equipment that is necessary for the day-to-day operation and maintenance of the BHS. Material or equipment that carries a warranty from the Original Equipment Manufacturer (OEM) is not considered a consumable.

1.10 "Deliverables" means all items that are provided by Contractor to City during the course of Contractor's performance of the Agreement, including City Data, the contents of reports, documents, diagrams, and all equipment, supplies, and materials. "Deliverables" do not include the format Contractor uses to provide reports, documents, diagrams and the like.

1.11 "Effective Date" means the date upon which the City's Controller certifies the availability of funds for this Agreement as provided in Section 3.1.

1.12 "High Level Control System (HLC)" or "Upper Level Control System (ULC)" mean the servers and associated equipment and software for the Sort Allocation Controller (SAC), Data Historian (DHS), Maintenance Diagnostics System (MDS) and Human Machine Interface (HMI).

1.13 "Individual Carrier System (ICS)" means the CrisBag® tote-based baggage transport and sortation system installed at SFO.

1.14 "Lower Level Controls (LLC)" means the Programmable Logic Controllers (PLC) and their software and logic that control various BHS components and gather statistics.

1.15 "Mandatory City Requirements" means those City laws set forth in the San Francisco Municipal Code, including the duly authorized rules, regulations, and guidelines implementing such laws that impose specific duties and obligations upon Contractor.

1.16 "Maintenance Plan" means the document developed and maintained by the Contractor that provides a detailed explanation of how maintenance will be conducted in conformance with the requirements of this Agreement, together with all operating manuals, maintenance manuals, training programs, system assurance monitoring plans and all other requirements and documents developed by the OEM, SFO and the Contractor.

1.17 "Manual Encoding Station (MES)" means the locations where items are directed to the assigned destinations in the BHS using a PC-based system that enables the operator to identify and route items manually.

1.18 "Mobilization" means the time period during which all necessary preparatory work is performed by the Contractor in advance of the start of full operations and maintenance services. This includes all necessary work to provide complete day-to-day operations, maintenance and repair of airport-owned BHS.

1.19 "Operations Plan" means the document, developed and updated by the Contractor and approved by SFO, that provides a detailed explanation of how operations will be conducted in compliance with the requirements of this Agreement and the OEM manuals and other documents relevant to the operation and maintenance of the BHS.

1.20 "Original Equipment Manufacturer (OEM)" means the original manufacturer of the BHS component or accessory.

1.21 "Party" and "Parties" mean the City and Contractor either collectively or individually.

1.22 "Preventative Maintenance (PM)" means the scheduled cyclical maintenance of the BHS performed in accordance with the OEM's requirements and the maintenance plan. PM includes regular inspection, servicing, cleaning, detection and correction of potential failures either before they occur or before they develop in to major defects and/or imminent failures.

1.23 "Programmable Logic Controller (PLC)" means an industrial solid-state computer that monitors inputs and outputs, and makes logic-based decisions for automated BHS processes and components.

1.24 "Routine or Periodic Inspection (RI)" means the periodic and repeated inspections of the BHS conducted in accordance with the OEM's requirements and the maintenance plan.

1.25 "Services" means the work performed by Contractor under this Agreement as specifically described in the "Scope of Services" attached as Appendix A, including all services, labor, supervision, materials, equipment, actions and other requirements to be performed and furnished by Contractor under this Agreement.

1.26 "SFO" or "Airport" means San Francisco International Airport.

1.27 "Subconsultant" or "Subcontractor" means a person or entity who has a direct contract with Contractor to perform a portion of the Services. "Subconsultant" or "Subcontractor" does not include vendors, suppliers of materials, or providers of support services indirectly related to the Services.

1.28 "TSA" means the U.S. Transportation Security Administration.

## **Article 2 Term of the Agreement**

2.1 The term of this Agreement shall commence on August 1, 2020 and expire on June 30, 2023, unless earlier terminated as otherwise provided in this Agreement.

2.2 The City has one (1) option to renew the Agreement for a period of two (2) years. The City may extend this Agreement beyond the expiration date by exercising the option at the City's sole and absolute discretion and by modifying this Agreement as provided in Section 11.5, "Modification of this Agreement".

## **Article 3 Financial Matters**

3.1 **Certification of Funds; Budget and Fiscal Provisions; Termination in the Event of Non-Appropriation.** This Agreement is subject to the budget and fiscal provisions of the City's Charter. Charges will accrue only after prior written authorization certified by the Controller, and the amount of City's obligation under this Agreement shall not at any time exceed the amount certified for the purpose and period stated in such advance authorization. This Agreement will terminate without penalty, liability or expense of any kind to City at the end of any fiscal year if funds are not appropriated for the next succeeding fiscal year. If funds are appropriated for a portion of the fiscal year, this Agreement will terminate, without penalty, liability or expense of any kind at the end of the term for which funds are appropriated. City has no obligation to make appropriations for this Agreement in lieu of appropriations

for new or other agreements. City budget decisions are subject to the discretion of the Mayor and the Board of Supervisors. Contractor's assumption of risk of possible non-appropriation is part of the consideration for this Agreement.

**THIS SECTION CONTROLS AGAINST ANY AND ALL OTHER PROVISIONS OF THIS AGREEMENT.**

**3.2 Guaranteed Maximum Costs.** The City's payment obligation to Contractor cannot at any time exceed the amount certified by City's Controller for the purpose and period stated in such certification. Absent an authorized Emergency per the City Charter or applicable Code, no City representative is authorized to offer or promise, nor is the City required to honor, any offered or promised payments to Contractor under this Agreement in excess of the certified maximum amount without the Controller having first certified the additional promised amount and the Parties having modified this Agreement as provided in Section 11.5, "Modification of this Agreement."

**3.3 Compensation.**

**3.3.1 Payment.** Contractor shall provide an invoice to the City on a monthly basis for Services completed in the immediately preceding month, unless a different schedule is set out in Appendix B, "Calculation of Charges." Compensation shall be made for Services identified in the invoice that the Airport Director, in the Director's sole discretion, concludes has been satisfactorily performed. Payment shall be made within 30 calendar days of receipt of the invoice, unless the City notifies the Contractor that a dispute as to the invoice exists. In no event shall the amount of this Agreement exceed **Twenty-One Million Dollars**. The breakdown of charges associated with this Agreement appears in Appendix B, "Calculation of Charges," attached and incorporated by reference as though fully set forth in this Agreement. A portion of payment may be withheld until conclusion of the Agreement if agreed to both parties as retainage, described in Appendix B. In no event shall City be liable for interest or late charges for any late payments.

**3.3.2 Payment Limited to Satisfactory Services.** Contractor is not entitled to any payments from City until Airport Commission approves Services, including any furnished Deliverables, as satisfying all of the requirements of this Agreement. Payments to Contractor by City shall not excuse Contractor from its obligation to replace unsatisfactory Deliverables, including equipment, components, materials, or Services even if the unsatisfactory character of such Deliverables, equipment, components, materials, or Services may not have been apparent or detected at the time such payment was made. The City may reject Deliverables, equipment, components, materials and Services that do not conform to the requirements of this Agreement and in such case must be replaced by Contractor without delay at no cost to the City.

**3.3.3 Withholding and Deducting from Payments.** If Contractor fails to provide satisfactory Services as set forth in Section 3.3.2 above (except as specified in Appendix A, Section 3.3 and in Appendix B, Section 1(e) of this Agreement), or in the case of systemic or pervasive failures, the City may withhold from payment that portion of an invoice charged by Contractor for the unsatisfactory service. Separately, the City may deduct from any and all payments due Contractor in accordance with Appendices A and B of this Agreement. Contractor shall not stop work as a result of City's withholding of payments as provided in this Agreement.

**3.3.4 Invoice Format.** Invoices furnished by Contractor under this Agreement must be in a form acceptable to the Controller and City and must include a unique invoice number. Payment shall be made by City as specified in 3.3.6, or in such alternate manner as the Parties have mutually agreed upon in writing.



**3.3.5 LBE Payment and Utilization Tracking System – Not Applicable.**

**3.3.6 Getting paid for goods and/or services from the City.**

(a) All City suppliers receiving new contracts, contract renewals, or contract extensions must sign up to receive electronic payments through the City's third-party service that provides Automated Clearing House (ACH) payments. Electronic payments are processed every business day and are safe and secure. To sign up for electronic payments, visit [www.sfgov.org/ach](http://www.sfgov.org/ach).

(b) The following information is required to sign up: (i) the enroller must be the company's authorized financial representative, (ii) the company's legal name, main telephone number and all physical and remittance addresses used by the company, (iii) the company's U.S. federal employer identification number (EIN) or Social Security number (in cases of sole proprietors), and (iv) the company's bank account information, including routing and account numbers.

**3.4 Audit and Inspection of Records.** Contractor agrees to maintain and make available to the City, during regular business hours, accurate books and accounting records relating to its Services. Contractor will permit City to audit, examine and make excerpts and transcripts from such books and records, and to make audits of all invoices, materials, payrolls, records or personnel and other data related to all other matters covered by this Agreement, whether funded in whole or in part under this Agreement. Contractor shall maintain such data and records in an accessible location and condition for a period of not fewer than five years after final payment under this Agreement or until after final audit has been resolved, whichever is later. The State of California or any Federal agency having an interest in the subject matter of this Agreement shall have the same rights as conferred upon City by this Section. Contractor shall include the same audit and inspection rights and record retention requirements in all subcontracts.

**3.5 Submitting False Claims.** The full text of San Francisco Administrative Code §21.35, including the enforcement and penalty provisions, is incorporated into this Agreement. Under San Francisco Administrative Code §21.35, any contractor, subcontractor or consultant who submits a false claim shall be liable to the City for the statutory penalties set forth in that section. A contractor, subcontractor or consultant will be deemed to have submitted a false claim to the City if the contractor, subcontractor or consultant: (a) knowingly presents or causes to be presented to an officer or employee of the City a false claim or request for payment or approval; (b) knowingly makes, uses, or causes to be made or used a false record or statement to get a false claim paid or approved by the City; (c) conspires to defraud the City by getting a false claim allowed or paid by the City; (d) knowingly makes, uses, or causes to be made or used a false record or statement to conceal, avoid, or decrease an obligation to pay or transmit money or property to the City; or (e) is a beneficiary of an inadvertent submission of a false claim to the City, subsequently discovers the falsity of the claim, and fails to disclose the false claim to the City within a reasonable time after discovery of the false claim.

**3.6 Payment of Prevailing Wages**

**3.6.1 Covered Services.** Services to be performed by Contractor under this Agreement may involve the performance of trade work covered by the provisions of Section 6.22(e) [Prevailing Wages] of the Administrative Code or Section 21C [Miscellaneous Prevailing Wage Requirements] (collectively, "Covered Services"). The provisions of Section 6.22(e) and 21C of the Administrative Code are incorporated as provisions of this Agreement as if fully set forth herein and will apply to any Covered Services performed by Contractor and its subcontractors.

3.6.2 **Wage Rates.** In accordance with San Francisco Office of Labor Standards and Enforcement determination regarding the appropriate prevailing wage for this Agreement, the correct classifications for determination of prevailing wages for the scope of work set forth in Appendix A are:

1. **Carpenter and Related Trades: Millwright** – for all labor involving installation, inspection, repair and maintenance of equipment.
2. **Laborer and Related Classifications: Group 3** – for all other tasks associated with the execution of this Contract.

Copies of the prevailing wage rates as fixed and determined by the Board of Supervisors are available from the Office of Labor Standards and Enforcement (“OLSE”) and on the Internet at <http://www.dir.ca.gov/DLSR/PWD> and <http://sfgov.org/olse/prevailing-wage> . Contractor agrees that it shall pay not less than the prevailing wage rates, as fixed and determined by the Board, to all workers employed by Contractor who perform Covered Services under this Agreement. Contractor further agrees as follows:

3.6.3 **Subcontract Requirements.** As required by Section 6.22(e)(5) of the Administrative Code, Contractor shall insert in every subcontract or other arrangement, which it may make for the performance of Covered Services under this Agreement, a provision that such subcontractor shall pay to all persons performing labor in connection with Covered Services under such subcontract or other arrangement not less than the highest general prevailing rate of wages as fixed and determined by the Board of Supervisors for such labor or services.

3.6.4 **Posted Notices.** As required by Section 1771.4 of the California Labor Code, Contractor shall post job site notices prescribed by the California Department of Industrial Relations (“DIR”) at all job sites where services covered by Chapter 6.22 are to be performed.

3.6.5 **Payroll Records.** As required by Section 6.22(e)(6) of the Administrative Code and Section 1776 of the California Labor Code, Contractor shall keep or cause to be kept complete and accurate payroll records for all trade workers performing Covered Services. Such records shall include the name, address and social security number of each worker who provided Covered Services on the project, including apprentices, his or her classification, a general description of the services each worker performed each day, the rate of pay (including rates of contributions for, or costs assumed to provide fringe benefits), daily and weekly number of hours worked, deductions made and actual wages paid. Every subcontractor who shall undertake the performance of any part of Covered Services shall keep a like record of each person engaged in the execution of Covered Services under the subcontract. All such records shall at all times be available for inspection of and examination by the City and its authorized representatives and the DIR.

3.6.6 **Certified Payrolls.** Certified payrolls shall be prepared pursuant to Administrative Code Section 6.22(e)(6) and California Labor Code Section 1776 for the period involved for all employees, including those of subcontractors, who performed labor in connection with Covered Services. Contractor and each subcontractor performing Covered Services shall submit certified payrolls to the City and to the DIR electronically. Contractor shall submit payrolls to the City via the reporting system selected by the City. The DIR will specify how to submit certified payrolls to it. The City will provide basic training in the use of the reporting system at a scheduled training session. Contractor and all subcontractors that will perform Covered Services must attend the training session. Contractor and applicable subcontractors shall comply with electronic certified payroll requirements (including training) at no additional cost to the City.

**3.6.7 Compliance Monitoring.** Covered Services to be performed under this Agreement are subject to compliance monitoring and enforcement of prevailing wage requirements by the DIR and /or the OLSE. Contractor and any subcontractors performing Covered Services will cooperate fully with the DIR and/or the OLSE and other City employees and agents authorized to assist in the administration and enforcement of the prevailing wage requirements, and agrees to take the specific steps and actions as required by Section 6.22(e)(7) of the Administrative Code. Steps and actions include but are not limited to requirements that: (i) the Contractor will cooperate fully with the Labor Standards Enforcement Officer and other City employees and agents authorized to assist in the administration and enforcement of the Prevailing Wage requirements and other labor standards imposed on Public Works Contractor by the Charter and Chapter 6 of the San Francisco Administrative Code; (ii) the Contractor agrees that the Labor Standards Enforcement Officer and his or her designees, in the performance of their duties, shall have the right to engage in random inspections of job sites and to have access to the employees of the Contractor, employee time sheets, inspection logs, payroll records and employee paychecks; (iii) the contractor shall maintain a sign-in and sign-out sheet showing which employees are present on the job site; (iv) the Contractor shall prominently post at each job-site a sign informing employees that the project is subject to the City's Prevailing Wage requirements and that these requirements are enforced by the Labor Standards Enforcement Officer; and (v) that the Labor Standards Enforcement Officer may audit such records of the Contractor as he or she reasonably deems necessary to determine compliance with the Prevailing Wage and other labor standards imposed by the Charter and this Chapter on Public Works Contractors. Failure to comply with these requirements may result in penalties and forfeitures consistent with analogous provisions of the California Labor Code, including Section 1776(g), as amended from time to time.

**3.6.8 Remedies.** Should Contractor, or any subcontractor who shall undertake the performance of any Covered Services, fail or neglect to pay to the persons who perform Covered Services under this Contract, subcontract or other arrangement for the Covered Services, the general prevailing rate of wages as herein specified, Contractor shall forfeit, and in the case of any subcontractor so failing or neglecting to pay such wage, Contractor and the subcontractor shall jointly and severally forfeit, back wages due plus the penalties set forth in Administrative Code Section 6.22 (e) and/or California Labor Code Section 1775. The City, when certifying any payment which may become due under the terms of this Agreement, shall deduct from the amount that would otherwise be due on such payment the amount of such forfeiture.

### **3.7 Apprentices**

**3.7.1** Contractor and its subcontractors of every tier that provide Covered Services under this Agreement (as defined in Section 10.20 above) shall, as a material term of the Agreement, comply with the requirements of the State Apprenticeship Program (as set forth in the California Labor Code, Division 3, Chapter 4 [commencing at Section 3070], and Section 1777.5 of the Labor Code) and Administrative Code Section 6.22(n). Contractor shall be solely responsible for securing compliance with Labor Code Section 1777.5 for all apprenticeable occupations. Contractor is encouraged to contact the State Division of Apprenticeship Standards at 415-703-4920 for any questions on the State Apprenticeship Program.

**3.7.2** Contractor shall include in all of its subcontracts the obligation for subcontractors to comply with the requirements of the State Apprenticeship Program.

**3.7.3** Should Contractor fail to comply with the apprenticeship requirements of Labor Code section 1777.5, Contractor shall be subject to the penalties prescribed in Labor Code Section 1777.7. The interpretation and enforcement of Labor Code Section 1777.5 shall be in accordance with rules and procedures prescribed by the California Apprenticeship Council.

**3.7.4** Contractor, if not signatory to a recognized apprenticeship training program under Labor Code, Chapter 4, shall provide to the City with all progress payment requests, starting with the second

such request, satisfactory evidence that it has contributed to the appropriate apprenticeship fund(s). Contractor shall require its subcontractors who are not signatories to provide such evidence to the City as a condition precedent for qualifying for payment from the City.

3.7.5 Contractor shall comply with all requests by the City to provide proof that Contractor and all of its subcontractors at every tier providing Covered Services are in compliance with the State Apprenticeship Program, including proof that Contractor and all of its subcontractors at any tier providing Covered Services contributed to the appropriate apprenticeship fund(s).

#### **Article 4 Services and Resources**

4.1 **Services Contractor Agrees to Perform.** Contractor agrees to perform the Services provided for in Appendix A, "Scope of Services." Officers and employees of the City are not authorized to request, and the City is not required to reimburse the Contractor for, Services beyond the Scope of Services listed in Appendix A, unless Appendix A is modified as provided in Section 11.5, "Modification of this Agreement."

Appendix A includes as-needed services. In the event the City determines that as-needed services are required, such services shall be requested by City through the issuance of a written task order signed by City and Contractor, which task order shall be made a part of and incorporated into the Agreement as though fully set forth in this Agreement without the need for a formal amendment to the Agreement. The task order shall include a description of the as-needed services, the deliverables, schedule for performance, cost, and method and timing of payment.

4.2 **Qualified Personnel.** Contractor shall use only competent personnel under the supervision of, and in the employment of, Contractor (or Contractor's authorized subcontractors) to perform the Services. Contractor will comply with City's reasonable requests regarding assignment and/or removal of personnel, but all personnel, including those assigned at City's request, must be supervised by Contractor. Contractor shall commit adequate resources to allow timely completion within the project schedule specified in this Agreement.

#### **4.3 Subcontracting.**

4.3.1 Contractor may subcontract portions of the Services only upon prior written approval of City. Contractor is responsible for its subcontractors throughout the course of the work required to perform the Services. All subcontracts must incorporate the terms of Article 10 "Additional Requirements Incorporated by Reference" of this Agreement, unless inapplicable. Neither Party shall, on the basis of this Agreement, contract on behalf of, or in the name of, the other Party. Any agreement made in violation of this provision shall be null and void.

4.3.2 City's execution of this Agreement constitutes its approval of the subcontractors listed below.

#### **4.4 Independent Contractor; Payment of Employment Taxes and Other Expenses.**

**Independent Contractor.** For the purposes of this Section 4.4, "Contractor" shall be deemed to include not only Contractor, but also any agent or employee of Contractor. Contractor acknowledges and agrees that at all times, Contractor or any agent or employee of Contractor shall be deemed at all times to be an independent contractor and is wholly responsible for the manner in which it performs the services and work requested by City under this Agreement. Contractor, its agents, and employees will not represent or hold themselves out to be employees of the City at any time. Contractor or any agent or employee of

Contractor shall not have employee status with City, nor be entitled to participate in any plans, arrangements, or distributions by City pertaining to or in connection with any retirement, health or other benefits that City may offer its employees. Contractor or any agent or employee of Contractor is liable for the acts and omissions of itself, its employees and its agents. Contractor shall be responsible for all obligations and payments, whether imposed by federal, state or local law, including, but not limited to, FICA, income tax withholdings, unemployment compensation, insurance, and other similar responsibilities related to Contractor's performing services and work, or any agent or employee of Contractor providing same. Nothing in this Agreement shall be construed as creating an employment or agency relationship between City and Contractor or any agent or employee of Contractor. Any terms in this Agreement referring to direction from City shall be construed as providing for direction as to policy and the result of Contractor's work only, and not as to the means by which such a result is obtained. City does not retain the right to control the means or the method by which Contractor performs work under this Agreement. Contractor agrees to maintain and make available to City, upon request and during regular business hours, accurate books and accounting records demonstrating Contractor's compliance with this section.

**4.4.1 Payment of Employment Taxes and Other Expenses.** Should City, in its discretion, or a relevant taxing authority such as the Internal Revenue Service or the State Employment Development Division, or both, determine that Contractor is an employee for purposes of collection of any employment taxes, the amounts payable under this Agreement shall be reduced by amounts equal to both the employee and employer portions of the tax due (and offsetting any credits for amounts already paid by Contractor which can be applied against this liability). City shall then forward those amounts to the relevant taxing authority. Should a relevant taxing authority determine a liability for past services performed by Contractor for City, upon notification of such fact by City, Contractor shall promptly remit such amount due or arrange with City to have the amount due withheld from future payments to Contractor under this Agreement (again, offsetting any amounts already paid by Contractor which can be applied as a credit against such liability). A determination of employment status pursuant to this Section 4.4 shall be solely limited to the purposes of the particular tax in question, and for all other purposes of this Agreement, Contractor shall not be considered an employee of City. Notwithstanding the foregoing, Contractor agrees to indemnify and save harmless City and its officers, agents and employees from, and, shall defend them against any and all claims, losses, costs, damages, and expenses, including attorneys' fees, arising from this section in accordance with Section 5.2 hereof.

**4.5 Assignment.** The Services to be performed by Contractor are personal in character. Neither this Agreement, nor any duties or obligations hereunder, may be directly or indirectly assigned, novated, hypothecated, transferred, or delegated by Contractor, or, where the Contractor is a joint venture, a joint venture partner, (collectively referred to as an "Assignment") unless first approved by City by written instrument executed and approved in the same manner as this Agreement in accordance with the Administrative Code. The City's approval of any such Assignment is subject to the Contractor demonstrating to City's reasonable satisfaction that the proposed transferee is: (i) reputable and capable, financially and otherwise, of performing each of Contractor's obligations under this Agreement and any other documents to be assigned, (ii) not forbidden by applicable law from transacting business or entering into contracts with City; and (iii) subject to the jurisdiction of the courts of the State of California. A change of ownership or control of Contractor or a sale or transfer of substantially all of the assets of Contractor shall be deemed an Assignment for purposes of this Agreement. Contractor shall immediately notify City about any Assignment and, provided the conditions for Assignment under this Agreement are met, City shall not unreasonably withhold approval. Any purported Assignment made in violation of this provision shall be null and void.

**4.6 Warranty.** Contractor warrants to City that during the terms of this Agreement and for one (1) year after the expiration of this Agreement, the Services will be performed with the degree of skill and care that is required by current, good and sound professional procedures and practices, and in



conformance with generally accepted professional standards prevailing at the time the Services are performed so as to ensure that all Services performed are correct and appropriate for the purposes contemplated in this Agreement. The City's exclusive remedy and Contractor's sole liability under this warranty is the reperformance of the Services at the sole cost and expense of Contractor. TO THE FULLEST EXTENT ALLOWED BY LAW, THE WARRANTIES AND REMEDIES SET FORTH IN THIS AGREEMENT ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED BY USAGE, CUSTOM OR THE TRADE, FACT, OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING BUT NOT LIMITED TO, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH ARE EXPRESSLY DISCLAIMED. CONTRACTOR'S WARRANTIES IN THE AGREEMENT RUN ONLY TO THE CITY AND ARE NOT EXTENDED TO ANY THIRD PARTY, INCLUDING ANY SUBCONTRACTOR OR AGENT OF THE CITY. CONTRACTOR NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE SERVICES.

4.7 **Liquidated Damages.** Not Applicable.

## **Article 5 Insurance and Indemnity**

### **5.1 Insurance.**

5.1.1 **Required Coverages.** Without in any way limiting Contractor's liability pursuant to the "Indemnification" section of this Agreement, Contractor must maintain in force, during the full term of the Agreement, insurance in the following amounts and coverages which may be met by any combination of primary, excess and/or umbrella policies:

(a) Workers' Compensation, in statutory amounts, with Employers' Liability Limits not less than \$1,000,000 each accident, injury, or illness; and

(b) Commercial General Liability Insurance with limits not less than \$8,000,000 each occurrence for Bodily Injury and Property Damage, including Contractual Liability, Personal Injury, Products and Completed Operations; and

(c) Commercial Automobile Liability Insurance with limits not less than \$2,000,000 each occurrence, "Combined Single Limit" for Bodily Injury and Property Damage, including Owned, Non-Owned and Hired auto coverage, as applicable.

(d) Technology Errors and Omissions Liability coverage, with limits of \$1,000,000 for each claim and each loss and \$2,000,000 general aggregate. The policy shall at a minimum cover professional misconduct or lack of the requisite skill required for the performance of services defined in the contract and shall also provide coverage for the following risks:

(i) Network security liability arising from the unauthorized access to, use of, or tampering with computers or computer systems, including hacker attacks; and

(ii) Liability arising from the introduction of any form of malicious software including computer viruses into, or otherwise causing damage to the City's or third person's computer, computer system, network, or similar computer related property and the data, software, and programs thereon.

(e) Contractor shall maintain in force during the full life of the Agreement Cyber and Privacy Insurance with limits of not less than \$1,000,000 per claim. Such insurance shall include coverage for liability arising from theft, dissemination, and/or use of confidential information, including but not limited to, bank and credit card account information or personal information, such as name, address, social security numbers, protected health information or other personally identifying information, stored or transmitted in electronic form.

5.1.2 Commercial General Liability and Commercial Automobile Liability Insurance policies must be endorsed to name as Additional Insured the City and County of San Francisco, its Officers, Agents, and Employees.

5.1.3 Contractor's Commercial General Liability and Commercial Liability Insurance policies shall provide that that such policies are primary insurance to any other insurance available to the Additional Insureds, with respect to any claims arising out of this Agreement, and that the insurance applies separately to each insured against whom claim is made or suit is brought.

5.1.4 All policies shall be endorsed to provide thirty (30) days' advance written notice to the City of cancellation for any reason, intended non-renewal, or reduction in coverages. Notices shall be sent to the City address set forth in Section 11.1, entitled "Notices to the Parties."

Contractor shall provide thirty (30) days' advance written notice to the City of cancellation, intended non-renewal, or reduction in coverages, except for non-payment for which no less than ten (10) days' notice shall be provided to City. Notices shall be sent to the City address set forth in Section 11.1 entitled "Notices to the Parties."

5.1.5 Should any of the required insurance be provided under a claims-made form, Contractor shall maintain such coverage continuously throughout the term of this Agreement and, without lapse, for a period of three years beyond the expiration of this Agreement, to the effect that, should occurrences during the contract term give rise to claims made after expiration of the Agreement, such claims shall be covered by such claims-made policies.

5.1.6 Should any of the required insurance be provided under a form of coverage that includes a general annual aggregate limit or provides that claims investigation or legal defense costs be included in such general annual aggregate limit, such general annual aggregate limit shall be double the occurrence or claims limits specified above.

5.1.7 Should any required insurance lapse during the term of this Agreement, requests for payments originating after such lapse shall not be processed until the City receives satisfactory evidence of reinstated coverage as required by this Agreement, effective as of the lapse date. If insurance is not reinstated, the City may, at its sole option, terminate this Agreement effective on the date of such lapse of insurance.

5.1.8 Before commencing any Services, Contractor shall furnish to City certificates of insurance and additional insured policy endorsements with insurers with ratings comparable to A-, VIII or higher, that are authorized to do business in the State of California, and that are satisfactory to City, in form evidencing all coverages set forth above. Approval of the insurance by City shall not relieve or decrease Contractor's liability hereunder.

5.1.9 The Workers' Compensation policy(ies) shall be endorsed with a waiver of subrogation in favor of the City for all work performed by the Contractor, its employees, agents and subcontractors.

5.1.10 If Contractor will use any subcontractor(s) to provide Services, Contractor shall require the subcontractor(s) to provide all necessary insurance and to name the City and County of San Francisco, its officers, agents and employees and the Contractor as additional insureds.

5.2 **Indemnification.** Contractor shall indemnify and hold harmless City and its officers, agents and employees (the "Indemnitees") from, and shall defend them from and against any and all claims, demands, losses, damages, costs, expenses, and liability (legal, contractual, or otherwise) arising from or in any way connected with any: (i) injury to or death of a person, including employees of City or Contractor; (ii) loss of or damage to property; (iii) violation of local, state, or federal common law, statute or regulation, including but not limited to privacy or personally identifiable information, health information, disability and labor laws or regulations; (iv) strict liability imposed by any law or regulation; or (v) losses arising from Contractor's execution of subcontracts not in accordance with the requirements of this Agreement applicable to subcontractors; so long as such injury, violation, loss, or strict liability (as set forth in subsections (i) – (v) above) arises directly or indirectly from Contractor's performance of this Agreement, including, but not limited to, Contractor's use of facilities or equipment provided by City or others, except (a) to the extent that such indemnity is void or otherwise unenforceable under applicable law, (b) where such loss, damage, injury, liability or claim is the result of the active negligence or willful misconduct of City and is not contributed to by any act of, or any omission to perform some duty imposed by law or agreement on the Contractor, its subcontractors, or either's agent or employee, or (c) where such loss, damage, injury, liability is allocated or apportioned to City on the basis of comparative fault, the parties acknowledging and agreeing that the foregoing indemnity obligation is not intended to require Contractor to indemnify the Indemnitees to the extent the indemnified claim arises out of, or in connection with, the acts or omissions of an Indemnitee.

In addition to Contractor's obligation to indemnify City, Contractor specifically acknowledges and agrees that it has an immediate and independent obligation to defend City from any claim which actually or potentially falls within this indemnification provision, even if the allegations are or may be groundless, false or fraudulent, which obligation arises at the time such claim is tendered to Contractor by City and continues at all times thereafter. City agrees to give Contractor prompt notice of any claim. City agrees to provide reasonable assistance to the Contractor (at Contractor's expense).

Contractor shall indemnify and hold City harmless from all loss and liability, including attorneys' fees, court costs and all other litigation expenses for any infringement of the patent rights, copyright, trade secret or any other proprietary right or trademark, and all other intellectual property claims of any person or persons arising directly or indirectly from the receipt by City, or any of its officers or agents, of Contractor's Services

## **Article 6      Liability of the Parties**

6.1 **Liability of City.** CITY'S PAYMENT OBLIGATIONS UNDER THIS AGREEMENT SHALL BE LIMITED TO THE PAYMENT OF THE COMPENSATION PROVIDED FOR IN SECTION 3.3.1, "PAYMENT," OF THIS AGREEMENT AS THAT AMOUNT MAY BE CHANGED PURSUANT TO THE TERMS OF THIS AGREEMENT. NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, IN NO EVENT SHALL CITY BE LIABLE, REGARDLESS OF WHETHER ANY CLAIM IS BASED ON CONTRACT OR TORT, FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOST PROFITS, ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR THE SERVICES PERFORMED IN CONNECTION WITH THIS AGREEMENT. THE FOREGOING LIMITATIONS OF LIABILITY SHALL NOT APPLY TO ANY CLAIM CAUSED BY THE CITY'S GROSS NEGLIGENCE, RECKLESS CONDUCT OR WILLFUL ACTS OR OMISSIONS

6.2 **Liability of Contractor.** NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, CONTRACTOR'S CUMULATIVE LIABILITY FOR ALL DAMAGES, LOSSES OR ANY CLAIMS UNDER THIS AGREEMENT, SHALL BE LIMITED TO THE TOTAL COMPENSATION AMOUNT PROVIDED IN SECTION 3.3.1, "PAYMENT." AS THAT AMOUNT MAY BE CHANGED PURSUANT TO THE TERMS OF THIS AGREEMENT CONTRACTOR'S LIABILITY LIMIT SET FORTH HEREIN SHALL NOT APPLY TO (1) DAMAGES, LIABILITY OR CLAIMS CAUSED BY CONTRACTOR'S GROSS NEGLIGENCE, RECKLESS CONDUCT OR WILLFUL ACTS OR OMISSIONS , (2) LIMIT CLAIMS OR GENERAL DAMAGES THAT FALL WITHIN THE INSURANCE COVERAGE REQUIRED UNDER THIS AGREEMENT, (3) STATUTORY FINES, EXPENSES, DAMAGES CAUSED BY CONTRACTOR'S VIOLATION OF FEDERAL, STATE AND/OR LOCAL LAWS, IN PARTICULAR THOSE INCLUDED IN THIS AGREEMENT AND REGARDING PRIVACY AND/OR HEALTH INFORMATION , (4) CONTRACTOR'S OBLIGATIONS TO INDEMNIFY AND DEFEND CITY PURSUANT TO THE GENERAL INDEMNITY CLAUSE AND FOR INTELLECTUAL PROPERTY INFRINGEMENT AS SET FORTH IN SECTION 5.2, (5) CONTRACTOR'S WARRANTIES UNDER THIS AGREEMENT, (6) WRONGFUL DEATH CAUSED BY CONTRACTOR, AND (6) PUNITIVE DAMAGES ASSESSED AGAINST CONTRACTOR OR ANY OF ITS SUBCONTRACTORS.

6.3 **Liability for Use of Equipment.** City shall not be liable for any damage to persons or property as a result of the use, misuse or failure of any equipment used by Contractor, or any of its subcontractors, or by any of their employees, even though such equipment is furnished, rented or loaned by City.

6.4 **Liability for Incidental and Consequential Damage.** NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, IN NO EVENT SHALL CONTRACTOR BE LIABLE, REGARDLESS OF WHETHER ANY CLAIM IS BASED ON CONTRACT OR TORT FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, LOST PROFITS, RESULTING IN WHOLE OR IN PART FROM CONTRACTOR'S ACTS OR OMISSIONS. HOWEVER, CONTRACTOR SHALL BE LIABLE FOR INCIDENTAL AND CONSEQUENTIAL DAMAGES RESULTING FROM (1) DAMAGES CAUSED BY CONTRACTOR'S GROSS NEGLIGENCE, RECKLESS CONDUCT OR WILLFUL ACTS OR OMISSIONS, (2) CLAIMS OR DAMAGES THAT FALL WITHIN THE INSURANCE COVERAGE OF THIS AGREEMENT, (3) STATUTORY FINES, EXPENSES OR DAMAGES, CAUSED BY CONTRACTOR'S VIOLATION OF FEDERAL, STATE AND/OR LOCAL LAWS, IN PARTICULAR THOSE INCLUDED IN THIS AGREEMENT AND REGARDING PRIVACY AND/OR HEALTH INFORMATION, (4) CONTRACTOR'S OBLIGATION TO INDEMNIFY AND DEFEND CITY PURSUANT TO THE GENERAL INDEMNITY CLAUSE AND FOR INTELLECTUAL PROPERTY INFRINGEMENT AS SET FORTH IN SECTION 5.2(5) WRONGFUL DEATH CAUSED BY CONTRACTOR.

## **Article 7      Payment of Taxes**

7.1 **Contractor to Pay All Taxes.** Except for any applicable California sales and use taxes charged by Contractor to City, Contractor shall pay all taxes, including possessory interest taxes levied upon or as a result of this Agreement, or the Services delivered under this Agreement. Contractor shall remit to the State of California any sales or use taxes paid by City to Contractor under this Agreement. Contractor agrees to promptly provide information requested by the City to verify Contractor's compliance with any State requirements for reporting sales and use tax paid by City under this Agreement.

7.2 **Possessory Interest Taxes.** Contractor acknowledges that this Agreement may create a “possessory interest” for property tax purposes. Generally, such a possessory interest is not created unless the Agreement entitles the Contractor to possession, occupancy, or use of City property for private gain. If such a possessory interest is created, then the following shall apply:

7.2.1 Contractor, on behalf of itself and any permitted successors and assigns, recognizes and understands that Contractor, and any permitted successors and assigns, may be subject to real property tax assessments on the possessory interest.

7.2.2 Contractor, on behalf of itself and any permitted successors and assigns, recognizes and understands that the creation, extension, renewal, or assignment of this Agreement may result in a “change in ownership” for purposes of real property taxes, and therefore may result in a revaluation of any possessory interest created by this Agreement. Contractor agrees on behalf of itself and its permitted successors and assigns to report on behalf of the City to the County Assessor the information required by Revenue and Taxation Code section 480.5, as amended from time to time, and any successor provision.

7.2.3 Contractor, on behalf of itself and any permitted successors and assigns, recognizes and understands that other events also may cause a change of ownership of the possessory interest and result in the revaluation of the possessory interest. (see, e.g., Rev. & Tax. Code section 64, as amended from time to time). Contractor agrees on behalf of itself and its permitted successors and assigns to report any change in ownership to the County Assessor, the State Board of Equalization or other public agency as required by law.

7.2.4 Contractor further agrees to provide such other information as may be requested by the City to enable the City to comply with any reporting requirements for possessory interests that are imposed by applicable law.

7.3 **Withholding.** Contractor agrees that it is obligated to pay all amounts due to the City under the San Francisco Business and Tax Regulations Code during the term of this Agreement. Pursuant to Section 6.10-2 of the San Francisco Business and Tax Regulations Code, Contractor further acknowledges and agrees that City may withhold any payments due to Contractor under this Agreement if Contractor is delinquent in the payment of any amount required to be paid to the City under the San Francisco Business and Tax Regulations Code. Any payments withheld under this paragraph shall be made to Contractor, without interest, upon Contractor coming back into compliance with its obligations.

## **Article 8 Termination and Default**

### **8.1 Termination for Convenience**

8.1.1 City shall have the option, in its sole discretion, to terminate this Agreement, at any time during the term hereof, for convenience and without cause. City shall exercise this option by giving Contractor written notice of termination. The notice shall specify the date on which termination shall become effective.

8.1.2 Upon receipt of the notice of termination, Contractor shall commence and perform, with diligence, all actions necessary on the part of Contractor to effect the termination of this Agreement on the date specified by City and to minimize the liability of Contractor and City to third parties as a result of termination. All such actions shall be subject to the prior approval of City. Such actions may include any or all of the following, without limitation:

(a) Halting the performance of all Services under this Agreement on the date(s) and in the manner specified by City.

(b) Terminating all existing orders and subcontracts, and not placing any further orders or subcontracts for materials, Services, equipment or other items.

(c) At City's direction, assigning to City any or all of Contractor's right, title, and interest under the orders and subcontracts terminated. Upon such assignment, City shall have the right, in its sole discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts.

(d) Subject to City's approval, settling all outstanding liabilities and all claims arising out of the termination of orders and subcontracts.

(e) Completing performance of any Services that City designates to be completed prior to the date of termination specified by City.

(f) Taking such action as may be necessary, or as the City may direct, for the protection and preservation of any property related to this Agreement which is in the possession of Contractor and in which City has or may acquire an interest.

8.1.3 Within thirty (30) days after the specified termination date, Contractor shall submit to City an invoice, which shall set forth each of the following as a separate line item:

(a) The reasonable cost to Contractor, without profit, for all Services prior to the specified termination date, for which Services City has not already tendered payment. Reasonable costs may include a reasonable allowance for actual overhead, not to exceed a total of 10% of Contractor's direct costs for Services. Any overhead allowance shall be separately itemized. Contractor may also recover the reasonable cost of preparing the invoice.

(b) A reasonable allowance for profit on the cost of the Services described in the immediately preceding subsection (a), provided that Contractor can establish, to the satisfaction of City, that Contractor would have made a profit had all Services under this Agreement been completed, and provided further, that the profit allowed shall in no event exceed 5% of such cost.

(c) The reasonable cost to Contractor of handling material or equipment returned to the supplier, delivered to the City or otherwise disposed of as directed by the City.

(d) A deduction for the cost of materials to be retained by Contractor, amounts realized from the sale of materials and not otherwise recovered by or credited to City, and any other appropriate credits to City against the cost of the Services or other work.

8.1.4 In no event shall City be liable for costs incurred by Contractor or any of its subcontractors after the termination date specified by City, except for those costs specifically listed in Section 8.1.3. Such non-recoverable costs include, but are not limited to, anticipated profits on the Services under this Agreement, post-termination employee salaries, post-termination administrative expenses, post-termination overhead or unabsorbed overhead, attorneys' fees or other costs relating to the prosecution of a claim or lawsuit, prejudgment interest, or any other expense which is not reasonable or authorized under Section 8.1.3.

8.1.5 In arriving at the amount due to Contractor under this Section, City may deduct: (i) all payments previously made by City for Services covered by Contractor’s final invoice; (ii) any claim which City may have against Contractor in connection with this Agreement; (iii) any invoiced costs or expenses excluded pursuant to the immediately preceding subsection 8.1.4; and (iv) in instances in which, in the opinion of the City, the cost of any Service performed under this Agreement is excessively high due to costs incurred to remedy or replace defective or rejected Services, the difference between the invoiced amount and City’s estimate of the reasonable cost of performing the invoiced Services in compliance with the requirements of this Agreement.

8.1.6 City’s payment obligation under this Section shall survive termination of this Agreement.

**8.2 Termination for Default; Remedies.**

8.2.1 Each of the following shall constitute an immediate event of default (“Event of Default”) under this Agreement:

(a) Contractor fails or refuses to perform or observe any term, covenant or condition contained in any of the following Sections of this Agreement:

3.5	Submitting False Claims.	10.10	Alcohol and Drug-Free Workplace
4.5	Assignment	10.13	Working with Minors
Article 5	Insurance and Indemnity	11.10	Compliance with Laws
Article 7	Payment of Taxes	Article 13	Data and Security

(b) Contractor fails or refuses to perform or observe any other term, covenant or condition contained in this Agreement, including any obligation imposed by ordinance or statute and incorporated into this Agreement by reference, and such default is not cured within ten days after written notice thereof from City to Contractor or, if given the nature of the default, it is not capable of cure within said ten-day period using commercially reasonable means, as determined by mutual agreement of the Parties, Contractor fails to commence cure within the ten-day period. If Contractor defaults a second time in the same manner as a prior default cured by Contractor, City may in its sole discretion immediately terminate the Agreement for default or grant an additional period not to exceed five days for Contractor to cure the default.

(c) Contractor (i) is generally not paying its debts as they become due; (ii) files, or consents by answer or otherwise to the filing against it of a petition for relief or reorganization or arrangement or any other petition in bankruptcy or for liquidation or to take advantage of any bankruptcy, insolvency or other debtors’ relief law of any jurisdiction; (iii) makes an assignment for the benefit of its creditors; (iv) consents to the appointment of a custodian, receiver, trustee or other officer with similar powers of Contractor or of any substantial part of Contractor’s property; or (v) takes action for the purpose of any of the foregoing.

(d) A court or government authority enters an order (i) appointing a custodian, receiver, trustee or other officer with similar powers with respect to Contractor or with respect to any substantial part of Contractor’s property, (ii) constituting an order for relief or approving a petition for relief or reorganization or arrangement or any other petition in bankruptcy or for liquidation or to take advantage of any bankruptcy, insolvency or other debtors’ relief law of any jurisdiction or (iii) ordering the dissolution, winding-up or liquidation of Contractor.

8.2.2 On and after any Event of Default, City shall have the right to exercise its legal and equitable remedies, including, without limitation, the right to terminate this Agreement or to seek specific performance of all or any part of this Agreement. In addition, where applicable, if Contractor fails to cure the default as set forth in this Section 8, City shall have the right (but no obligation) to cure (or cause to be cured) on behalf of Contractor any Event of Default; Contractor shall pay to City on demand all costs and expenses incurred by City in effecting such cure, with interest thereon from the date of incurrence at the maximum rate then permitted by law. City shall have the right to offset from any amounts due to Contractor under this Agreement: (i) all damages, losses, costs or expenses incurred by City as a result of an Event of Default; and (ii) any liquidated damages levied upon Contractor pursuant to the terms of this Agreement; and (iii), any damages imposed by any ordinance or statute that is incorporated into this Agreement by reference.

8.2.3 Except as otherwise set forth in this Agreement, all remedies provided for in this Agreement may be exercised individually or in combination with any other remedy available hereunder or under applicable laws, rules and regulations. The exercise of any remedy shall not preclude or in any way be deemed to waive any other remedy. Except as otherwise set forth in this Agreement, nothing in this Agreement shall constitute a waiver or limitation of any rights that City may have under applicable law.

8.2.4 Any notice of default must be sent by registered mail to the address set forth in Article 11.

8.3 **Non-Waiver of Rights.** The omission by either party at any time to enforce any default or right reserved to it, or to require performance of any of the terms, covenants, or provisions hereof by the other party at the time designated, shall not be a waiver of any such default or right to which the party is entitled, nor shall it in any way affect the right of the party to enforce such provisions.

8.4 **Rights and Duties upon Termination or Expiration.**

8.4.1 This Section and the following Sections of this Agreement listed below, shall survive termination or expiration of this Agreement:

3.3.2	Payment Limited to Satisfactory Services	9.1	Ownership of Results
3.3.7(a)	Grant Funded Contracts - Disallowance	9.2	Works for Hire
3.4	Audit and Inspection of Records	11.6	Dispute Resolution Procedure
3.5	Submitting False Claims	11.7	Agreement Made in California; Venue
Article 5	Insurance and Indemnity	11.8	Construction
Article 6	Liability of the Parties	11.9	Entire Agreement
		11.10	Compliance with Laws
Article 7	Payment of Taxes	11.11	Severability
8.1.6	Payment Obligation	Article 13	Data and Security

8.4.2 Subject to the survival of the Sections identified in Section 8.4.1, above, if this Agreement is terminated prior to expiration of the term specified in Article 2, this Agreement shall be of no further force or effect. Upon receipt of payment therefor, Contractor shall transfer title to City, and deliver in the manner, at the times, and to the extent, if any, directed by City, any work in progress, completed work, supplies, equipment, and other materials produced as a part of, or acquired in connection with the performance of this Agreement, and any completed or partially completed work which, if this Agreement had been completed, would have been required to be furnished to City.



## Article 9 Rights In Deliverables

9.1 **Ownership of Results.** Subject to Section 9.2, the Deliverables, including any drawings, plans, specifications, blueprints, studies, reports, memoranda, computation sheets, computer files and media or other documents prepared by Contractor or its subcontractors for the purposes of this agreement, shall become the property of and will be transmitted to City. However, unless expressly prohibited elsewhere in this Agreement, Contractor may retain and use copies for reference and as documentation of its experience and capabilities.

9.2 **Works for Hire.** As of the effective date of this Agreement, the Parties agree that Contractor's Deliverables, as defined in this Agreement, do not include Works for Hire. If, in connection with Services, Contractor or its subcontractors agree, in writing, to create Works for Hire specifically for the City, including, without limitation, systems designs, software, source codes, or any other original works of authorship, whether in digital or any other format, such works of authorship shall be Works for Hire as defined under Title 17 of the United States Code, and all copyrights in such works shall be the property of the City. If any Works for Hire created by Contractor or its subcontractor(s) under this Agreement are ever determined not to be Works for Hire under U.S. law, Contractor hereby assigns all Contractor's copyrights to such Deliverables to the City, agrees to provide any material and execute any documents necessary to effectuate such assignment, and agrees to include a clause in every subcontract imposing the same duties upon subcontractor(s). With City's prior written approval, Contractor and its subcontractor(s) may retain and use copies of such works for reference and as documentation of their respective experience and capabilities.

## Article 10 Additional Requirements Incorporated by Reference

10.1 **Laws Incorporated by Reference.** The full text of the laws listed in this Article 10, including enforcement and penalty provisions, are incorporated by reference into this Agreement. The full text of the San Francisco Municipal Code provisions incorporated by reference in this Article and elsewhere in the Agreement ("Mandatory City Requirements") are available at: [http://www.amlegal.com/codes/client/san-francisco\\_ca/](http://www.amlegal.com/codes/client/san-francisco_ca/).

10.2 **Conflict of Interest.** By executing this Agreement, Contractor certifies that it does not know of any fact which constitutes a violation of Section 15.103 of the City's Charter; Article III, Chapter 2 of City's Campaign and Governmental Conduct Code; Title 9, Chapter 7 of the California Government Code (Section 87100 *et seq.*), or Title 1, Division 4, Chapter 1, Article 4 of the California Government Code (Section 1090 *et seq.*), and further agrees promptly to notify the City if it becomes aware of any such fact during the term of this Agreement.

10.3 **Prohibition on Use of Public Funds for Political Activity.** In performing the Services, Contractor shall comply with Administrative Code Chapter 12G ("Chapter 12G"), which prohibits funds appropriated by the City for this Agreement from being expended to participate in, support, or attempt to influence any political campaign for a candidate or for a ballot measure. Contractor is subject to the enforcement and penalty provisions in Chapter 12G.

10.4 **Consideration of Salary History.** Contractor shall comply with Administrative Code Chapter 12K ("Chapter 12K"), the Consideration of Salary History Ordinance or "Pay Parity Act." Contractor is prohibited from considering current or past salary of an applicant in determining whether to hire the applicant or what salary to offer the applicant to the extent that such applicant is applying for employment to be performed on this Agreement or in furtherance of this Agreement, and whose application, in whole or part, will be solicited, received, processed or considered, whether or not through

an interview, in the City or on City property. The ordinance also prohibits employers from (1) asking such applicants about their current or past salary or (2) disclosing a current or former employee's salary history without that employee's authorization unless the salary history is publicly available. Contractor is subject to the enforcement and penalty provisions in Chapter 12K. Information about and the text of Chapter 12K is available on the web at <https://sfgov.org/olse/consideration-salary-history>. Contractor is required to comply with all of the applicable provisions of Chapter 12K, irrespective of the listing of obligations in this Section.

## 10.5 Nondiscrimination Requirements

**10.5.1 Nondiscrimination in Contracts.** Contractor shall comply with the provisions of Administrative Code Chapters 12B and 12C. Contractor shall incorporate by reference in all subcontracts the provisions of Administrative Code Sections 12B.2(a), 12B.2(c)-(k), and 12C.3 and shall require all subcontractors to comply with such provisions. Contractor is subject to the enforcement and penalty provisions in Chapters 12B and 12C.

**10.5.2 Nondiscrimination in the Provision of Employee Benefits.** Administrative Code Section 12B.2, Contractor does not as of the date of this Agreement, and will not during the term of this Agreement, in any of its operations in San Francisco, on real property owned by San Francisco, or where work is being performed for the City elsewhere in the United States, discriminate in the provision of employee benefits between employees with domestic partners and employees with spouses and/or between the domestic partners and spouses of such employees, subject to the conditions set forth in Administrative Code Section 12B.2.

**10.6 Local Business Enterprise and Non-Discrimination in Contracting Ordinance.** Contractor shall comply with all applicable provisions of Chapter 14B ("LBE Ordinance"). Contractor is subject to the enforcement and penalty provisions in Chapter 14B.

**10.7 Minimum Compensation Ordinance.** If Administrative Code Chapter 12P applies to this contract, Contractor shall pay covered employees no less than the minimum compensation required by San Francisco Administrative Code Chapter 12P, including a minimum hourly gross compensation, compensated time off, and uncompensated time off. Contractor is subject to the enforcement and penalty provisions in Chapter 12P. Information about and the text of the Chapter 12P is available on the web at <http://sfgov.org/olse/mco>. Contractor is required to comply with all of the applicable provisions of 12P, irrespective of the listing of obligations in this Section. By signing and executing this Agreement, Contractor certifies that it complies with Chapter 12P.

**10.8 Health Care Accountability Ordinance.** If Administrative Code Chapter 12Q applies to this contract, Contractor shall comply with the requirements of Chapter 12Q. For each Covered Employee, Contractor shall provide the appropriate health benefit set forth in Section 12Q.3 of the HCAO. If Contractor chooses to offer the health plan option, such health plan shall meet the minimum standards set forth by the San Francisco Health Commission. Information about and the text of the Chapter 12Q, as well as the Health Commission's minimum standards, is available on the web at <http://sfgov.org/olse/hcao>. Contractor is subject to the enforcement and penalty provisions in Chapter 12Q. Any Subcontract entered into by Contractor shall require any Subcontractor with 20 or more employees to comply with the requirements of the HCAO and shall contain contractual obligations substantially the same as those set forth in this Section.

**10.9 First Source Hiring Program.** Contractor must comply with all of the provisions of the First Source Hiring Program, Chapter 83 of the San Francisco Administrative Code, that apply to this Agreement, and Contractor is subject to the enforcement and penalty provisions in Chapter 83.

**10.10 Alcohol and Drug-Free Workplace.** City reserves the right to deny access to, or require Contractor to remove from, City facilities personnel of any Contractor or subcontractor who City has reasonable grounds to believe has engaged in alcohol abuse or illegal drug activity which in any way impairs City's ability to maintain safe work facilities or to protect the health and well-being of City employees and the general public. City shall have the right of final approval for the entry or re-entry of any such person previously denied access to, or removed from, City facilities. Illegal drug activity means possessing, furnishing, selling, offering, purchasing, using or being under the influence of illegal drugs or other controlled substances for which the individual lacks a valid prescription. Alcohol abuse means possessing, furnishing, selling, offering, or using alcoholic beverages, or being under the influence of alcohol.

**10.11 Limitations on Contributions.** By executing this Agreement, Contractor acknowledges its obligations under Section 1.126 of the City's Campaign and Governmental Conduct Code, which prohibits any person who contracts with, or is seeking a contract with, any department of the City for the rendition of personal services, for the furnishing of any material, supplies or equipment, for the sale or lease of any land or building, for a grant, loan or loan guarantee, or for a development agreement, from making any campaign contribution to (i) a City elected official if the contract must be approved by that official, a board on which that official serves, or the board of a state agency on which an appointee of that official serves, (ii) a candidate for that City elective office, or (iii) a committee controlled by such elected official or a candidate for that office, at any time from the submission of a proposal for the contract until the later of either the termination of negotiations for such contract or twelve months after the date the City approves the contract. The prohibition on contributions applies to each prospective party to the contract; each member of Contractor's board of directors; Contractor's chairperson, chief executive officer, chief financial officer and chief operating officer; any person with an ownership interest of more than 10% in Contractor; any subcontractor listed in the bid or contract; and any committee that is sponsored or controlled by Contractor. Contractor certifies that it has informed each such person of the limitation on contributions imposed by Section 1.126 by the time it submitted a proposal for the contract, and has provided the names of the persons required to be informed to the City department with whom it is contracting.

**10.12 Slavery Era Disclosure** – Not applicable.

**10.13 Working with Minors** – Not applicable.

**10.14 Consideration of Criminal History in Hiring and Employment Decisions**

10.14.1 Contractor agrees to comply fully with and be bound by all of the provisions of Chapter 12T, "City Contractor/Subcontractor Consideration of Criminal History in Hiring and Employment Decisions," of the San Francisco Administrative Code ("Chapter 12T"), including the remedies provided, and implementing regulations, as may be amended from time to time. The provisions of Chapter 12T are incorporated by reference and made a part of this Agreement as though fully set forth herein. The text of the Chapter 12T is available on the web at <http://sfgov.org/olse/fco> . Contractor is required to comply with all of the applicable provisions of 12T, irrespective of the listing of obligations in this Section. Capitalized terms used in this Section and not defined in this Agreement shall have the meanings assigned to such terms in Chapter 12T.

10.14.2 The requirements of Chapter 12T shall only apply to a Contractor's or Subcontractor's operations to the extent those operations are in furtherance of the performance of this Agreement, shall apply only to applicants and employees who would be or are performing work in furtherance of this Agreement, and shall apply when the physical location of the employment or

prospective employment of an individual is wholly or substantially within the City of San Francisco which excludes Airport property. Chapter 12T shall not apply when the application in a particular context would conflict with federal or state law or with a requirement of a government agency implementing federal or state law.

**10.15 Public Access to Nonprofit Records and Meetings** – Not applicable.

**10.16 Food Service Waste Reduction Requirements.** Contractor shall comply with the Food Service Waste Reduction Ordinance, as set forth in San Francisco Environment Code Chapter 16, including but not limited to the provided remedies for noncompliance.

**10.17 Distribution of Beverages and Water.**

**10.17.1 Sugar-Sweetened Beverage Prohibition** - Not applicable.

**10.17.2 Packaged Water Prohibition.** Contractor agrees that it shall not sell, provide, or otherwise distribute Packaged Water, as defined by San Francisco Environment Code Chapter 24, as part of its performance of this Agreement.

**10.18 Tropical Hardwood and Virgin Redwood Ban.** Under San Francisco Environment Code Section 804(b), the City urges Contractor not to import, purchase, obtain, or use for any purpose, any tropical hardwood, tropical hardwood wood product, virgin redwood or virgin redwood wood product.

**10.18.1** Contractor shall comply with San Francisco Environment Code Chapter 8, which provides that except as expressly permitted by the application of Sections 802(b) and 803(b) of the San Francisco Environment Code, Contractor shall not provide any items to the City in performance of this contract which are tropical hardwoods, tropical hardwood wood products, virgin redwood or virgin redwood wood products. Contractor is subject to the penalty and enforcement provisions of Chapter 8.

**10.19 Preservative Treated Wood Products** – Not applicable.

## **Article 11 General Provisions**

**11.1 Notices to the Parties.** Unless otherwise indicated in this Agreement, all written communications sent by the Parties may be by U.S. mail or e-mail, and shall be addressed as follows:

To City: Harvey Milk Terminal 1 BHS O&M Project Manager  
C/O Operations and Security – Airport Services  
San Francisco International Airport  
PO Box 8097  
San Francisco, CA 94128

To Contractor: Mark J. Sibley  
BEUMER Lifecycle Management LLC  
800 Apgar Drive, Somerset, NJ 08873  
mark.sibley@beumergroup.com  
(732) 893-2901

Any notice of default must be sent by registered mail. Either Party may change the address to which notice is to be sent by giving written notice thereof to the other Party. If email notification is used, the sender must specify a receipt notice.

**11.2 Compliance with Americans with Disabilities Act.** Contractor shall provide the Services in a manner that complies with the Americans with Disabilities Act (ADA), including but not limited to Title II's program access requirements, and all other applicable federal, state and local disability rights legislation.

**11.3 Incorporation of Recitals.** The matters recited above are hereby incorporated into and made part of this Agreement.

**11.4 Sunshine Ordinance.** Contractor acknowledges that this Agreement and all records related to its formation, Contractor's performance of Services, and City's payment are subject to the California Public Records Act, (California Government Code §6250 *et. seq.*), and the San Francisco Sunshine Ordinance, (San Francisco Administrative Code Chapter 67). Such records are subject to public inspection and copying unless exempt from disclosure under federal, state or local law.

**11.5 Modification of this Agreement.** This Agreement may not be modified, nor may compliance with any of its terms be waived, except as noted in Section 11.1, "Notices to Parties," regarding change in personnel or place, and except by written instrument executed and approved in the same manner as this Agreement. Contractor shall cooperate with Department to submit to the Director of CMD any amendment, modification, supplement or change order that would result in a cumulative increase of the original amount of this Agreement by more than 20% (CMD Contract Modification Form).

**11.6 Dispute Resolution Procedure.**

**11.6.1 Negotiation; Alternative Dispute Resolution.** The Parties will attempt in good faith to resolve any dispute or controversy arising out of or relating to the performance of services under this Agreement. If the Parties are unable to resolve the dispute, then, under San Francisco Administrative Code Section 21.36, Contractor may submit to the Contracting Officer a written request for administrative review and documentation of the Contractor's claim(s). Upon such request, the Contracting Officer shall promptly issue an administrative decision in writing, stating the reasons for the action taken and informing the Contractor of its right to judicial review. If agreed by both Parties in writing, disputes may be resolved by a mutually agreed-upon alternative dispute resolution process. If the parties do not mutually agree to an alternative dispute resolution process or such efforts do not resolve the dispute, then either Party may pursue any remedy available under California law. The status of any dispute or controversy notwithstanding, Contractor shall proceed diligently with the performance of its obligations consistent with the Agreement and the written directions of the City. Neither Party will be entitled to legal fees or costs for matters resolved under this section.

**11.6.2 Government Code Claim Requirement.** No suit for money or damages may be brought against the City until a written claim therefor has been presented to and rejected by the City in conformity with the provisions of San Francisco Administrative Code Chapter 10 and California Government Code Section 900, *et seq.* Nothing set forth in this Agreement shall operate to toll, waive or excuse Contractor's compliance with the California Government Code Claim requirements set forth in San Francisco Administrative Code Chapter 10 and California Government Code Section 900, *et seq.*

**11.7 Agreement Made in California; Venue.** The formation, interpretation and performance of this Agreement shall be governed by the laws of the State of California. Venue for all litigation relative to the formation, interpretation and performance of this Agreement shall be in San Francisco.

11.8 **Construction.** All paragraph captions are for reference only and shall not be considered in construing this Agreement.

11.9 **Entire Agreement.** This contract sets forth the entire Agreement between the parties, and supersedes all other oral or written provisions. This Agreement may be modified only as provided in Section 11.5, "Modification of this Agreement."

11.10 **Compliance with Laws.** Contractor shall keep itself fully informed of the City's Charter, codes, ordinances and duly adopted rules and regulations of the City and of all state, and federal laws in any manner affecting the performance of this Agreement, and must at all times comply with such local codes, ordinances, and regulations and all applicable laws as they may be amended from time to time.

11.11 **Severability.** Should the application of any provision of this Agreement to any particular facts or circumstances be found by a court of competent jurisdiction to be invalid or unenforceable, then (a) the validity of other provisions of this Agreement shall not be affected or impaired thereby, and (b) such provision shall be enforced to the maximum extent possible so as to effect the intent of the parties and shall be reformed without further action by the parties to the extent necessary to make such provision valid and enforceable. WITHOUT LIMITING THE FOREGOING, IT IS EXPRESSLY UNDERSTOOD AND AGREED THAT EACH AND EVERY PROVISION OF THE AGREEMENT THAT PROVIDES FOR A LIMITATION OF LIABILITY, DISCLAIMER OF WARRANTIES, EXCLUSION OF DAMAGES, WITHHOLDING AND DEDUCTING PAYMENTS, PREVAILING WAGES, QUALIFIED PERSONNEL, INDEMNITY, INCIDENTAL AND CONSEQUENTIAL DAMAGES, TERMINATION FOR CONVENIENCE AND TERMINATION FOR DEFAULT IS INTENDED BY THE PARTIES TO BE SEVERABLE AND INDEPENDENT OF ANY OTHER PROVISION AND TO BE ENFORCED AS SUCH. FURTHER, IT IS EXPRESSLY UNDERSTOOD AND AGREED THAT IN THE EVENT ANY REMEDY PROVIDED UNDER THE AGREEMENT IS DETERMINED TO HAVE FAILED OF ITS ESSENTIAL PURPOSE, ALL EXCLUSIONS FROM SEVERABILITY SET FORTH IN THIS PARAGRAPH 11.11

11.12 **Cooperative Drafting.** This Agreement has been drafted through a cooperative effort of City and Contractor, and both Parties have had an opportunity to have the Agreement reviewed and revised by legal counsel. No Party shall be considered the drafter of this Agreement, and no presumption or rule that an ambiguity shall be construed against the Party drafting the clause shall apply to the interpretation or enforcement of this Agreement.

11.13 **Order of Precedence.** Contractor agrees to perform the services described in this Agreement in accordance with the terms and conditions of this Agreement and any implementing task orders.

11.14 **Notification of Legal Requests.** Contractor shall immediately notify City upon receipt of any subpoenas, service of process, litigation holds, discovery requests and other legal requests ("Legal Requests") related to City Data or Data given to Contractor by City in the performance of this Agreement, or which in any way might reasonably require access to City's Data, and in no event later than 24 hours after it receives the request. Contractor may provide notices to the City of the abovementioned requests by email. Contractor shall not respond to Legal Requests related to City without first notifying City other

than to notify the requestor that the information sought is potentially covered under a non-disclosure agreement. Contractor shall retain and preserve City Data in accordance with the City's instruction and requests, including, without limitation, any retention schedules and/or litigation hold orders provided by the City to Contractor, independent of where the City Data is stored.

#### 11.15 Force Majeure and Pandemic.

11.15.1 **Liability.** No Party shall be liable for delay in the performance of its obligations under this Agreement if and to the extent such delay is caused, directly or indirectly, by: fire, flood, earthquake in excess of a magnitude 5.5 on the Richter Scale, elements of nature or acts of God, riots, civil disorders, pandemics, or any other cause beyond the reasonable control of such Party (a "Force Majeure Event"). In the case of a Force Majeure Event, Contractor shall immediately commence disaster recovery services as described in Appendix A, Section 4.4.3 of this Agreement.

11.15.2 **Duration.** In a Force Majeure Event, the non-performing Party shall be excused from further performance or observance of the obligation(s) so affected for as long as such circumstances prevail and such Party continues to use commercially reasonable efforts to recommence performance whenever and to whatever extent possible without delay. Any Party so delayed in its performance shall immediately notify the Party to whom performance is due by telephone, to be confirmed in writing two (2) days of the inception of such delay, unless either of the parties sustains a complete failure of electronic communication. In that event the Party delayed by the Force Majeure event shall confirm in writing at the earliest possible time after communications have been restored and describe at a reasonable level of detail the circumstances causing such delay. If Force Majeure conditions prevent the Party delayed from investigating the circumstances causing delay, that Party shall explain that in a written communication to the other Party and shall undertake an investigation as soon as possible. Notice as required by this provision shall be deemed to have been given for the current pandemic but Contractor shall promptly notify City of any impacts affecting delivery of performance should they occur during the term of the COVID-19 pandemic, including any and all resurgences affecting delivery of performance.

11.15.3 **Effect.** If a Force Majeure Event substantially prevents, hinders, or delays performance of the Services as critical for more than fifteen (15) consecutive days, then at City's option: (i) City may terminate any portion of this Agreement so affected and the charges payable hereunder shall be equitably adjusted to reflect those terminated Services; or (ii) City may terminate this Agreement for convenience, as set forth in Section 8.1 of this Agreement.

11.15.4 As of the effective date of this Agreement, the COVID-19 public health emergency remains in effect in San Mateo and San Francisco counties. Because the Airport is situated in San Mateo County, that county's Public Health Order ("Order") is applicable to all operations at SFO, including work described in this Agreement. The Orders in San Mateo County regarding COVID-19 change from time to time. Each Party to this Agreement shall keep informed on the most current Order. Real time Information on past and current Orders can be found here: <https://www.smchealth.org/coronavirus>. The current Order describes all requirements determined to be necessary to help stop the spread of COVID-19, including but not limited to the requirement that masks be worn at all times inside Airport facilities and all other businesses, and that individuals maintain social distancing. Notwithstanding any other provision set forth in this Agreement, in the event the COVID-19 restrictions set forth in the current or future Orders issued by San Mateo County or Pandemic Restrictions from jurisdictions other than San Mateo County change in a manner that has a material impact on the cost or time necessary to perform any Services, the Parties shall cooperate in making reasonable adjustments in the time for performance and/or price of the Services and, if necessary, City will issue a task order to that effect. For purposes of this Section 11.15.4, "Pandemic Restrictions" shall mean all laws, orders regulations, guidelines, restrictions, and protocols issued by any domestic or foreign government, governmental agency, health organization, customer, subcontractor and/or supplier arising

from or issued in connection with, any pandemic, whether issued before, during or after execution of this Agreement, to the extent that such laws, orders regulations, guidelines, restrictions, and/or protocols have a direct, material impact on the cost and/or time necessary to perform Services, including but not limited to, material delays in shipping, material shortages of labor, closure or modified working hours of subcontractors, government offices or suppliers, unavailability of materials, parts or supplies, including personal protective equipment that the public, excluding first responders and medical personnel, is required to wear, or the rationing thereof whether occurring before, during or after execution of this Agreement.

## **Article 12 Requirements for Airport Contracts**

**12.1 Airport Commission Rules and Regulations.** Contractor agrees to comply with the Airport Commission's Rules and Regulations for the San Francisco International Airport as amended from time to time. A copy of the current Rules and Regulations can be found at: <http://www.flysfo.com/about-sfo/the-organization/rules-and-regulations> .

**12.2 Airport Intellectual Property.** Pursuant to Resolution No. 01-0118, adopted by the Airport Commission on April 18, 2001, the Airport Commission affirmed that it will not tolerate the unauthorized use of its intellectual property, including the SFO logo, CADD designs, and copyrighted publications. No proposers, bidders, contractors, tenants, permittees, and others doing business with or at the Airport (including subcontractors and subtenants) may use the Airport intellectual property, or any intellectual property confusingly similar to the Airport intellectual property, without the Airport Director's prior written consent.

**12.3 Labor Peace / Card Check Rule.** Without limiting the generality of other provisions in this Agreement requiring Contractor to comply with all Airport Rules, Contractor shall comply with the Airport's Labor Peace / Card Check Rule, adopted on February 1, 2000, pursuant to Airport Commission Resolution No. 00-0049 (the "Labor Peace / Card Check Rule"). Capitalized terms not defined in this provision are defined in the Labor Peace/Card Check Rule. To comply with the Labor Peace/Card Check Rule, Contractor shall, among other actions: (a) Enter into a Labor Peace/Card Check Rule Agreement with any Labor Organization which requests such an agreement and which has registered with the Airport Director or his / her designee, within thirty (30) days after Labor Peace/Card Check Rule Agreement has been requested; (b) Not less than thirty (30) days prior to the modification of this Agreement, Contractor shall provide notice by mail to any Labor Organization or federation of labor organizations which have registered with the Airport Director or his / her designee (registered labor organization"), that Contractor is seeking to modify or extend this Agreement; (c) Upon issuing any request for proposals, invitations to bid, or similar notice, or in any event not less than thirty (30) days prior to entering into any Subcontract, Contractor shall provide notice to all registered Labor Organizations that Contractor is seeking to enter into such Subcontract; and (d) Contractor shall include in any subcontract with a Subcontractor performing services pursuant to any covered Contract, a provision requiring the Subcontractor performing services pursuant to any covered Contract, a provision requiring the Subcontractor to comply with the requirements of the Labor Peace/Card Check Rule. If Airport Director determines that Contractor violated the Labor Peace/Card Check Rule, Airport Director shall have the option to terminate this Agreement, in addition to exercising all other remedies available to the Airport Director.

**12.4 Federal Fair Labor Standards Act.** This Agreement incorporates by reference the provisions of 29 USC §201, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part time workers. Contractor has full responsibility to monitor compliance to the



referenced statute or regulation. Contractor must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.

**12.5 Occupational Safety and Health Act of 1970.** This Agreement incorporates by reference the requirements of 29 CFR §1910 with the same force and effect as if given in full text. Contractor must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. Contractor retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (29 CFR §1910). Contractor must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

**12.6 Federal Nondiscrimination Requirements.** During the performance of this Agreement, Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as "Contractor") agrees as follows:

**12.6.1 Compliance with Regulations.** Contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts And Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this Agreement.

**12.6.2 Nondiscrimination.** Contractor, with regard to the work performed by it during the Agreement, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. Contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the Agreement covers any activity, project, or program set forth in Appendix B of 49 CFR §21.

**12.6.3 Solicitations for Subcontracts. Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by Contractor of Contractor's obligations under this Agreement and the Nondiscrimination Acts And Authorities on the grounds of race, color, or national origin.

**12.6.4 Information and Reports.** Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Airport or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Airport or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

**12.6.5 Sanctions for Noncompliance.** In the event of a Contractor's noncompliance with the Non-discrimination provisions of this Agreement, the Airport will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:

(a) Withholding payments to the contractor under the contract until the contractor complies; and/or

(b) Cancelling, terminating, or suspending a contract, in whole or in part.

**12.6.6 Incorporation of Provisions.** Contractor will include the provisions of paragraphs 12.6.1 through 12.6.6 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. Contractor will take action with respect to any subcontract or procurement as the Airport or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, Contractor may request the Airport to enter into any litigation to protect the interests of the Airport. In addition, Contractor may request the United States to enter into the litigation to protect the interests of the United States.

**12.6.7 Title VI List of Pertinent Nondiscrimination Acts and Authorities.** During the performance of this Agreement, Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 USC §2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination In Federally-Assisted Programs of The Department of Transportation—Effectuation of Title VI of The Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 USC §4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973, (29 USC. §794 *et seq.*), as amended (prohibits discrimination on the basis of disability); and 49 CFR §27;
- The Age Discrimination Act of 1975, as amended (42 USC §6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC §471, Section 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 USC §12131 – 12189) as implemented by Department of Transportation regulations at 49 CFR §37 and 38 and the Department of Justice regulations at 28 CFR, parts 35 and 36;
- The Federal Aviation Administration's Non-discrimination statute (49 USC §47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you

must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 CFR at 74087 to 74100);

• Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC §1681 *et seq.*).

## **Article 13      Data and Security**

### **13.1      Nondisclosure of City Data, Private or Confidential Information.**

13.1.1 **Protection of Private Information.** If this Agreement requires City to disclose “Private Information” to Contractor within the meaning of San Francisco Administrative Code Chapter 12M, Contractor and subcontractor shall use such information only in accordance with the restrictions stated in Chapter 12M and in this Agreement and only as necessary in performing the Services. Contractor is subject to the enforcement and penalty provisions in Chapter 12M.

13.1.2 **Confidential Information.** In the performance of Services, the Parties may have access to the other Party's Confidential Information, the disclosure of which to third parties may damage City. If either Party discloses Confidential Information to the other, such information must be held by the receiving party in confidence and used only in performing the Agreement. Each Party shall exercise the same standard of care to protect such information as a reasonably prudent party would use to protect its own Confidential Information.

13.2 **Payment Card Industry (“PCI”) Requirements** - Not applicable.

13.3 **Business Associate Agreement** - Not applicable.

### **13.4      Management of City Data and Confidential Information**

13.4.1 **Access to City Data.** City shall at all times have access to and control of all data given to Contractor by City in the performance of this Agreement, and shall be able to retrieve it in a readable format, in electronic form and/or print, at any time, at no additional cost.

13.4.2 **Use of City Data and Confidential Information.** Each Party agrees to hold Confidential Information received from the other Party in strictest confidence. A Party shall not use or disclose the other Party's Confidential Information except as permitted or required by the Agreement or as otherwise authorized in writing by the disclosing Party. Any work using, or sharing or storage of, City's Confidential Information outside the United States is subject to prior written authorization by the City. Access to a Party's Confidential Information must be strictly controlled and limited to the receiving party's staff assigned to this project on a need-to-know basis only. Contractor is provided a limited non-exclusive license to use the City Data or Confidential Information solely for performing its obligations under the Agreement and not for Contractor's own purposes or later use. Nothing herein shall be construed to confer any license or right to the City Data or Confidential Information, by implication, estoppel or otherwise, under copyright or other intellectual property rights, to any third-party. Unauthorized use of City Data or Confidential Information by Contractor, subcontractors or other third-parties is prohibited. For purpose of this requirement, the phrase “unauthorized use” means the data mining or processing of data, stored or transmitted by the service, for commercial purposes, advertising or advertising-related purposes, or for any purpose other than security or service delivery analysis that is not explicitly authorized.





13.4.3 **Disposition of Confidential Information.** Upon termination of Agreement or request of a Party, the Contractor or Party receiving the request shall within forty-eight (48) hours return

all Confidential Information which includes all original media. Once the receiving party has received written confirmation from the other Party that Confidential Information has been successfully transferred to the disclosing party, the receiving party shall within ten (10) business days purge all Confidential Information from its servers, any hosted environment Contractor has used in performance of this Agreement, work stations that were used to process the data or for production of the data, and any other work files stored by the receiving party in whatever medium. The receiving party shall provide the other party with written certification that such purge occurred within five (5) business days of the purge.

#### **Article 14      MacBride And Signature**

14.1      **MacBride Principles -Northern Ireland.** The provisions of San Francisco Administrative Code §12F are incorporated by this reference and made part of this Agreement. By signing this Agreement, Contractor confirms that Contractor has read and understood that the City urges companies doing business in Northern Ireland to resolve employment inequities and to abide by the MacBride Principles, and urges San Francisco companies to do business with corporations that abide by the MacBride Principles.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day first mentioned above.

<b>CITY</b> AIRPORT COMMISSION CITY AND COUNTY OF SAN FRANCISCO	<b>CONTRACTOR</b>
By:  Ivar C. Satero, Airport Director	 Authorized Signature
Attest:	MARK J. SIBLEY Printed Name
By:  C. Corina Monzon, Secretary Airport Commission	President Title
Resolution No: 20-0111	Beumer Lifecycle Management, LLC Company Name
Adopted on: June 16, 2020	0000040977 City Supplier Number
Approved as to Form:	800 Apgar Drive Address
Dennis J. Herrera City Attorney	Somerset, NJ 08873 City, State, ZIP
By:  Sheryl L. Bregman Airport General Counsel	732-893-2800 Telephone Number
	82-3745033 Federal Employer ID Number

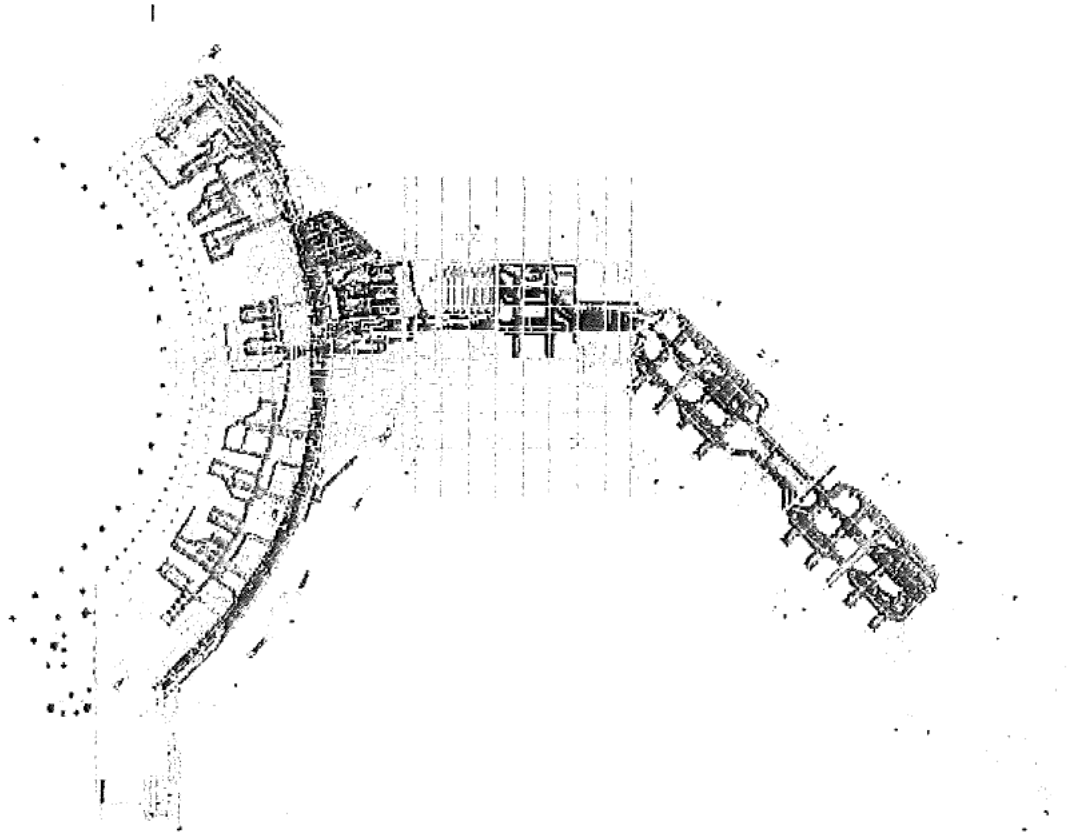
**Appendices**

- A: Scope of Services
- B: Calculation of Charges

## Appendix A Scope of Services

### 1. Description of Services

1.1. The overall system layout is provided below as a reference.



### 1.2. General

1.2.1. The Contractor shall provide all labor, supervision, materials, repair, replacement parts, tools, supplies, lubricants, equipment, and other incidentals necessary to perform complete maintenance and repair services including routine and unscheduled maintenance, repair, and inspection of Airport-owned BHS in Terminal 1 beginning with the mobilization period and continuing for the duration of this Agreement.

1.2.1.1 The Contractor shall provide 24/7/365 Support Services remotely through its central Help Desk(s) using contractor supplied systems including voice and secure data communications. These services shall include software support, mechanical, electrical and controls systems monitoring, analysis and technical support for all equipment and systems under the Contractor's scope of work.

1.2.1.2 Fees for the support services shall be invoiced in accordance with Appendix B of this Agreement.

- 1.2.2. The Explosive Detection System (EDS) baggage screening equipment components are furnished, maintained and operated by the Transportation Security Administration (TSA) and are not included in the Scope of Services under this Agreement.1.2.2.1. The conveyance of materials through the in-line baggage screening equipment is provided by the BHS equipment.
  - 1.2.2.2. The Contractor shall be responsible for maintaining the flow of materials through the screening equipment including clearing of jams or other stoppages related to the materials transported and/or the function of the BHS equipment.
- 1.2.3. The Contractor shall be responsible for all equipment, including computer hardware, software and related systems and equipment as listed in Appendix A – Exhibit 1 of this Agreement, as well as supplies, parts, consumables and a staffing plan necessary to operate and maintain the BHS, on a 24-hour, seven (7) days-a-week, 365 days-a-year (24/7/365) basis. The Airport-owned BHS shall be operated in accordance with these requirements, Original Equipment Manufacturer (OEM) requirements, and the design configuration of the system upon the effective date of this Agreement.
- 1.2.4. The Contractor shall be responsible for the provisioning of replacement baggage tubs, ensuring a sufficient supply is provided at required induction points, and tubs are available and used for every bag inducted that requires their use, as well as the overall care and management of baggage tubs.
- 1.2.5. The Contractor shall provide and store sufficient supplies of fallback baggage tags for immediate use when required.
- 1.2.6. The Contractor shall be available on a 24/7/365 basis to perform emergency work, preventative maintenance services, equipment maintenance and repair activities, and provide documentation of system conditions, as well as reports on the BHS.
- 1.2.7. The Contractor shall keep the BHS operational and available to the Airport and its associated airlines at a rate of 99%. of the time or greater.
- 1.2.8. Maintenance and repair duties shall include routine maintenance, scheduled and preventative maintenance, non-scheduled maintenance, ordinary wear maintenance, maintenance and testing of equipment, maintenance of tools and other equipment, on-call maintenance, and an update of manuals and other reference resources.
- 1.2.9. Operations and Maintenance services shall be performed in accordance with the Operations and Maintenance Plan developed by the Contractor and approved by SFO.
- 1.2.10. When BHS service is interrupted, restoration of the BHS shall be the Contractor's first priority.
- 1.2.11. The Contractor shall cooperate in all respects with SFO, its subcontractors or other designees, the TSA, and user airlines and/or their representatives. Preventative Maintenance ("PM") and non-scheduled maintenance tasks shall be coordinated with, and scheduled around, the requirements of the user airlines operations. The Contractor shall submit a PM schedule to SFO for review and approval based on the OEM recommendations. In the event the OEM does not define PM requirements, then the

Contractor shall develop its PM and routine inspection schedule based on the criticality of the components, as well as expected wear and use related factors. The Contractor's PM and routine inspection schedule shall be included in the Operations and Maintenance Plan and presented to SFO for approval.

- 1.2.12. The Contractor shall ensure the Operation and Maintenance of the BHS is in conformance with industry best practices, consistent with the intended design and usage of the BHS and that it is acceptable to SFO.
- 1.2.13. The Contractor shall ensure that the BHS is operated and maintained consistent with all applicable local, state, Occupational Safety and Health Administration (OSHA), and federal laws and regulations, relevant building codes, and safety standards; and shall assure a safe and efficient system for all personnel who operate, maintain, or have access to the equipment. The Contractor shall submit a Safety Plan suitable for this work for review and approval by SFO.
- 1.2.14. The Contractor shall maintain and operate the BHS in accordance with all TSA regulations and guidance, including applicable TSA Planning Guidance and Design Standards (PGDS) regarding performance, modification, record keeping, and general operating and security standards.
- 1.2.15. The Contractor shall provide all services in accordance with documented procedures that meet or exceed industry and Airport standards, including best business practices, quality of work performed, projected management, maintenance and engineering practices.
- 1.2.16. The Contractor shall maintain all records generated in performance of this Agreement and transfer them to SFO in accordance with documented plans and procedures and records transfer schedules as included in Section 4 of this Appendix A or as may be agreed upon by the parties from time to time.
- 1.2.17. The Contractor shall consult with the OEM of the BHS and component parts and systems if necessary, to maintain the required operational rates and performance.
- 1.2.18. The Contractor shall observe all Airport rules and provisions while undertaking any of its activities under these requirements.
- 1.2.19. The Contractor shall coordinate with SFO and user airlines in the undertaking of any of its activities in support of these requirements where such activities may affect SFO or the airline.
- 1.2.20. The Contractor's procurement and storage of fluids (e.g. hydraulic, cleaning, lubricating) and other materials used for BHS Operation and Maintenance shall be in accordance with federal, state, and local laws, Airport Rules and Regulations, and all other applicable regulations for the handling and storage of hazardous materials. Upon request, the Contractor shall provide Safety Datasheets (SDS) to SFO in addition to all other required distributions and / or postings of those documents.
- 1.2.21. SFO reserves the right, at its discretion, to inspect any part of the BHS to the component level for safety violations or deficiencies and to direct the Contractor to make immediate



corrections of deficient conditions and/or procedures, and/or to stop the work if hazards are deemed to exist.

- 1.2.22. The Contractor shall be fully responsible for the facilities made available by the Airport including repairs, replacements and refurbishment necessitated by ordinary use and wear. The contractor shall not be responsible for facility related repairs or replacements necessitated by causes beyond the Contractor's control. Any damage to the BHS or related facilities, personal injury, or other incident associated with the BHS must be reported immediately to SFO's Airfield Operations. The Contractor shall cooperate fully with any incident investigation conducted by SFO or other authorities.
- 1.2.23. The Contractor shall be responsible for collecting and disposing of all general office, lubricants, belt and scrap metal waste generated in the operations and maintenance of the Airport-owned BHS and disposal shall be at an off-site location.
- 1.2.24. Preventative maintenance and all scheduled maintenance performed during operating hours shall in no way delay airline operations.
- 1.2.25. Where applicable, the Contractor shall track the warranty period for all components and record labor hours for repairs and other costs for accomplishing warranty work as approved by the OEM.
- 1.2.26. The Contractor shall be fully responsible for any and all costs related to revoked or otherwise degraded warranty coverage resultant from their acts or omissions.
- 1.2.27. The Contractor shall acquire, or in the case of subcontractors, ensure that they have acquired the proper insurance and SFO permits for all vehicles that are owned and operated at the site by its employees and/or subcontractors.
- 1.2.28. The Contractor shall ensure that all vehicles and equipment owned or operated by the Contractor or its subcontractors are maintained in a clean, safe, and mechanically sound condition. SFO rules and regulations regarding vehicle and equipment operation and condition shall apply.
- 1.2.29. The Contractor will ensure that its personnel and/or subcontractor personnel shall follow TSA and U.S. Customs and Border Protection (CBP) rules and regulations when working in controlled security areas. The Contractor shall ensure that under no circumstances will any of its employees or subcontractor employees enter any unauthorized areas.
- 1.2.30. The Contractor shall manage the procurement, inventory control, storing and re-ordering of spare or replacement parts as required for the maintenance of the BHS. The Contractor shall maintain a full stock of spare parts with, at a minimum, quantities of spare parts equal to or greater than that which are present at the start of the Agreement. The Contractor shall submit an invoice for the cost of all spare or replacement parts, and all such spare or replacement parts shall immediately become SFO property. Spare and replacement parts invoices must clearly state the amount the Contractor paid to suppliers for procurement of spare parts and be fully compliant with the requirements contained in Appendix B of this Agreement.

- 1.2.31. At the conclusion of this Agreement, the Contractor shall deliver to SFO all manuals, drawings, computer programs (excluding source codes), procedures, records, tools, spare parts, equipment, and testing devices that SFO and the OEM have provided the Contractor for use in maintaining the BHS. All records, logs, reports, and related documentation relative to the maintenance of the BHS developed by the Contractor during the term of the Agreement, including the mobilization period, are the property of and shall be returned to SFO at the conclusion of this Agreement.
- 1.2.32. The Contractor shall be responsible for the maintenance and support of the BHS Lower Level Controls (LLC) for ICS (CrisBag) components including Programmable Logic Controls (PLC) hardware and software components and Upper Level Controls (ULC) (see Appendix A, Exhibit 1 for the complete list). SFO will provide maintenance and support of all other elements of the ULC and the LLC including PLC for the conventional conveyor components, make up and claim units, and all other non- ICS components. SFO's responsibility shall also include, but not be limited to maintenance and support of the following:
- BHS Sort Control Servers
  - Human Machine Interfaces (HMI)
  - BHS reporting systems
  - BHS local area network (BHS LAN).
  - Programmable Logic Controls (PLC) – Non ICS
  - Remote Start / Stop system of EDS CTX Machines
  - Baggage Reconciliation System (BRS)

### **1.3. Personnel – General**

- 1.3.1. The Contractor shall be responsible for all costs associated with staffing the work encompassed in this Agreement, including hiring, SFO security badging, parking, taxes, and wages.
- 1.3.2. The Contractor shall not assign, schedule or use personnel designated to perform work under this Agreement to perform work outside the scope of this agreement without prior approval from the Airport.
- 1.3.3. The Contractor shall be responsible for providing skilled technicians with mechanical and electrical aptitude relevant to Baggage Handling System or Material Handling Systems.
- 1.3.4. The Contractor shall provide a sufficient number of technicians to operate, maintain, troubleshoot, update, and repair the BHS Lower Level Control (LLC) and Upper Level Control (ULC) systems under their responsibility (see Appendix A – Exhibit 1)).
- 1.3.5. The Contractor shall provide sufficient BHS Control Room Personnel to monitor and operate the BHS during periods of active operation in accordance with the approved methods and procedures (see Appendix A - Section 2.3.6).
- 1.3.6. All employees must have a SFO Security Badge as required for unescorted access to the Airport's Security Identification Display Area (SIDA). Management and supervisory

employees must have "Escort" privileges associated with their security badge in accordance with SFO Security Access Office policies. Other staff up to the Airport's maximum allowed number may also be given "Escort" privileges, if required.

- 1.3.7. All employees working in the BHS areas must have a US Customs and Border Protection (CBP) Level 2 Seal associated with their SFO Security Badge.
- 1.3.8. The Contractor shall require all prospective employees, including Contractor's employees, to show proof of citizenship or proof from the United States Immigration Authority that they have the legal right to work in the United States. The Contractor and its subcontractor(s) shall comply with all badging requirements.
- 1.3.9. The Contractor's and subcontractor's employees, who operate motorized vehicles in the performance of this Agreement, must possess a valid driver's license and valid San Francisco International Airport driver's permission, as indicated by an icon on the employee's SFO Identification badge. The Contractor shall have in place procedures to ensure that employee's driver's licenses remain valid at all times. Participation in California's "PULL" program is strongly recommended.
- 1.3.10. The appearance of the Contractor's and Subcontractor's personnel shall be clean and neat and their conduct courteous and consistent with the highest ethical standards.

#### 1.4. Staffing

- 1.4.1. Operations and Maintenance (O&M) Manager: The Contractor shall assign a qualified and experienced person as the O&M Manager responsible for overseeing and directing BHS Operations and Maintenance in Terminal 1. The O&M Manager or his/her authorized representative (person designated by the Contractor), shall be available and on site at all times, including attendance at regularly scheduled or on demand meetings called by SFO and/or the user airlines to discuss the operation and maintenance of the Airport-owned BHS. The Contractor shall attend all daily briefings as required. The O&M Manager shall also be available for periodic tours and inspections of the premises to be made with SFO, other government agencies, and/or airline representatives. The O&M Manager shall oversee and have overall responsibility for the work to be carried out under this Agreement and as such shall devote his/her time exclusively to this task. The Contractor shall be responsible for providing equivalent level management when the BHS O&M Manager is absent due to sick or vacation leave. SFO shall have the right to approve or reject any management selected by the Contractor and/or demand replacement at its sole discretion.
- 1.4.2. Staffing Levels: The Contractor shall determine, in accordance with the Operating and Maintenance requirements of this Agreement the necessary staffing levels and experience and provide all the labor necessary to meet the requirements of this Agreement. The staffing level shall be described in the Staffing Level and Allocation Plan (see Appendix B) and subject to approval by SFO. The Contractor's failure to include minimum staffing levels in the Staffing Level and Allocation Plan does not relieve the Contractor of the obligation of providing the necessary staffing levels to ensure full performance of the work at no additional costs.

Contractor shall provide adequate staffing for each Manual Encode station for every shift.

Contractor shall provide Baggage Operators, whose job duties shall consist of, but not be limited to, clearing all baggage jams in a safe and expedient manner. The Baggage Jam operator may also be used to help in any other area and perform any other duties the Contractor may require.

- 1.4.3. SFO's Right to Reject Contractor Personnel: SFO or its Representatives reserve the right, upon reasonable cause, to reject key personnel assigned to this Agreement.

### **1.5. Training**

The Contractor is responsible for providing initial and on-going training to all employees involved in the maintenance, repair and operation of Airport-owned BHS. The Contractor shall ensure and establish to the Airport's satisfaction that all employees involved in the operation, repair and maintenance of the BHS attend and participate in an Airport-approved maintenance training program.

## 2. Operational Requirements and Services

### 2.1. Mobilization

The Contractor shall plan and perform all necessary work required for the successful start of full Operations and Maintenance services during the Mobilization period. The Mobilization period shall not exceed one hundred and twenty (120) days. The start of the Mobilization period will be agreed upon by SFO and the Contractor. The tasks set forth below are not meant to be all inclusive, but only illustrative of the necessary actions the Contractor must accomplish during the Mobilization period to be fully functional at time of commencement of responsibilities for Operation and Maintenance of the BHS. The Mobilization requirements shall be maintained throughout the terms of this agreement. Activities and requirements shall include, but not be limited to:

- 2.1.1 Hiring the full complement of the BHS Maintenance staff who shall have completed all required security checks and received an SFO security badge and US Customs and Border Protection Level 2 Seal or will obtain a CBP Level 2 Seal before the commencement of international flight and/or baggage handling in Terminal 1. The hiring component includes ensuring that Operations and Maintenance staff meet all requirements of Airport Rules and Regulations including security checks, security badging, and driver requirements.
- 2.1.2 Ensuring Maintenance staff for the BHS is fully proficient on specific requirements of the BHS Maintenance and Operations. Training shall include operational practice.
- 2.1.3 Ensuring that the BHS O&M Manager or his/her designated representative is on-site full-time during Mobilization, and at all other times, consistent with section 1.4.1 of this Appendix A.
- 2.1.4 Ensuring the BHS O&M Manager is available for periodic tours and/or inspection of the BHS to be made with SFO and / or others as requested by SFO.
- 2.1.5 Obtaining all necessary licenses and permits.
- 2.1.6 Not Used.
- 2.1.7 Procuring all tools, equipment, furnishings, fixtures and supplies necessary to establish and sustain operation and administration of the SFO site and perform all of the services required by this Agreement. Such items shall include vehicles, access and lift equipment, hand tools, system and component specific tools, materials handling and storage equipment, office equipment, furnishings fixtures and communications equipment. A lump sum payment in the amount of \$205,510 (two hundred five thousand five hundred and ten dollars) shall be due to the contractor upon SFO's confirmation that Contractor has made these items available for use under this Agreement. See Appendix B for invoicing requirements.
- 2.1.8 Providing an inventory of all maintenance tools and equipment provided during transfer of Operations and Maintenance responsibilities. The Contractor shall purchase, at its sole expense, all tools, equipment, and supplies necessary for the Operation and Maintenance of the BHS components and subsystems.
- 2.1.9 Procuring all tools and equipment required to perform Preventative Maintenance and repair functions in accordance with OEM requirements. Certain tools that are required to

perform specific maintenance tasks on OEM supplied equipment may be supplied by the OEM as part of the equipment supply and installation. These tools shall remain property of SFO and subject to all requirements for maintenance, storage, and condition upon return to SFO as specified elsewhere in this Agreement.

- 2.1.10 Providing a Tool List as per Original Equipment Manufacturer (OEM) recommendations.
- 2.1.11 Managing storage of all spare parts, supplies and equipment and maintain all storage areas in a clean and organized manner. At its discretion, SFO may inspect storage areas and inventory records for all parts and equipment provided by SFO or purchased under this Agreement. SFO will provide storage space for spare parts required under this Agreement.
- 2.1.12 Using the Airport-provided automated system (Maximo), develop and maintain an automated maintenance management and inventory control program for all BHS related work activities and spare parts, which shall be reviewed with SFO prior to implementation.
- 2.1.13 Organizing an electronic maintenance library of available as-built documents, manuals, and other resources. The Contractor shall be wholly familiar with the contents of these documents in order to capably operate, maintain, diagnose and repair the BHS components and subsystems.
- 2.1.14 Providing a 24/7/365 contact telephone number for any service issues related to the BHS. The telephone number may be the same number as the general emergency contact provided to SFO for the Contractor.

## **2.2 Maintenance Plan and Required Experience**

- 2.2.1 SFO must approve the Maintenance Plan prior to the Contractor's start of Operations and Maintenance of the BHS. The Maintenance Plan shall be submitted to SFO a minimum of twenty (20) business days prior to the Contractor's commencement of Operation and Maintenance of the BHS. SFO shall respond to the Contractor's proposed Maintenance Plan within fifteen (15) business days of submittal. Subsequent revisions to the Maintenance Plan must be approved by SFO prior to implementation of any changes to the existing Maintenance Plan. Revisions to the Maintenance Plan shall be submitted as necessary to ensure that the Maintenance Plan reflects the actual conduct of the Operations and Maintenance services and meets these requirements.
- 2.2.2 The Contractor's Maintenance Plan shall include the following:
  - 2.2.2.1 An organizational and implementation framework around which the Contractor's operations and maintenance activities are conducted.
  - 2.2.2.2 A scope of work that provides complete maintenance services for the BHS. Any other services that the Contractor determines are required in order to assume complete responsibility for Operation and Maintenance of the BHS that are not described herein shall be referred to in the Maintenance Plan as "additional services."

2.2.2.3 A training plan detailing how the Contractor will meet initial and recurrent training requirements.

2.2.2.3.1 The Contractor shall be responsible for training all BHS Operations and Maintenance workers. The Contractor shall not allow personnel who have failed to successfully complete the approved training program(s) to operate or perform maintenance on the BHS. The Contractor shall maintain accurate training records and make them available to the Airport upon request. Airport staff may audit and/or, on a space-available basis, participate in training sessions.

2.2.2.3.2 Contractor shall develop a Training Plan that includes a list of training classes and programs, a brief summary of their content, duration, and the objective of each class or program, and the qualifications of the instructor(s). The Training Plan and all revisions must be approved by SFO. The approved Training Plan shall be included in the Maintenance Plan.

2.2.2.3.3 Contractor shall develop a program of recurrent training including baggage hygiene, new or modified equipment, procedures, techniques and any other updated content. Such training shall be conducted annually at minimum, or more frequently if deemed necessary by the Contractor or SFO. Baggage hygiene training shall be made available to the airlines using the BHS.

2.2.2.3.4 The initial operator training and maintenance training specific to the requirements for newly installed BHS subsystems or components shall be included in the purchase cost if the Airport provided subsystems or components. Subsequent training requested from the OEM by the Contractor shall be at the Contractor's expense.

2.2.2.4 A Safety Plan detailing how the work will be accomplished in a safe manner and the BHS protected from damage.

2.2.2.4.1 The Safety Plan shall be reviewed and updated annually along with the Maintenance Plan.

2.2.2.4.2 During the term of this Agreement the Contractor shall provide all materials, training, and other resources required to ensure that the BHS can be safely operated and maintained in conformance with all applicable federal, state, local, Airport Rules and Regulations, and the approved documents developed concerning the BHS.

2.2.2.5 An Operational Contingency Plan providing detailed steps to recover and continue baggage processing in the event of system failures or interruptions due to mechanical, electrical, controls, or environmental (not directly BHS-related) events that render some, or all, of the system degraded or unavailable. These plans must include the use of alternate equipment, manual methods, alternative

sites or combinations of these and other mitigating measures. Resources required, and sources of those resources are to be included, as are communication plans. Procedures and methods to resume normal processing after the system is restored must be included. Contingencies to mitigate interruption of part, or all, of the inline baggage screening capability are to be developed directly with TSA and included in the Contractor's overall plan.

2.2.2.6 The Maintenance Manager shall be the individual with primary responsibility to implement the Maintenance Plan and fulfill the Contractor's obligations regarding the Operation and Maintenance of the BHS. The Maintenance Manager shall have a minimum of five (5) years of experience in operation, maintenance and repair of BHS. The BHS Maintenance and Operations Manager may be a working member of the staff.

2.2.2.7 The Contractor shall provide information on the previous experience of the Maintenance Manager, Supervisor(s) and other management-level staff in the following areas:

- Managing BHS Operations and Maintenance services to achieve maximum levels of safety and reliability.
- Inventory management.
- Preparing and automating BHS Operation and Maintenance documentation and reports.
- Establishing and sustaining an effective quality control program.
- Establishing a maintenance program and plan, including an automated maintenance management and inventory control program.
- Performing corrective maintenance of all BHS components.
- Performing preventative maintenance consistent with OEM standards.
- Maintaining maintenance records including warranty repairs, scheduled preventative maintenance, and non-warranty repairs.
- Establishing a safety plan and asset protection plan.
- Establishing and sustaining a training program.

2.2.2.8 The Contractor shall provide to SFO sufficient documentation, including resumes and proof of experience to demonstrate that the proposed staff meets the minimum qualifications.

## **2.3 Operational Duties**

2.3.1 The Contractor shall execute the maintenance of the BHS to meet, at a minimum, the Operations and Maintenance Standards specified in this Agreement.

2.3.2 It is the Contractor's responsibility to consult with the OEM, if necessary, to maintain the required operational rates and performance.

2.3.3 The Contractor shall be responsible for providing, training and supervising all maintenance personnel and providing all materials, tools, equipment and services



required to accomplish the tasks specified to assure that the BHS provides safe and reliable service, meeting the specified minimum performance criteria. The Contractor shall monitor the BHS status and dispatch maintenance personnel as necessary to correct fault conditions including electrical and mechanical failures. A failure or fault is defined as any condition that renders the BHS, or any subcomponent, unserviceable or non-compliant to the performance specifications.

- 2.3.4 The Contractor is responsible for responding to and rectifying all fault conditions. Whenever the service of the BHS is interrupted, the restoration of such service shall be accomplished in accordance with the Maintenance Plan and the OEM maintenance manuals.
- 2.3.5 The Contractor shall be responsible for the removal of any baggage remaining in the system and any manual handling required in the event of a BHS system failure and to respond to all BHS related failures and emergencies as required, allowing the transport of bags to their intended destination.
- 2.3.6 The Contractor shall staff the BHS Control Room on a 24/7/365 while the system is in operational use and provide monitoring of the BHS using the systems provided.

2.3.6.1 The Control Room operator's general duties include, but are not limited to:

- Alert maintenance personnel through radio or other communication methods of faults or failures and dispatch them to the appropriate location.
- Monitor system balancing.
- Monitor statistical performance and reports.
- Monitor baggage make-up and claim assignments to ensure flight coverage and accuracy.
- Make BHS operational decisions, maintaining and coordinating implementation of any backup/fallback procedures necessary to facilitate continued operations.
- Ensure smooth daily start-ups and shut downs by establishing and following start-up and shut down checklists and procedures.

2.3.6.2 The Control Room operator's daily duties include, but are not limited to:

- Log onto the user interface workstation(s) and log out when leaving the area.
- Ensure that BHS Sortation and HMI computers are operational.
- Verify, using the HMI that there are no devices in an alarm state or condition that will prevent the BHS system from starting and contact maintenance operations to correct any conditions that may prevent system start-up or continued optimal operation.
- Verify, via the HMI, that all communication links are running and operational (baggage and flight messages PLC, BHS LAN).

- Monitor HMI for any visual and audible alerts and notify maintenance operations of identified conditions that may need correction.
- Verify and monitor that the flight information to the BHS is the correct and initiate action to make any corrections needed.
- Verify and monitor that all flight's baggage make-up and baggage claim assignments are correct, and initiate action to make any corrections needed.
- Assist the TSA as necessary for system start-up and operation.
- Verify readiness to exercise/initiate any and all back-up or fallback modes or procedures at any time.
- Coordinate and communicate with users and maintenance and operations staff as required for baggage tub management, ensuring availability at load points at all times.

### 2.3.7 Baggage System Fallback Duties

- 2.3.7.1 Fallback Tags – Contractor must verify, daily, the readiness to exercise / initiate any and all back-up or fallback modes or procedures at any time. This shall include, but is not limited to, verifying the availability of a sufficient stock of pre-printed Fallback/Pier tags as required to allow possible implementation on demand at any given time. Current stock must be sufficient to ensure that it will not be depleted faster than it can be replenished if use were required for extended periods.
- 2.3.7.2 Fallback tags will be provided by the Contractor based on the recommendations of the OEM as well as airlines and other operations stakeholders. The Contractor shall be responsible for restocking, in a similar manner to spare parts purchases, as required to ensure continuous availability as described above and for distribution of Fallback tags as needed. Invoicing procedures (see Appendix B) shall apply to the Contractor's procurement of Fallback tags.
- 2.3.8 The Contractor is responsible for coordinating decisions and managing those decisions regarding BHS fallback operational procedures.
- 2.3.9 The Contractor shall keep SFO and the user airlines informed of all BHS outages or failures that impact the airlines' operations. The Contractor shall inform SFO of these equipment outages or failures as soon as practical after each occurrence. Additionally, these periods of equipment outages or failures shall be reported via the daily and weekly reports.

## 2.4 Response Time

Response time for work requirements is dependent upon work priority and shall be in accordance with the following standards:

### 2.4.1 Emergency Work:

The Contractor shall have personnel available to take emergency action at the job site within five (5) minutes following notification of a problem with the BHS. Emergency

Work is defined as correction of any mechanical, electrical or Low-Level Controls issue or any condition in which the BHS becomes not usable for its intended purpose.

2.4.2 Routine Work:

Work orders shall be started as soon as possible following receipt of the work request. Routine work is defined as correction of any condition that is not causing the BHS to be unusable for its intended purpose. Routine work may be scheduled or unscheduled.

2.4.3 Urgent Work:

Urgent work shall be started with the first available person after receipt of the request. Work in progress will be halted to perform urgent work.

2.4.4 Bag Jams:

Responsive time for bag jams is within five (5) minutes of the occurrence.

2.4.5 After the work has begun, the Contractor shall maintain continued and steady progress to ensure completion in the minimum amount of time, considering competing workload, etc., except when a specific performance period is noted on the work request.

2.4.6 Down Time Event shall be defined as the time in which a BHS related problem causes an interruption in the normally scheduled use of the BHS. Duration of such events shall be measured from the initial notification of the interruption until the effected BHS system is returned to service and the normal operation is restored.

## 2.5 Corrective Action

2.5.1 For any calendar month during the Agreement where the number of cumulative downtime events exceeds the KPI's specified for the BHS elements defined and covered under this Agreement, the Contractor shall promptly undertake reviews of maintenance procedures and shall propose a plan to SFO to correct the problem and return performance within the allowed number of events.

2.5.2 Corrective actions shall be documented in a Failure Analysis Report issued by the Contractor to SFO, to be submitted by the 10th day of the following month.

2.5.3 Any single downtime event exceeding 6 (six) hours shall be reported to SFO immediately and reviewed separately in accordance with the provisions as described in this Agreement, with the exception that the Failure Analysis Report is to be submitted to SFO within 48 (forty-eight) hours of the return to service of the specified BHS.

2.5.4 Should a downtime event exceed 24 (twenty-four) hours SFO may, at its sole discretion, arrange for restoration of the specified BHS to operational condition using Airport and / or contracted resources at the Contractor's expense.

## 2.6 Terminal 1 Baggage Handling System Related Facilities and Supporting Infrastructure

2.6.1 Space rental and utilities required to operate and maintain these facilities are provided by the Airport. The Contractor shall be fully responsible and liable for the facilities made available to them, including repairs, replacements and refurbishment necessitated by ordinary use and wear and including loss or damage. Janitorial maintenance and supplies are the responsibility of the Contractor. The contractor shall not be responsible for facility related repairs or replacements necessitated by causes beyond the Contractor's control. The Contractor shall observe all safety security, and sanitary directives. The Contractor may not use any SFO facilities other than those specifically provided. Contractor shall promptly notify the San Francisco Police Department – Airport Bureau of all equipment and supply theft and assist in determining loss.

2.6.2 The following locations are assigned for the sole and exclusive use of Contractor for the term of the Agreement:

a) **Room T1.1.176H- BHS Control Room**– The BHS Control Room houses the controls equipment, operating, and monitoring systems required for the BHS to function. The Airport shall have full right of entry and inspection of the BHS Control Room and the Airport-owned equipment therein at any time.

b) **Room T1.1.180, B.1.230- BHS Parts Storage and Work Rooms**– These spaces house parts and equipment storage and workshop areas. The Airport shall have full right of entry and inspection of the BHS Parts Storage and Work Room and the Airport-owned equipment therein at any time.

c) **Room T1.1.190- BHS Administrative Office**– The Airport shall have full right of entry and inspection of the space and the Airport-owned parts and / or equipment therein upon reasonable notice to the Contractor under routine circumstances and at any time the Airport's interest in the facility and/or parts and/or equipment dictates immediate entry

2.6.3 Shared Equipment Rooms – The BHS Servers and various other equipment may be located in rooms in which equipment used by others is also located. The Contractor is required to participate in maintaining the cleanliness and security of these spaces in cooperation with the other users whose equipment is located therein.

## 2.7 General Safety

SFO reserves the right, at its discretion, to inspect the BHS for safety violations or deficiencies, to direct the Contractor to make immediate improvement of necessary conditions and/or procedures, and/or stop the work if other hazards are deemed to exist.

### 3. Maintenance Services – Requirements

#### 3.1. General Maintenance Requirements

The Contractor shall provide maintenance of the BHS in conformance with the SFO-approved Maintenance Plan and maintenance manuals provided by the OEM(s). The work shall be performed diligently with top quality supplies, materials, equipment, and workmanship. The Contractor shall not remove BHS subsystems or components from service for purposes other than maintenance and repair, nor shall the Contractor elect not to repair and restore to service failed BHS subsystems or components. In no case may the BHS be used as a source of spare parts or materials unless a demonstrably critical operational need exists. SFO shall be immediately notified of such action, the reason for it and when the removed parts and/or materials will be replaced. The “donor” subsystem or component must also be covered under these requirements and any parts and/or materials used must be in conformance with these requirements. The Maintenance duties for the BHS to be undertaken by the Contractor shall include the following:

- 3.1.1. The Contractor shall maintain all SFO-owned equipment, parts, supplies, and materials in good working order, properly maintained and secure for the duration of the agreement.
- 3.1.2. The Contractor shall establish a maintenance program and plan, which is to include an automated maintenance management and inventory control program using the SFO provided Maintenance Management System (MMS).
- 3.1.3. The Contractor shall follow all required checklists as indicated in the BHS OEM manuals or utilized SFO approved checklists, to be completed by trained maintenance personnel. Discrepancies not corrected on the spot must be scheduled for further maintenance attention. BHS and accessories shall be removed from service for repair or maintenance inspection immediately, if any defect or condition affecting safe operation is found or suspected. The Contractor must coordinate with SFO for the closure of any of the above-mentioned systems and / or equipment.
- 3.1.4. The Contractor shall ensure that OEM requirements necessary to retain warranty coverage, when such coverage is available, are fully complied with. The Contractor shall be responsible for all costs related to revoked or otherwise degraded warranty coverage resultant from their acts or omissions.
- 3.1.5. The Contractor shall establish and sustain an effective quality control program.
- 3.1.6. The Contractor shall maintain maintenance records, including records of warranty repairs, scheduled preventative maintenance, and non-warranty repairs. The MMS shall be used for this purpose.
- 3.1.7. At the conclusion of this Agreement the Contractor shall deliver to SFO all manuals, drawings, computer programs, documentation, records, spare parts, tools, equipment, vehicles and testing devices that SFO and/or the OEM have provided the Contractor for use in operating and maintaining the BHS. All records, logs, reports and related documentation relative to the operation and maintenance of the BHS developed by the Contractor are also to be turned over to SFO.

### 3.2. Maintenance Tasks

The following work tasks provide a general listing of activities assumed necessary to maintain and repair the Airport-owned BHS. In addition to the general listing below, Contractor agrees to perform maintenance work in accordance with the requirements of this Agreement.

#### 3.2.1 Routine Maintenance:

Activities including, but not limited to, routine inspections and testing designed to identify any unusual or abnormal equipment condition or equipment requiring corrective measures or repair due to ordinary wear. The Contractor shall adhere to the OEM's requirements for routine inspections of the BHS in accordance with the schedules and requirements of the OEM as stated in the maintenance manuals. All parts and components subject to wear and tear must be replaced or renewed when needed. Operation of BHS in adverse climatic conditions such as locations near salt water will require more frequent inspections of some items and a more frequent lubrication schedule.

#### 3.2.2 Scheduled / Preventative Maintenance:

Activities required for keeping the BHS operating at the prescribed levels of safety, efficiency and reliability, as defined in the OEM Manuals, which are performed on a regular basis at specified intervals. Preventative Maintenance shall include cleaning BHS conveyor equipment as well as the surrounding area to keep equipment and surrounding areas free from any trash, dirt, debris, and graffiti. The Contractor shall adhere to a rigid program of Preventative Maintenance to prevent or reduce failures or the need for non-scheduled maintenance. Maintenance schedules and procedures established and recommended in the OEM manuals must be followed at all times with the goal of maintaining or exceeding BHS system design life expectancy.

#### 3.2.3 Non-Scheduled Maintenance:

Activities requiring corrective measures or repairs necessitated by an inspection, a failure, or unusual circumstances adversely affecting the normal operations of the BHS or BHS component(s). Non-scheduled maintenance shall be performed on a priority basis, as necessary, to meet the specified performance criteria.

#### 3.2.4 On-Call Maintenance - Maintenance Requested by SFO.

#### 3.2.5 Other Maintenance:

- Updating maintenance manuals or other resources, maintenance of testing equipment, maintenance of tools, equipment and fixtures.
- Maintenance and repair of platforms, suspension (hanger) systems and other structural and supporting elements associated with the BHS.
- Maintenance and repair (including repairs of damage regardless of cause) of impact protection provided for BHS components, including electrical and controls cabinets, supports, conveyors, make up devices, access stairs or ladders and other BHS elements. This to include replacement of damaged parts, including fabrication of parts if necessary, straightening, fastening (including welding), remounting and flooring repair, restoral of finishes (painting) and any other tasks necessary to maintain impact protection in an "as installed" condition.

- Maintenance and replacement as necessary of anti-fatigue mats provided at baggage make up units and other employee work areas as identified by SFO. Replacement mats shall be procured and invoiced by the Contractor in accordance with Appendix B of this Agreement.
- Maintaining all necessary vehicles, including, but not limited to lift devices, fork-lift trucks, etc. that will be required and used under this Agreement.
- Maintenance and repair of all means of access to the BHS including stairs and ladders and including all fencing, gates and associated hardware provided to secure access points. Electronic access control systems provided for access points will be maintained by SFO.
- Managing inventory of parts and equipment.

### 3.3 Maintenance and Operating Standards

#### 3.3.1 Availability Standard

The Contractor is required to keep all BHS and sub systems operational and available to SFO and its associated airlines. A monthly availability percentage of 99%, or greater, is required per system and subsystem. Subsystems shall be defined by agreement between the Contractor and SFO. Any service interruption due to events caused by outside entities such as power outages or failures of federally maintained equipment shall be reported but shall not count toward downtime of the BHS. A monthly availability percentage below 99% shall constitute non-compliance. Measurements of availability shall not include pre-planned down time for Preventative Maintenance. The availability percentage will be calculated using a weighted reliability time metric of three (3) levels of criticality. It is the Contractor's responsibility to consult with the BHS and / or component OEM, if necessary, to maintain the required availability standards.

The levels are:

Level	Description	Weight
Level 1	Highly Critical - A BHS downtime event resulting in more than two (2) flight delays or any flight delay greater than ten (10) minutes past scheduled flight departure time caused by waiting for baggage from the BHS and/or more than two (2) checked items missing the flight for which they were checked. Airline determination as to delay or missed baggage causes shall be accepted.	1.5
Level 2	Critical - A BHS downtime event resulting in two (2) or less flight delays or any flight delay greater than five (5) minutes past scheduled flight departure time caused by waiting for baggage from the BHS and/or two (2) or less checked items missing the flight for which they were checked. Airline determination as to the delay or missed baggage causes shall be accepted.	1.0
Level 3	Minor - BHS downtime event that can be mitigated to eliminate operational	0.0

The availability percentage will be calculated monthly as follows:

- Each BHS component outage shall be reported in minutes, and multiplied times weight to determine weighted minutes.
- The total number of weighted minutes is then summed and subtracted from the total monthly minutes of required availability to obtain the Actual Available Monthly Minutes.

- The Actual Available Monthly Minutes is then divided by the agreed upon total minutes minus scheduled PM minutes to determine the availability percentage.
- Actual Available Monthly Minutes = Total Monthly Minutes – (minus) Scheduled Preventative Maintenance Minutes

### 3.3.2 Measuring non-compliance

The Contractor will be viewed as non-compliant with the availability requirements if the monthly availability percentage is less than 99%. For each month of non-compliance, The Contractor shall submit a written explanation and a plan to prevent recurrence of similar failures, and SFO may, at its sole discretion assess adjustments to payments as specified in 3.3.3 “Withholding and Deducting from Payments” of this Agreement, and in Appendix B of this Agreement.

Other Key Performance Indicators:

### 3.3.3 Tracking Accuracy Standards

The Contractor is required to maintain the highest possible tracking accuracy of bags throughout the BHS including the sortation sub-system and the Checked Baggage Inspection System (CBIS). The Contractor is required to achieve, on a monthly basis, the following tracking percentages:

#### **3.3.3.1 In the Checked Baggage Inspection System (CBIS): 98% accuracy (<= 2% lost in tracking)**

The source of CBIS tracking accuracy results shall be the BHS Reporting System – “CBIS CBRA PERFORMANCE REPORT” “Lost in Tracking” column.

#### **3.3.3.2 In the Sortation sub-system: 97% accuracy (<= 3% lost in tracking)**

The source of Sortation sub-system tracking accuracy reports shall be the BHS Reporting System – “EQUIPMENT OPERATIONAL SUMMARY REPORT” “unknown” and “total bags” columns and will include sortation lines, manual encode lines, and crossover lines.

### 3.3.3.3 Measuring non-compliance

3.3.3.4 The Contractor will be viewed as non-compliant with the tracking accuracy standards if the monthly tracking accuracy percentage is less than 98% for the CBIS or 97% for the sortation sub-system. For any month of non-compliance of either system/sub-system The Contractor shall submit a written explanation and a plan to prevent recurrence of similar failures, and SFO may, at its sole discretion assess a financial penalty of \$1,000 to be deducted from the monthly invoice payment.

### 3.3.3.5 Preventative Maintenance and Routine Inspection Standards

The Contractor shall adhere to the OEM’s requirements for PM and Routine Inspections (RI) of the BHS in accordance with the schedules and requirements of the OEM(s) as stated in the maintenance manuals. See Attachments 1 and 2 of this Appendix A for example PM Inspection Checklists.

Accurate and timely completion of the checklist and recording/retention of the completed checklist constitutes a completed preventative maintenance inspection. For purposes of monitoring the Contractor’s compliance with OEM schedules for PM and RI, the Contractor shall provide to SFO a monthly schedule detailing planned PM



and RI tasks for all BHS components and equipment covered under this Agreement. The Contractor is required to achieve, on a monthly basis, the following PM/RI on time completion rates:

- 3.3.3.5.1 PM/RI on time completion rate of 98% or higher. A completion rate below 98% shall constitute non-compliance.

The PM/RI on time completion rate is calculated as follows:

Completed and "on-time" PM/RI divided by Scheduled PM/RI

Example: 44 completed and on-time PM/RI / 45 Scheduled PM/RI = 98%

- 3.3.3.5.2 Exceptions: Annual and semi-annual PM/RI must be completed at scheduled intervals and have a completion standard of 100%. Each failure to complete Annual or Semi- Annual inspections per schedules shall constitute non-compliance.

### 3.3.4 Measuring Non-Compliance

- 3.3.4.1 The Contractor will be viewed as non-compliant with the requirements if PMs are not conducted within five (5) days of the interval due date as defined in the Maintenance Plan, and within two (2) days of the interval due date defined in the Maintenance Plan for RI. Non-compliant PM and RI will be considered incomplete for purposes of calculating the PM Inspections Completion Rate as required in this Agreement. For each month of non-compliance (completion rate less than 98% or annual and semi-annual PM/RI not completed on schedule), Contractor shall submit a written explanation and a plan to prevent recurrence of similar failures. For each month of non-compliance SFO may, at its sole discretion assess a financial penalty of \$1,000 to be deducted from the monthly invoice payment.

## 3.4 Repair, Replacement and Inventory of Parts, Components and Materials

- 3.4.1 The Contractor shall maintain an inventory of spare parts, equipment, and consumables at a level sufficient to maintain the BHS in accordance with the requirements. Any inventory of spare parts, equipment, and consumables provided to the Contractor by SFO upon the commencement of this Agreement shall be maintained as received (i.e., same quantities of specific parts, equipment, and consumables) with allowance for mutually agreed upon reasonable resupply intervals throughout the term of this Agreement.

3.4.2 To ensure that a proper inventory level of parts is maintained throughout the term of this Agreement the Contractor shall promptly order replacement parts after any part is withdrawn from the inventory, but no more than one business day after approval is given by the City. In the event of an extended down time event or disruption due to an "out of stock" occurrence, the Contractor shall demonstrate its good faith efforts, including pursuit of alternates, to obtain the necessary part(s) in a timely manner and validate that the replacement part in question was promptly ordered by the Contractor but has not yet arrived due to the lead time constraints of the supplier from whom the part was ordered, or due to delays in transportation.

- 3.4.3 Only OEM approved, or recommended, methods, parts, equipment, and consumables shall be used in any BHS operation, maintenance or repair. Exceptions may be granted for functionally equivalent items upon written request to SFO and at SFO's discretion.

- 3.4.4 The Contractor shall be responsible for taking all necessary steps to obtain warranties whenever available from the suppliers of all purchased spare parts, components or materials, tracking the applicability of those warranties, and exercising the provisions of those warranties when applicable.
- 3.4.5 The Contractor shall accurately record any purchases made for spare parts and fulfill any other requirements necessary to obtain reimbursement under the terms of the Warranty Agreement(s) for the BHS parts, components or materials.
- 3.4.6 During the term of this Agreement, the Contractor shall provide SFO with an up-to-date list of parts inventory every six (6) months. SFO may inspect inventory and / or records at any time.
- 3.4.7 The Contractor shall promptly repair and / or replace unserviceable parts, components, or materials. SFO will reimburse the Contractor for the cost of such repairs and replacements in accordance with Appendix B of this agreement. There shall be no reimbursement for repairs or replacement of items covered by guarantees or warranties provided by the Contractor or other supplier or for repairs or replacements necessitated by the careless or negligent acts or omissions of the Contractor's employees, suppliers, agents or subcontractors.
- 3.4.8 At the conclusion of this Agreement equivalent quantities of any and all spare parts, equipment, and consumables provided to the Contractor by SFO will become the property of SFO. All shall be in the same condition as received and meet the same OEM specifications as the originally received inventory. SFO shall be reimbursed by the Contractor for items that are not accounted for or returned from the original inventory.
- 3.4.9 If it is necessary for the Contractor to replace any materials or spare parts, excluding all tools and consumables, of the BHS under this Contract, and SFO is responsible for the cost, the Contractor shall first submit to SFO, for approval, the name of the item, identifying number and quantity required, name of the proposed supplier and the supplier's price to Contractor without any markup. SFO's written approval is required before the purchase of any spare parts or material and SFO shall reimburse only the Contractor's cost of purchase, plus markup. (Refer to Appendix B of this Agreement.) There shall be no reimbursement for repairs or replacements for items covered under warranty. Shipping costs as applicable and not covered by the OEM may be included on the Contractor's monthly invoice. Airport approval of shipping costs must be obtained in advance and documented with the invoice.
- 3.4.10 If replacement of spare parts is necessary and SFO is responsible for the cost of the spare part and/or equipment, the Contractor shall submit an invoice for the cost of all spare parts and/or equipment, and all such spare parts and/or equipment shall immediately become SFO property upon payment. Spare parts invoices must clearly state the amount the Contractor paid to suppliers for procurement of spare parts. If replacement parts and/or equipment is manufactured or fabricated by Contractor, Contractor shall submit an invoice in an amount not to exceed the list price of such parts supplied. In the event parts and/or equipment manufactured by the Contractor does not appear on a published list, the Contractor shall provide evidence that the charges to SFO are comparable to those given to other preferred customers of the Contractor.

3.4.11 All actual costs shall be supported with copies of actual invoices. All cash discounts for spare parts and materials shall be accrued to the Airport. In order to minimize the actual costs to be paid by the Airport for purchased spare parts, the Contractor shall make all reasonable efforts to research appropriate vendors to secure price comparisons, taking into account such things as shipping charges and discounts available.

**3.5 Restrictions on Maintenance, Repair and Operational Activities**

3.5.1 If at any time the Contractor’s activities are deemed to constitute a hazard to Airport patrons, personnel, or facilities, present an unacceptable level of inconvenience or disruption or generally contravene the good order of the Airport the Contractor shall immediately cease such activities when ordered to do so by SFO authorities.

3.5.2 All cutting or welding must comply with Airport Commission’s Rules and Regulations and be conducted under a valid permit issued by SFO.

**4. Performance Monitoring and Reports**

**4.1. Maintenance Management System (MMS)**

The Contractor shall use and maintain a computerized Maintenance Management System (MMS) provided by SFO that provides the ability to track and issue work orders, equipment and repair history, repair frequencies and part failure modes and perform trend analysis. All assets including spare parts provided by the Airport must be entered, managed, and maintained through the MMS. Performance and Monitoring reports shall be generated using the MMS. SFO shall have full and unrestricted access to and use of the MMS.

**4.2. Report Development**

The Contractor shall develop reports in collaboration with and in a format acceptable to the Airport which shall be updated as required and which shall include complete information concerning BHS performance and problems, including description of fault / problem, time and date of occurrence, type of corrections performed and assigned responsibility. The reports shall be archived by the Contractor for the duration of this Agreement after submittal and provided to the Airport or its representatives upon request.

**4.3. Weekly Performance Reports and Monthly Summaries**

The Contractor shall submit weekly performance reports and monthly summaries to SFO’s Project Manager. The format of the weekly and monthly reports shall be coordinated with SFO and, at a minimum, shall provide an indication of actual performance with respect to all performance criteria specified herein. The Contractor shall prepare all documents in the English language and provide them in electronic and / or printed form per SFO direction.

**4.4. Report Submittal**

Interval	Systems	Report Name	Description
Per Incident	BHS	Accident/Injury Report	Include the following information: Date, Time, and Location of Accident/Injury Accident/Injury Description Date and Time when SFO was notified of Accident/Injury Any other relevant information

Daily	BHS	BHS Activity	Include the following information: Total airline baggage processed Total daily baggage jams Total daily missorted bags Total daily outbound bags processed Shift activity
Weekly	BHS	Quality Control (QC)	Include the following information: A summary of results of all quality control inspections performed that includes, at a minimum, date of QC inspection, description of system inspected, name of technician, name of QC inspector, and result
Weekly	BHS	System Downtime	Include the following information: A summary of all systems downtime experienced during the reporting period, that includes, at a minimum, date, start time, end time, system, subsystem, system failure description, resolution, and total downtime.
Monthly	BHS	Sortation and Baggage Tracking	Include the following information: Number and percentage of bags tracked at CBIS

			Number and percentage of bags tracked at Sortation
Monthly	BHS	Faults and Downtime	Include the following information: Number of faults and downtime events Response time Downtime duration Responsibility
Monthly	BHS	Availability Rate	A report of system availability indicating the actual system availability hours; total monthly hours; and scheduled preventative maintenance hours for the month.
Monthly	BHS	Preventative Maintenance (PM) Rate	A summary of the percentage and number of completed Preventative Maintenance tasks and Required Inspections (RI) for each month. The report must include: All PM and RI scheduled to be performed that month PM services accomplished / completed and on-time for that month A list of PM services not timely completed together with a schedule of when the Contractor will perform delinquent PM and RI services All non-scheduled maintenance performed that month
Monthly	BHS	Spare Parts	Include the following information: A list of all parts used during the month A list of all parts purchased during the month A list of all parts on-hand and any shortages from planned stocks
Monthly	BHS	Corrective Action	Include the following information: A list of all non-scheduled repairs by system and subsystem A description of each failure, including cause A plan to mitigate said failures
Semi Annual	BHS	Parts Inventory	A report indicating all parts on-hand at SFO to include: Part number Part ID Location Part Name Actual Quantity

#### 4.5. Quality Assurance Monitoring and Reporting

During the term of this Agreement the Contractor shall collect operational data for analysis. This data shall measure actual performance of the BHS to verify the service availability requirements described in this Agreement. The Contractor shall provide SFO monthly System Quality Assurance Monitoring Reports that include this data for review, commencing at the end of the first month of this Agreement.

#### 4.6. Annual Technology Review and Report

The Contractor shall provide an annual report, no later than October 1st of each year of the Agreement, which identifies system modifications, enhancements, redesigns, and / or replacements of any BHS components that may be desirable due to technological advancements. At a minimum this report shall contain the following:

- Description of component to be replaced
- Reason for replacement
- Description of new components

- Advantages for replacement
- Cost to replace the component
- Time required to complete replacement

#### 4.7. Maintenance of Crisbag® Elements

##### 4.7.1. General Maintenance of Crisbag® Elements

This table covers tasks for general maintenance of CrisBag® elements.

No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Cleaning of photocells and reflectors					✓				5.1.1 / 24
2.	General cleaning of elements						✓			5.1.2 / 25
3.	Cleaning of elements with belts						✓			5.1.3 / 25
4.	Cleaning of roller elements						✓			5.1.4 / 25
5.	Inspection of timing belt	1,300,000 To be replaced after 13,440,000					✓			5.2.1 / 25
6.	Inspection of side guards								✓	5.2.2 / 26
7.	Inspection of cables								✓	5.2.3 / 26

##### 4.7.2. Maintenance of Bottom Covers on Crisbag® Elements

This table covers tasks for the maintenance of bottom covers on CrisBag® elements.  
Straight elements, wide elements, curve elements, diverter elements and merger elements.

No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Inspection of bottom cover					✓				5.3.1 / 27

#### 4.7.3. Totes

This table covers the following straight elements: CB5110 (standard baggage tote, SBT)										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Conveying totes to inspection	2,000					✓		✓	5.4.1 / 28
2.	Inspection of tote								✓	5.4.2 / 28
3.	Cleaning tote								✓	5.4.2.1 / 29
4.	Replacing ID label on CrisBag <sup>®</sup> tote								✓	5.4.2.2 / 29

#### 4.7.4. Loader Elements

This table covers the following loader elements: CB5210, CB5211										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Inspection of belts (alignment)		✓							5.5.3 / 31
2.	Inspection of belts (general condition)				✓					5.5.3 / 31
3.	Inspection of belt guide				✓					5.5.4 / 32
4.	Inspection of drums				✓					5.5.5 / 32
5.	Inspection of sliding plates						✓			5.5.6 / 32
6.	Inspection of motor						✓			5.5.7 / 33
7.	Cleaning of photocells and reflectors on topper			✓						5.5.8 / 35

#### 4.7.5. Straight Elements

This table covers the following elements: Straight elements: CB5300, CB5301, CB5304, CB5310, CB5311, CB5313, CB5320, CB5326 Acceleration and deceleration elements: CB5373, CB5374, CB5375, CB5376, CB5381, CB5382, CB5383, CB5384, CB5387, CB5388 Element for VSU: CB5528 Elements for VTU's: CB5650, CB5651 EBS elements: CB5716, CB5717, CB5718 Empty tote storage elements: CB5755, CB5756, CB5780										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Inspection of belts	700,000				✓				5.6.1 / 36
2.	Inspection of drums	1,300,000					✓			5.6.2 / 37
3.	Inspection of motor and bearings	1,300,000					✓			5.6.3 / 37

#### 4.7.6. Curve Elements

This table covers the following curve elements: CB5330, CB5332, CB5333, CB5334, CB5335, CB5336										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Cleaning of wheel bandages					✓				5.7.1 / 38
2.	Inspection of motor and bearings	1,300,000					✓			5.7.2 / 39
3.	Inspection of conical drums	1,300,000					✓			5.7.3 / 40
4.	Inspection of wheel bandages	700,000				✓				5.7.4 / 40
5.	Inspection of conical drums	2,600,000						✓		5.7.5 / 41

#### 4.7.7. Diverter Elements

This table covers the following diverter elements: CB5410										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Inspection of rollers	700,000				✓				5.8.1 / 42
2.	Inspection of the timing belt between the rollers	1,300,000 To be replaced after 13,440,000					✓			5.8.2 / 43
3.	Inspection of timing belt at diverter arm	1,300,000 To be replaced after 13,440,000					✓			5.8.3 / 44
4.	Inspection of side guards								✓	5.8.4 / 45
5.	Inspection of motor and bearings								✓	5.8.5 / 46
6.	Inspection of diverter arm					✓				5.8.6 / 47
7.	Inspection of linear guide	10,000,000							✓	5.8.7 / 48
8.	Inspection of stop block unit					✓				5.8.8 / 48

#### 4.7.8. Merger Elements

This table covers the following merger elements: CB5410										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Inspection of rollers	700,000				✓				5.9.1 / 50
2.	Inspection of timing belt	1,300,000 To be replaced after 13,440,000					✓			5.9.2 / 51
3.	Inspection of side guards								✓	5.9.3 / 52
4.	Inspection of cables						✓			5.9.4 / 53
5.	Inspection of motor and bearings								✓	5.9.5 / 53



#### 4.7.9. Cross Transfer Elements

This table covers the following cross transfer elements: CB5455, CB5457, CB5460										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Inspection of belts on straight element	700,000						✓		5.10.1 / 55
2.	Inspection of belts on cross unit	350,000						✓		5.10.1 / 55
3.	Inspection of drums	1,300,000						✓		5.10.2 / 56
4.	Inspection of motor and bearings	1,300,000						✓		5.10.3 / 56
5.	Inspection of sensors							✓		5.10.4 / 57
6.	Inspection of running wheels and slide guide for cart	700,000						✓		5.10.5 / 59
7.	Inspection of slideway (running rail)	700,000						✓		5.10.6 / 59
8.	Inspection of actuator	700,000 To be replaced after 2,500,000						✓		5.10.7 / 60
9.	Replenishing grease	Replenished after 2,500,000							✓	5.10.8 / 60
10.	Inspection of actuator bracket	700,000						✓		5.10.9 / 61

#### 4.7.10. Dynamic Tote`Stacker / Dynamic Tote Destacker

This list covers the following dynamic tote stacker and dynamic tote destacker: CB5755, CB5756										
No.	Task	Lifetime for wear parts	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Cleaning and adjustment of photocells and reflectors							✓		5.11.1 / 62
2.	Cleaning of servomotors, grippers, raising/lowering unit etc.							✓		5.11.2 / 63
3.	Inspection for play in bearings on raising/lowering unit and in grippers	30,000 hours of operation*						✓		5.11.3 / 65
4.	Checking and adjustment of the tension of the timing belts	6,000 hours of operation*						✓		5.11.40 / 67
5.	Inspection for play in the connecting links between servomotors and grippers							✓		5.11.5 / 67
6.	Inspection of servomotors	1,650,000 hours of operation*						✓		5.11.6 / 68
7.	Inspection of cables and cable carrier	Cable carrier: 16,400,000 double travels*						✓		5.11.7 / 68
8.	Inspection of belts	700,000						✓		See "Maintenance schedule - straight elements" above
9.	Inspection of drums	1,300,000							✓	See "Maintenance schedule - straight elements" above
10.	Inspection of motor and bearings	1,300,000						✓		See "Maintenance schedule - straight elements" above

Note: \* In accordance with the supplier's specifications.

#### 4.7.11. Multi-Dynamic Discharge

This table covers the following discharge elements: CB5812										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Inspection of sub-module							✓		5.12.1 / 71
2.	Inspection of bells	700,000						✓		5.12.2 / 72
3.	Inspection of bell wheels, timing bell pulley and bearing housing	1,300,000						✓		5.12.3 / 72
4.	Inspection of motor and servo gear motor	1,300,000						✓		5.12.4 / 72
5.	Inspection of wheels							✓		5.12.5 / 73

#### 4.7.12. Static Discharge, Low Capacity

This table covers the following element: CB5811										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Cleaning of photocells and reflectors					✓				5.13.1 / 74
2.	Cleaning of element						✓			5.13.2 / 75
3.	Inspection of belts	350,000				✓				5.13.3 / 75
4.	Inspection of motors	1,300,000					✓			5.13.4 / 76
5.	Inspection of drums and bearings	1,300,000					✓			5.13.5 / 76
6.	Inspection of shaft bearings	1,300,000					✓			5.13.6 / 77
7.	Inspection of timing belt	1,300,000 To be replaced after 13,440,000					✓			5.13.7 / 77
8.	Inspection of guide wheels	350,000				✓				5.13.8 / 77
9.	Inspecting cables								✓	5.13.9 / 77

#### 4.7.13. Manual Handling Stations

This table covers the following manual handling stations: CB5964, CB5971, CB5974, CB5978										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
10.	Inspection of belts	700,000				✓				5.14.1 / 79
11.	Inspection of drums	1,300,000					✓			5.14.2 / 80
12.	Inspection of motor and bearings	1,300,000					✓			5.14.3 / 80
13.	Inspection of wooden side guards								✓	5.14.4 / 81
14.	Inspection of load cells/electronics		✓						✓	5.14.5 / 81

#### 4.7.14. Walk-Through Elements

This table covers the following walk-through elements: CB5952, CB5954										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Inspection of tilting bridge					✓				5.15.1 / 82
2.	Inspection of proximity switch					✓				5.15.2 / 83
3.	Inspection of gas spring					✓				5.15.3 / 84
4.	Inspection of grating					✓				5.15.4 / 85

#### 4.7.15. Contour Scanner

This table covers the following contour scanners: CB5910, CB5911, CB5912										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Cleaning of light grids and cover for photocell							✓		5.16.1 / B7
2.	Inspection of element								✓	5.16.2 / B7

#### 4.7.16. Tote State Verifier, TSV

This table covers the following Tote State Verifier, TSV: CB5922										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Cleaning of photocells and reflectors					✓				5.17.1 / B8

#### 4.7.17. Empty Tote Verifier, ETV

This table covers the following Empty Tote Verifier, ETV: CB5923										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Cleaning of photocells and reflectors					✓				5.18.1 / 9D

#### 4.7.18. Item Height Verifier, IHV

This table covers the following Item Height Verifier, IHV: CB5924										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Cleaning of photocells and reflectors					✓				5.19.1 / 93

#### 4.7.19. Stacked Tote Verifier, STV

This table covers the following stacked tote verifier, STV: CB5925										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Cleaning of photocells and reflectors					✓				5.20.1 / 95

#### 4.7.20. Tote ID Scanner

This table covers the following tote ID scanner: CB5980										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Inspection of cables								✓	5.21.1 / 96

#### 4.7.21. Intermediate Rollers

This table covers the following intermediate rollers: CB5930, CB5931, CB5932, CB5934, CB5935, CB5937, CB5938, CB5939										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Cleaning of element								✓	5.22.1 / 102
2.	Inspection of rollers	700,000							✓	5.22.2 / 103
3.	Inspection of rollers parts (CB5935) at EBS element					✓				5.22.2 / 103

#### 4.7.22. ESD Brushes and Curtains

This table covers the following ESD brushes and curtains: CB5941, CB5942, CB5943, CB5944, CB5945										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Cleaning and checking ESD brushes on straight elements and wide elements					✓				5.23.1 / 105
2.	Cleaning and checking ESD brushes for dynamic tote stacker/destacker					✓				5.23.2 / 106

#### 4.7.23. Tote Shock Absorber

Tote shock absorber CB5991										
No.	Task	Activations between inspections	Frequency							Reference to procedure
			D	W	M	Q	S	A	O	Section / Page
1.	Cleaning of element						✓			5.24.1 / 108
2.	Inspection of element				✓					5.24.2 / 108

#### 4.7.24. Vertical Sorting Unit – VSU

Vertical Sorting Unit – VSU										
No.	Task	Activations between inspections	Frequency							Reference to procedure
			D	W	M	Q	S	A	O	Section / Page
1.	Cleaning of VSU								✓	5.25.1.1 / 109
2.	Inspection of VSU		✓							5.25.1.2 / 109
3.	Inspection of motors and bearings			✓						5.25.1.3 / 109
4.	Inspection of emergency stop								✓	5.25.1.4 / 109
5.	Inspection of sensors				✓					5.25.1.5
6.	Replacing the toothed belt								✓	5.25.1.6 / 110
7.	General cleaning of elements						✓			5.1.2 / 25
8.	Cleaning of elements with belts						✓			5.1.3 / 25
9.	Inspection of timing belt	1,300,000 To be replaced after 13,440,000					✓			5.2.1 / 25
10.	Inspection of cables								✓	5.2.3 / 26
11.	Inspection of side guards								✓	5.2.2 / 26
9.	Inspection of bells	700,000				✓				5.6.1 / 36
10.	Inspection of drums	1,300,000					✓			5.6.2 / 37
11.	Inspection of motor and bearings	1,300,000					✓			5.6.3 / 37

4.7.25. CB5660 / CB5661 – Lift with Cross Element for SBT

CB5660 / CB5661 - Lift with cross element for SBT										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Cleaning of Lift				✓					5.26.1.1 / 111
2.	Inspection of Lift		✓							5.26.1.2 / 111
3.	Inspection of motors and bearings			✓						5.26.1.3 / 111
4.	Inspection of motors and bearing lubrication leakage				✓					5.26.1.4 / 111
5.	Inspection of emergency stop								✓	5.26.1.4 / 111
6.	Inspection of sensors				✓					5.26.1.6 / 112
7.	Inspection of screws and bolts					✓				5.26.1.7 / 112
8.	Cleaning the photocells and reflectors					✓				5.1.1 / 24
9.	General cleaning of the elements						✓			5.1.2 / 25
10.	Cleaning of elements with belts						✓			5.1.3 / 25
11.	Inspection of timing belt	1,300,000 To be replaced after 13,440,000					✓			5.2.1 / 25
12.	Inspection of side guards								✓	5.2.2 / 26
13.	Inspection of cables								✓	5.2.3 / 26
14.	Inspection of belts on cross unit	350,000				✓				5.10.1 / 55
15.	Inspection of drums	1,300,000					✓			5.10.2 / 56
16.	Inspection of motor and bearings	1,300,000					✓			5.10.3 / 56
17.	Inspection of sensors						✓			5.10.4 / 57
18.	Inspection of running wheels and slide guide for cart	700,000					✓			5.10.5 / 59
19.	Inspection of slideway (running rail)	700,000					✓			5.10.6 / 59
20.	Inspection of actuator	700,000 To be replaced after 2,500,000				✓				5.10.7 / 60
21.	Replenishing grease	Replenished after 2,500,000							✓	5.10.8 / 60
22.	Inspection of actuator bracket	700,000					✓			5.10.9 / 61

#### 4.7.26. Power Control and Distribution Elements

##### Main Power Panels

This schedule covers the following main power panels: CB900x										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Cleaning/inspection of power panels								✓	5.27.1.1 / 113
2.	Lamp test				✓					5.27.1.2 / 114
3.	Replacement of ventilation filter mats					✓				5.27.1.3 / 114
4.	Replacement of PLC Power supply module backup batteries							✓		5.27.1.4 / 116

##### Electrical Boxes and Panels

This schedule covers the following electrical boxes and panels: CB9010										
No.	Task	Activations between inspections	Frequency							Reference to procedure Section / Page
			D	W	M	Q	S	A	O	
1.	Cleaning/inspection of electrical boxes and panels								✓	5.27.2.1 / 118



## 5. Maintenance of Conveyor Elements

### 5.1. Preventative Maintenance Schedules

Interval	Components	Unusual Noise	Lubrication/ Oil Levels	Proper Tension	Normal Wear	Alignment/ Position	Fasteners/ Setscrews	Cleanliness	Physical	Proper Operation
<b>Daily</b> (8 Hours)	Personnel Walkways							X	X	
	Safety Guards and Devices					X	X		X	
	General Conveyor	X						X	X	X
<b>Weekly</b> (40 Hours)	Gear Reducer/Motor	X								
	Conveyor Control Devices							X		X
	General Conveyor					X				
<b>Monthly</b> (160 Hours)	Safety Devices									X
	General Conveyor				X					
	Gear Reducer/Motor		X				X		X	
	Mounted Bearings	X					X		X	
	Chains/Sprockets	X		X	X				X	
	Pulleys				X	X			X	
	Belt			X	X	X		X	X	
<b>Quarterly</b>	Photoeyes					X		X	X	X
<b>Bi-Yearly</b> (Six Months)	Drive Chains	X	X	X	X	X	X	X	X	X

5.2. Preventive Maintenance Daily Schedule

Interval	Components	Unusual Noise	Lubrication/ Oil Levels	Proper Tension	Normal Wear	Alignment/ Position	Fasteners/ Setscrews	Cleanliness	Physical	Proper Operation
<b>Daily</b> (8 Hours)	Personnel Walkways							X	X	
	Safety Guards and Devices					X	X		X	
	General Conveyor	X						X	X	X
<b>Weekly</b> (40 Hours)	Gear Reducer/Motor	X								
	Conveyor Control Devices							X		X
	General Conveyor					X				
<b>Monthly</b> (160 Hours)	Safety Devices									X
	General Conveyor				X					
	Gear Reducer/Motor		X				X		X	
	Mounted Bearings	X					X		X	
	Chains/Sprockets	X		X	X				X	
	Pulleys				X	X			X	
	Belt			X	X	X		X	X	
	Photoeyes					X		X	X	X
<b>Bi-Yearly</b> (Six Months)	Drive Chains	X	X	X	X	X	X	X	X	X

5.3. Preventive Maintenance Weekly Schedule

Interval	Components	Unusual Noise or Vibration	Alignment/ Position	Fasteners/ Setscrews	Cleanliness	Proper Operation	Comments
<b>Weekly</b> (Note Day)	Gear Reducer/Motor						
	Conveyor Control Devices						
	General Conveyor						
NOTE:							
1.							
2.							
3.							
4.							

5.4. Preventive Maintenance Monthly Schedule

Interval	Components	Unusual Noise or Vibration	Lubrication/ Oil Levels	Proper Tension	Normal Wear	Alignment/ Position	Fasteners/ Setscrews	Cleanliness	Physical Condition	Proper Operation	Unusual Noise or Vibration
Week 1	Safety Devices										
	General Conveyor										
	Gear Reducer/Motor										
	Mounted Bearings										
	Chains/Sprockets										
	Pulleys										
	Belt										
	Photoeyes										

Interval	Components	Unusual Noise or Vibration	Lubrication/Oil Levels	Proper Tension	Normal Wear	Alignment/Position	Fasteners/ Setscrews	Cleanliness	Physical Condition	Proper Operation	Unusual Noise or Vibration
<b>Week 2</b>	Safety Devices										
	General Conveyor										
	Gear Reducer/Motor										
	Mounted Bearings										
	Chains/Sprockets										
	Pulleys										
	Belt										
	Photoeyes										
<b>Week 3</b>	Safety Devices										
	General Conveyor										
	Gear Reducer/Motor										
	Mounted Bearings										
	Chains/Sprockets										
	Pulleys										
	Belt										
	Photoeyes										
<b>Week 4</b>	Safety Devices										
	General Conveyor										
	Gear Reducer/Motor										
	Mounted Bearings										
	Chains/Sprockets										
	Pulleys										
	Belt										
	Photoeyes										

Interval	Components	Unusual Noise or Vibration	Lubrication/ Oil Levels	Proper Tension	Normal Wear	Alignment/ Position	Fasteners/ Setscrews	Cleanliness	Physical Condition	Proper Operation	Unusual Noise or Vibration
<b>Week 5</b>	Safety Devices										
	General Conveyor										
	Gear Reducer/Motor										
	Mounted Bearings										
	Chains/Sprockets										
	Pulleys										
	Belt										
Photoeyes											
<b>Comments</b>											
<b>NOTE:</b>											
1.											
2.											
3.											
4.											

**5.5. Preventive Maintenance Yearly Checklist**

Interval	Components	Sprocket Wear	Chain Wear	Damaged Links	Excessive Chain	Damaged Frame	Comments
<b>Yearly (Note Month)</b>	Drive Chain and Sprockets						
<b>NOTE:</b>							
1.							
2.							
3.							
4.							

5.6. Preventive Maintenance Two-Year Checklist

Interval	Components	Replace Motors (as required)	Comments
<b>2-Year (Note Month)</b>	Overall Drive System		
NOTE: 1. 2. 3. 4.			

5.7. Slope Plate Preventive Maintenance Schedules

Preventive Maintenance Program Model 30 - Slope Plate											
Client											
System Description											
Contract Number						Date Installed					
Installed at:											
Inspection Engineer:						Signature:					
on behalf of:						Date Checked:					
Address:											
Unit Number										Comments, Corrective Required	
Daily Checks											
		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Safety Procedures & Tagouts											
Clear Debris prior to start up											
Check Guarding, Safety switches and E stops prior to start up											
Mechanical Running & Visual Check											
Check for excessive bearing noise											
Monthly Inspection/Services											
Excessive Gearbox Temperature											
Check Gearbox leaks											
Check Drive Unit Fastenings											
Check Support Wheels, Upper and Lower											
Check Nylon Spine ties											

<b>Quarterly inspection/Services</b>											
Sprocket Alignment Caterpillar Chain Tension & Lubrication											
Check Gearbox oil levels											
Link plate & link bolt visual inspection											
<b>Annual Inspection/Services</b>											
Link bolt torque check											
Replace gearbox oil (at specified hours)											

## Attachment 1 to Appendix A – BHS Inspection Checklists

### 1. Required Inspections and Checklists

A variety of inspections and checklists are required under these requirements. At a minimum, the Contractor must use the Original Equipment Manufacturers (OEM) checklist provided in the BHS and/or component Operation and Maintenance Manuals. In the event OEM checklists are not available, the Contractor may use the inspection checklists provided in this document or submit comparable checklists for approval to SFO.

### 2. Checklist Completion

Checklists are to be completed as inspection items are accomplished. Completed checklists are to be retained and available for review by SFO for the duration specified by SFO for each checklist. Completed checklists may be entered into an automated MMS. All information, including responsible inspector's name, must be included, and records maintained for the duration required in this Attachment.

At the conclusion of this Agreement, all completed checklists retained by the Contractor (electronically and/or in printed form) shall be turned over to, and become the property of, SFO.

### 3. Detailed Plan

The Contractor shall develop a detailed plan, including schedules, of how inspections will be accomplished and include it in the Maintenance Plan developed by the Contractor and approved by SFO.

D = Daily	Daily
W = Weekly	Max. 50 hours of operation
M = Monthly	Max. 200 hours of operation
Q = Quarterly	Max. 600 hours of operation
S = Semi-annually	Max. 1200 hours of operation
A = Annually	Max. 2400 hours of operation
O = Other	In connection with other maintenance tasks
O = Other	When required or in connection with other maintenance work
O = Other	Every 4 years or after 2,500,000 single strokes
O = Other	Make sure to comply with local requirements for safety and working conditions

Maintenance tasks are performed after the number of activations indicated in the column "Activations between inspections" and no later than the deadline indicated under "Frequency".

### 4. Daily Operator Checklist

The Contractor must complete the daily checklist. All discrepancies are to be noted on the form for maintenance attention. Individual components of the BHS shall be removed from service for repair and/or further maintenance inspection immediately, if any defect or condition affecting a safe operation is found or suspected. All operational checks and observations per the operator's training materials and the OEM operator's manuals shall be conducted with each operation of the BHS as required. Completed Daily Operator Checklists shall be retained for a rolling one-year period.

### 5. Weekly Preventive Maintenance Checklist

Trained maintenance personnel must complete the weekly checklist. All discrepancies are to be noted on the form. Discrepancies not immediately corrected must be scheduled for further maintenance attention.



Individual components of the BHS shall be removed from service for repair and/or further maintenance inspection immediately, if any defect or condition affecting a safe operation is found or suspected. Completed Weekly Preventive Maintenance Checklists shall be retained for a rolling two-year period.

**6. Bi-Weekly Preventive Maintenance Checklist**

Trained maintenance personnel must complete the bi-weekly (every 2 weeks) checklist. All discrepancies are to be noted on the form. Discrepancies not immediately corrected must be scheduled for further maintenance attention. Individual components of the BHS shall be removed from service for repair and/or further maintenance inspection immediately, if any defect or condition affecting a safe operation is found or suspected. Completed Bi-Weekly Preventive Maintenance Checklists shall be retained for a rolling two-year period.

**7. Monthly Preventive Maintenance Checklist**

Trained maintenance personnel must complete the monthly checklist. All discrepancies are to be noted on the form. Discrepancies not immediately corrected must be scheduled for further maintenance attention. Individual components of the BHS shall be removed from service for repair and/or further maintenance inspection immediately, if any defect or condition affecting a safe operation is found or suspected. Completed Monthly Preventive Maintenance Checklists shall be retained for a rolling two-year period.

**8. Quarterly Preventive Maintenance Checklist**

Trained maintenance personnel must complete the quarterly checklist. All discrepancies are to be noted on the form. Discrepancies not immediately corrected must be scheduled for further maintenance attention. Individual components of the BHS shall be removed from service for repair and/or further maintenance inspection immediately, if any defect or condition affecting a safe operation is found or suspected.

Completed Quarterly Preventive Maintenance Checklists shall be retained for a rolling two-year period.

**9. Semi-Annual Preventive Maintenance Checklist**

Trained maintenance personnel must complete the semi-annual checklist. All discrepancies are to be noted on the form. Discrepancies not immediately corrected must be scheduled for further maintenance attention. Individual components of the BHS shall be removed from service for repair and/or further maintenance inspection immediately, if any defect or condition affecting a safe operation is found or suspected. Completed Semi-Annual Preventive Maintenance Checklists shall be retained for a rolling two-year period.

**10. Annual Preventive Maintenance Checklist**

Trained maintenance personnel must complete the annual checklist. All discrepancies are to be noted on the form. Discrepancies not immediately corrected must be scheduled for further maintenance attention. Individual components of the BHS shall be removed from service for repair and/or further maintenance inspection immediately if any defect or condition affecting a safe operation is found or suspected. Completed Annual Preventive Maintenance Checklists shall be retained for the duration of this Agreement.

## **Attachment 2 to Appendix A – BHS Controls and Related Hardware, Software and Infrastructure Maintenance and Operation**

### **1. General**

The Contractor shall comply with all Airport policies and requirements regarding operation, maintenance, support and security (physical and Cyber Security) of airport owned software, hardware and network infrastructure under its responsibility as defined in Exhibit 1.

The Airport may audit, monitor, inspect or test any or all aspects of the contractor's use, maintenance, or operations of the airport owned software, hardware or network infrastructure under this scope of work or provided by the Airport for use by the contractor to ensure compliance with Airport cybersecurity requirements. The contractor shall fully cooperate with these activities without delay.

### **2. Standards and Practices**

The Contractor shall provide all services in accordance with procedures that meet or exceed applicable government standards and policies and industry best practices in project management, maintenance, engineering, cyber security and quality assurance. Examples of the standards and recommended practices include but are not limited to the current versions of the following:

- TSA Planning Guidelines and Design Standards for Checked Baggage Inspection Systems Version 5.0 or the version under which the system, sub-system, or component was originally certified by the TSA.
- Industrial Control Systems Cyber Emergency Response Team Recommended Practices: <https://ics-cert.us-cert.gov/Recommended-Practices>
- Regulations Implementing the Support Anti-Terrorism by Fostering Effective Technologies Act of 2002 (the SAFETY Act) <https://www.safetyact.gov/>
- TSA Sensitive Security Information (SSI): <https://www.tsa.gov/for-industry/sensitive-security-information>
- Catalog of Control Systems Security: Recommendations for Standards Developers [www.us-cert.gov](http://www.us-cert.gov)

### **3. Coordination with SFO**

- The Contractor shall cooperate fully with SFO's Information Technology and Telecommunications (ITT) Division, including Cyber Security and Network departments in troubleshooting, fault resolution, audits, inspections, monitoring and incident response regarding SFO owned equipment, software, and networks.
- SFO ITT – Cyber Security will be the lead agency in directing the response to and mitigation of any cyber security incidents involving SFO equipment, software, or networks.
- The Contractor shall report any cyber security incidents, or suspected cyber security incidents involving SFO equipment, software, or networks to SFO immediately after

discovery of such incidents or suspected incidents. This requirement shall include incidents or suspected incidents involving The Contractor's connection(s) (VLAN) with SFO's network(s).

#### **4. Description of Services**

##### **4.1 Software Maintenance and Support**

- 4.1.1 The Contractor shall maintain and support all software (operating systems, network software and applications) currently used by or for systems and devices currently within the Scope of Work or as may be added from time to time.
- 4.1.2 The Contractor shall maintain a comprehensive inventory of all installed software (operating systems, network software and applications) in a form and format acceptable to the Airport.
- 4.1.2 The Contractor shall maintain and renew all required software licenses and software support agreements prior to the expiry date, insuring continuous availability and coverage.
- 4.1.3 The Contractor shall ensure that all installed software (operating systems network software and applications) is under OEM support, and shall monitor OEM version life cycle plans and provide the Airport with migration plans at a minimum of one (1) year prior to announced end of support dates to insure that all software (operating systems, network software and applications) remains continuously under full OEM support.
- 4.1.4 The Contractor shall track the release of all upgrades or revisions to installed software (operating systems network software and applications) and review such upgrades and revisions for applicability and potential benefits. This analysis shall be presented to the Airport for a decision to proceed with the upgrade or revision or not. Security related patches are not considered upgrades or revisions for purposes of this section.
- 4.1.5 The Contractor shall develop and implement a configuration management program including a patch management program and other elements recommended for such programs for the Baggage Handling and Tracking Controls Systems. This program shall be developed, implemented, and operated in conjunction with the Airport's ITT Cyber Security and Operations and Security – Airport Systems departments. For reference, an overview of recommendations for a configuration management program including patch management can be found on The Industrial Control Systems Cyber Emergency Response Team (ICS-CERT) website at <https://ics-cert.us-cert.gov/>. The Components of the program shall include but not be limited to the following:
  - 4.1.5.1 Patch release and threat monitoring focused specifically on all installed operating systems, network software and application software and general applicability to Industrial Control Systems (ICS) and Supervisory Control and Data Acquisition (SCADA) systems. Use of industry sources such as The Industrial Control Systems Cyber Emergency Response Team (ICS-CERT) at <https://ics-cert.us-cert.gov/> are recommended.
  - 4.1.5.2 Establishing and operating a reviewing process for all potentially relevant patches to determine applicability, vulnerability and urgency using industry best practices and

methods as approved by the Airport. The Airport's ITT Cyber Security and Operations staff shall be included in this process.

- 4.1.5.3 Testing of all patches prior to installation to ensure their effectiveness in accomplishing the stated purpose or objective of the patch and that the patch does not cause conflicts with coexisting applications.
- 4.1.5.4 Installation and operational testing of patches at times acceptable to the Airport and other stakeholders, generally during a maintenance window established by the Airport and during overnight hours.
- 4.1.6 The Contractor shall ensure that thorough compatibility testing has been completed prior to implementation of any changes to software and/or operating systems.

## **4.2 Hardware Maintenance and Support**

- 4.2.1 The Contractor shall maintain and support all hardware used by or for systems within the Scope of Work and may be added from time to time. Uninterruptible Power Supplies (UPS) used for baggage system components are included in this scope.
- 4.2.2 The Contractor shall maintain a comprehensive inventory of all installed hardware in a form and format acceptable to the Airport.
- 4.2.3 The Contractor shall maintain and renew all required hardware support agreements prior to the expiry date, insuring continuous availability and coverage.
- 4.2.4 The Contractor shall track warranty coverage availability for all hardware and take full advantage of warranty coverage that is available. The Contractor will be fully responsible for any costs incurred due to failure to take full advantage of available warranties.
- 4.2.5 The Contractor shall carry out a program of Preventative Maintenance (PM) applicable to the specific hardware in order to assure optimal performance, reliability and useful life. The PM requirements, including tasks and frequencies are provided in Exhibit 1 of this document.
- 4.2.6 The Contractor and the Airport's Project Manager shall periodically review and revise the PM requirements to ensure effectiveness.
- 4.2.7 The Contractor shall monitor the hardware operational parameters to ensure that the systems are stable and no resource limitations are in danger of being exceeded over time and to identify problematic trends before operational impacts occur due to system resource limitations.
- 4.2.8 The parameters monitored shall be reviewed with the Airport's Project Manager annually and any time an event or an outage identifies an unmonitored critical parameter. Parameters monitored shall include at a minimum:
  - Available disk space
  - CPU utilization
  - Memory utilization

- PLC scan times
- 4.2.9 The Contractor shall provide detailed reports illustrating the parameters of system resources monitored in a format to be approved by the Airport.
- 4.2.10 Each monitored parameter shall have identified and graphically represented limits for critical, high, low, and normal values as applicable.
- 4.2.11 Reports shall be compiled weekly and submitted to the Airport monthly and used by the Contractor's maintenance and support staff to diagnose and correct problems before they impact system operations.

### **4.3 Systems Documentation**

- 4.3.1 The Contractor shall provide and maintain documentation supporting BHS operations and maintenance for all Airport owned equipment and systems including hardware, software and operating procedures.
- 4.3.2 The Contractor shall maintain an effective change management program documenting all changes to the system's hardware and software installations configurations and functionality.
- 4.3.3 The Contractor shall contribute documentation to the Airport's comprehensive electronic library of Airport-wide Baggage Handling Systems reference documents sourced through the Airport and its contractors. This electronic library is provided as a reference for, and shall be accessible by, users and maintainers of Airport-owned BHS. Access is controlled by the Airport based upon user's needs. The Contractor's proprietary source code is not included in this requirement and is addressed elsewhere in this agreement.
- 4.3.3.1 The library shall include, but not be limited to, as-built documents for the motor control panels (MCP), Networks, BHS mechanical, electrical and controls drawings, component specifications and user/maintenance manuals.
- 4.3.3.2 If existing reference documents are insufficient or unavailable, the Airport may request that documents be sourced or prepared by the Contractor as a contracted service.
- 4.3.4 The Contractor shall maintain access to up-to-date source code for software and systems included in the scope of work, including back up files.
- 4.3.4.1 All up to date back up files are to be stored on and off site.
- 4.3.4.2 Proprietary code of suppliers used by BEUMER Corporation, other than the Contractor, that is not directly available to the Contractor shall be held by and immediately available from the supplier(s) under the required service agreement(s) between the Contractor and the third party supplier(s).
- 4.3.5 All reference documents shall be available for review by Airport personnel.
- 4.3.6 Cyber security best practices as approved by the Airport, and TSA SSI procedures shall be strictly applied to all information handling and storage processes.

### **4.4 System Failures and Outages**

- 4.4.1 The Contractor shall provide detailed plans for managing unplanned system failures and outages including:
- Contingency and mitigation plans
  - Communications plans for notification, response and recovery.
  - Escalation plans
- 4.4.2 The Contractor shall provide incident reports, including time lines, root cause analysis, and mitigation plans for unplanned system outages and failures. Preliminary incident reports shall be submitted to the Airport as soon as possible and in no case more than eight (8) hours after the onset of a system outage or other significant service-failure event. Final incident reports must be submitted to the Airport within ten (10) business days of each event.
- 4.4.3 Backup and Disaster Recovery - The Contractor shall maintain all required backups, software, and documented procedures to perform disaster recovery of the Baggage Handling Control Systems (ICS System Controller, PLCs, control system networks (e.g. PROFIBUS (Process Field Bus), AS-Interface (Actuator Sensor Interface, ASi), PROFINET (Process Field Net)) from new replacement hardware.
- 4.4.3.1 Where practical, these procedures shall be tested to demonstrate the completeness and successful implementation of these procedures.
- 4.4.3.2 All backup and recovery procedures shall be reviewed with and approved by the Airport on an annual basis.

#### **4.5 Reporting**

- 4.5.1 The Contractor shall submit written and electronic reports as requested by the Airport. The timely submission of all reports is a necessary and material to the terms and conditions of this Agreement. The format of such reports shall be determined by the Airport. The reports, including any copies, shall be submitted on recycled paper and printed on double-sided pages to the maximum extent possible.
- 4.5.2 The Contractor shall provide daily and monthly reports of maintenance and support activities as shown in Table 2, in a format approved by the Airport, which must be submitted to the Airport on a monthly basis as a condition of monthly invoice payments.
- 4.5.3 The Contractor shall provide written meeting notes for all project-related meetings in a format approved by the Airport, distributed no later than three (3) working days after each meeting. The schedule and frequency of regular and special purpose meetings shall be at the Airport's discretion.

#### **4.6 Data**

- 4.6.1 The Contractor shall provide all data generated in the operation and maintenance of the BHS to SFO in a format and manner acceptable to SFO.
- 4.6.2 Data to be provided shall include but not be limited to baggage tracking, routing, sorting and status data.

4.6.3 The data may be required “real time” (as generated) or on a deferred basis at the discretion of SFO.

**Exhibit 1**

**Hardware, Software and Related Equipment**

**1. General**

This Exhibit provides a listing of Hardware, Software, and related equipment to be operated, maintained and supported under this Agreement. The detailed inventory(ies) were deemed current at the effective date of the agreement and are subject to change from time to time.

**2. Maintenance and support responsibilities.**

**2.1. Devices with shared maintenance and support responsibilities**

2.1.1. Hardware, domain, VM(s) and networking are SFO responsibility.

2.1.2. Operating system and application(s) software are the Contractor's responsibility.

IP Address	Host Name	Function	VLAN	Physical Location	HW Type
172.26.13.13	SFO-BG-CSC	CrisBag CSC VM	VLAN 43	Core Rooms	N/A
172.26.13.14	SFO-BG-SDG	Sort Data Gateway VM	VLAN 43	Core Rooms	N/A
172.26.13.15	SFO-BG-CCSC	Conveyor CSC VM	VLAN 43	Core Rooms	N/A
172.26.13.16	SFO-BG-CMMS	CMMS Server VM	VLAN 43	Core Rooms	N/A
172.26.13.37	SFO-BG-OPC01	OPC Server VM	VLAN 43	Core Rooms	N/A
172.26.14.10	SFO-T1-NAS02	CrisBag NAS	VLAN 44	T220P	NAS
172.26.14.20	SFO-T1-UTIL01	Utility Server	VLAN 44	T220P	Server
172.26.15.34	SFO-T1-WSBG3D	BG3D Workstation	VLAN 45	T1 Control Room	HP Z240
172.26.15.35	SFO-T1-WSCMMS01	CMMS Workstation	VLAN 45	T1 Control Room	HP Z240
172.26.15.36	SFO-T1-WSCMMS02	CMMS Workstation	VLAN 45	T1 Control Room	HP Z240
172.26.15.37	SFO-T1-WSCMMS03	CMMS Workstation	VLAN 45	T1 Control Room	HP Z240
172.26.15.38	SFO-T1-WSCMMS04	CMMS Workstation	VLAN 45	T1 Control Room	HP Z240

**2.2. Devices solely maintained and supported by the Contractor (hardware, operating systems, software and networking).**

IP Address	Host Name	Function	VLAN	Physical Location	HW Type
172.26.11.219	Power Monitor	MCC199	VLAN 40		Power Monitor -Janitza
172.26.11.220	Power Monitor	MCC299	VLAN 40		Power Monitor-Janitza
172.26.11.223	Power Monitor	MCC101	VLAN 40		Power Monitor-Janitza
172.26.11.224	Power Monitor	MCC102	VLAN 40		Power Monitor -Janitza



172.26.11.225	Power Monitor	MCC103	VLAN 40		Power Monitor-Janitza
172.26.11.226	Power Monitor	MCC104	VLAN 40		Power Monitor-Janitza
172.26.11.227	Power Monitor	MCC105	VLAN 40		Power Monitor -Janitza
172.26.11.228	Power Monitor	MCC106	VLAN 40		Power Monitor-Janitza
172.26.11.229	Power Monitor	MCC107	VLAN 40		Power Monitor-Janitza
172.26.11.230	Power Monitor	MCC108	VLAN 40		Power Monitor -Janitza
172.26.11.231	Power Monitor	MCC109	VLAN 40		Power Monitor-Janitza
172.26.11.232	Power Monitor	MCC110	VLAN 40		Power Monitor-Janitza
172.26.11.233	Power Monitor	MCC111	VLAN 40		Power Monitor -Janitza
172.26.11.234	Power Monitor	MCC112	VLAN 40		Power Monitor-Janitza
172.26.11.235	Power Monitor	MCC113	VLAN 40		Power Monitor-Janitza
172.26.11.236	Power Monitor	MCC201	VLAN 40		Power Monitor -Janitza
172.26.11.237	Power Monitor	MCC202	VLAN 40		Power Monitor-Janitza
172.26.11.238	Power Monitor	MCC203	VLAN 40		Power Monitor-Janitza
172.26.11.239	Power Monitor	MCC204	VLAN 40		Power Monitor -Janitza
172.26.11.240	Power Monitor	MCC205	VLAN 40		Power Monitor-Janitza
172.26.11.241	Power Monitor	MCC206	VLAN 40		Power Monitor-Janitza
172.26.11.242	Power Monitor	MCC207	VLAN 40		Power Monitor -Janitza
172.26.11.243	Power Monitor	MCC208	VLAN 40		Power Monitor-Janitza
172.26.11.244	Power Monitor	MCC209	VLAN 40		Power Monitor-Janitza
172.26.11.245	Power Monitor	MCC211	VLAN 40		Power Monitor -Janitza
172.26.11.246	Power Monitor	MCC212	VLAN 40		Power Monitor-Janitza
172.26.11.247	Power Monitor	MCC213	VLAN 40		Power Monitor-Janitza
172.26.11.248	Power Monitor	MCC301	VLAN 40		Power Monitor -Janitza
172.26.12.45	PLC-A	MCC104	VLAN 42		PLC - Siemens S7
172.26.12.46	PLC-B	MCC104	VLAN 42		PLC - Siemens S7
172.26.12.75	PLC-A	MCC106	VLAN 42		PLC - Siemens S7
172.26.12.76	PLC-B	MCC106	VLAN 42		PLC - Siemens S7
172.26.12.80	PLC-A	MCC105	VLAN 42		PLC - Siemens S7
172.26.12.81	PLC-B	MCC105	VLAN 42		PLC - Siemens S7
172.26.12.83	PLC-112-A	MCC205	VLAN 42		PLC - Siemens S7
172.26.12.84	PLC-112-B	MCC205	VLAN 42		PLC - Siemens S7
172.26.12.86	Safety PLC-A	MCC205.ESC003	VLAN 42		Safety PLC - Siemens
172.26.12.87	Safety PLC-B	MCC205.ESC003	VLAN 42		Safety PLC - Siemens
172.26.12.88	PLC-A	MCC206	VLAN 42		PLC - Siemens S7
172.26.12.89	PLC-B	MCC206	VLAN 42		PLC - Siemens S7
172.26.12.100	PLC-A	MCC107	VLAN 42		PLC - Siemens S7
172.26.12.101	PLC-B	MCC107	VLAN 42		PLC - Siemens S7
172.26.12.105	PLC-A	MCC301	VLAN 42		PLC - Siemens S7
172.26.12.106	PLC-B	MCC301	VLAN 42		PLC - Siemens S7
172.26.12.112	PLC-A	MCC110	VLAN 42		PLC - Siemens S7

172.26.12.113	PLC-B	MCC110	VLAN 42		PLC - Siemens S7
172.26.12.116	Safety PLC-A	MCC103.ESC002	VLAN 42		Safety PLC - Siemens
172.26.12.117	Safety PLC-B	MCC103.ESC002	VLAN 42		Safety PLC - Siemens
172.26.12.122	PLC-A	MCC203	VLAN 42		PLC - Siemens S7
172.26.12.123	PLC-B	MCC203	VLAN 42		PLC - Siemens S7
172.26.12.127	PLC-A	MCC103	VLAN 42		PLC - Siemens S7
172.26.12.128	PLC-B	MCC103	VLAN 42		PLC - Siemens S7
172.26.12.139	PLC-A	MCC201	VLAN 42		PLC - Siemens S7
172.26.12.140	PLC-B	MCC201	VLAN 42		PLC - Siemens S7
172.26.12.144	PLC-A	MCC101	VLAN 42		PLC - Siemens S7
172.26.12.145	PLC-B	MCC101	VLAN 42		PLC - Siemens S7
172.26.12.163	Safety PLC-A	MCC202.ESC001	VLAN 42		Safety PLC - Siemens
172.26.12.164	Safety PLC-B	MCC202.ESC001	VLAN 42		Safety PLC - Siemens
172.26.12.165	PLC-A	MCC102	VLAN 42		PLC - Siemens S7
172.26.12.166	PLC-B	MCC102	VLAN 42		PLC - Siemens S7
172.26.12.168	PLC-A	MCC202	VLAN 42		PLC - Siemens S7
172.26.12.169	PLC-B	MCC202	VLAN 42		PLC - Siemens S7
172.26.12.173	PLC-A	MCC211	VLAN 42		PLC - Siemens S7
172.26.12.174	PLC-B	MCC211	VLAN 42		PLC - Siemens S7
172.26.12.176	PLC-A	MCC111	VLAN 42		PLC - Siemens S7
172.26.12.177	PLC-B	MCC111	VLAN 42		PLC - Siemens S7
172.26.12.179	Safety PLC-A	MCC113.ESC004	VLAN 42		Safety PLC - Siemens
172.26.12.180	Safety PLC-B	MCC113.ESC004	VLAN 42		Safety PLC - Siemens
172.26.12.182	PLC-A	MCC113	VLAN 42		PLC - Siemens S7
172.26.12.183	PLC-B	MCC113	VLAN 42		PLC - Siemens S7
172.26.12.185	PLC-A	MCC213	VLAN 42		PLC - Siemens S7
172.26.12.186	PLC-B	MCC213	VLAN 42		PLC - Siemens S7
172.26.12.189	PLC-A	MCC208	VLAN 42		PLC - Siemens S7
172.26.12.190	PLC-B	MCC208	VLAN 42		PLC - Siemens S7
172.26.12.192	PLC-A	MCC108	VLAN 42		PLC - Siemens S7
172.26.12.193	PLC-B	MCC108	VLAN 42		PLC - Siemens S7
172.26.12.195	PLC-A	MCC209	VLAN 42		PLC - Siemens S7
172.26.12.196	PLC-B	MCC209	VLAN 42		PLC - Siemens S7
172.26.12.198	Safety PLC-A	MCC199.ESC005	VLAN 42		Safety PLC - Siemens
172.26.12.199	Safety PLC-B	MCC199.ESC005	VLAN 42		Safety PLC - Siemens
172.26.12.202	PLC-A	MCC109	VLAN 42		PLC - Siemens S7
172.26.12.203	PLC-B	MCC109	VLAN 42		PLC - Siemens S7
172.26.12.205	PLC-A	MCC199	VLAN 42		PLC - Siemens S7
172.26.12.206	PLC-B	MCC199	VLAN 42		PLC - Siemens S7
172.26.12.208	PLC-A	MCC299	VLAN 42		PLC - Siemens S7
172.26.12.209	PLC-B	MCC299	VLAN 42		PLC - Siemens S7

172.26.12.218	PLC-A	MCC112	VLAN 42		PLC - Siemens S7
172.26.12.219	PLC-B	MCC112	VLAN 42		PLC - Siemens S7
172.26.12.221	PLC-A	MCC212	VLAN 42		PLC - Siemens S7
172.26.12.222	PLC-B	MCC212	VLAN 42		PLC - Siemens S7
172.26.12.234	PLC-A	MCC207	VLAN 42		PLC - Siemens S7
172.26.12.235	PLC-B	MCC207	VLAN 42		PLC - Siemens S7
172.26.12.240	PLC-A	MCC204	VLAN 42		PLC - Siemens S7
172.26.12.241	PLC-B	MCC204	VLAN 42		PLC - Siemens S7
172.26.13.24	Fallback CSC	Fallback CSC Server	VLAN 43	CSC001.CFB001	PC
172.26.16.50	SFO-T1-SCA101-A	TLI101 SCA	VLAN 46		SICK ATR
172.26.16.51	SFO-T1-SCA101-B	TLI101 SCA	VLAN 46		SICK ATR
172.26.16.52	SFO-T1-SCA101-RDT	TLI101 SCA	VLAN 46		SICK ATR
172.26.16.54	SFO-T1-SCA103-A	TLI103 SCA	VLAN 46		SICK ATR
172.26.16.55	SFO-T1-SCA103-B	TLI103 SCA	VLAN 46		SICK ATR
172.26.16.56	SFO-T1-SCA103-RDT	TLI103 SCA	VLAN 46		SICK ATR
172.26.16.63	SFO-T1-SCA106-A	TLI106 SCA	VLAN 46		SICK ATR
172.26.16.64	SFO-T1-SCA106-B	TLI106 SCA	VLAN 46		SICK ATR
172.26.16.65	SFO-T1-SCA106-RDT	TLI106 SCA	VLAN 46		SICK ATR
172.26.16.71	SFO-T1-SCA110-A	IOL110 SCA	VLAN 46		SICK ATR
172.26.16.72	SFO-T1-SCA110-B	IOL110 SCA	VLAN 46		SICK ATR
172.26.16.73	SFO-T1-SCA110-RDT	IOL110 SCA	VLAN 46		SICK ATR
172.26.16.74	SFO-T1-SCA111-A	IOL111 SCA	VLAN 46		SICK ATR
172.26.16.75	SFO-T1-SCA111-B	IOL111 SCA	VLAN 46		SICK ATR
172.26.16.76	SFO-T1-SCA111-RDT	IOL111 SCA	VLAN 46		SICK ATR
172.26.16.77	SFO-T1-SCA202-A	TLI202 SCA	VLAN 46		SICK ATR
172.26.16.78	SFO-T1-SCA202-B	TLI202 SCA	VLAN 46		SICK ATR
172.26.16.79	SFO-T1-SCA202-RDT	TLI202 SCA	VLAN 46		SICK ATR
172.26.16.81	SFO-T1-SCA204-A	TLI204 SCA	VLAN 46		SICK ATR

172.26.16.82	SFO-T1-SCA204-B	TLI204 SCA	VLAN 46		SICK ATR
172.26.16.83	SFO-T1-SCA204-RDT	TLI204 SCA	VLAN 46		SICK ATR
172.26.16.85	SFO-T1-SCA205-A	TLI205 SCA	VLAN 46		SICK ATR
172.26.16.86	SFO-T1-SCA205-B	TLI205 SCA	VLAN 46		SICK ATR
172.26.16.87	SFO-T1-SCA205-RDT	TLI205 SCA	VLAN 46		SICK ATR
172.26.16.89	SFO-T1-SCA206-A	TLI206 SCA	VLAN 46		SICK ATR
172.26.16.90	SFO-T1-SCA206-B	TLI206 SCA	VLAN 46		SICK ATR
172.26.16.91	SFO-T1-SCA206-RDT	TLI206 SCA	VLAN 46		SICK ATR
172.26.16.93	SFO-T1-SCA207-A	TLI207 SCA	VLAN 46		SICK ATR
172.26.16.94	SFO-T1-SCA207-B	TLI207 SCA	VLAN 46		SICK ATR
172.26.16.95	SFO-T1-SCA207-RDT	TLI207 SCA	VLAN 46		SICK ATR
172.26.16.96	SFO-T1-SCA209-A	TLI209 SCA	VLAN 46		SICK ATR
172.26.16.97	SFO-T1-SCA209-B	TLI209 SCA	VLAN 46		SICK ATR
172.26.16.98	SFO-T1-SCA209-RDT	TLI209 SCA	VLAN 46		SICK ATR
172.26.16.150	SFO-T1-SCAC101-A	TLO101 SCA	VLAN 46		SICK ATR
172.26.16.151	SFO-T1-SCAC101-B	TLO101 SCA	VLAN 46		SICK ATR
172.26.16.152	SFO-T1-SCAC101-RDT	TLO101 SCA	VLAN 46		SICK ATR
172.26.16.154	SFO-T1-SCAC102-A	TLO102 SCA	VLAN 46		SICK ATR
172.26.16.155	SFO-T1-SCAC102-B	TLO102 SCA	VLAN 46		SICK ATR
172.26.16.156	SFO-T1-SCAC102-RDT	TLO102 SCA	VLAN 46		SICK ATR
172.26.16.158	SFO-T1-SCAC103-A	TLO103 SCA	VLAN 46		SICK ATR
172.26.16.159	SFO-T1-SCAC103-B	TLO103 SCA	VLAN 46		SICK ATR
172.26.16.160	SFO-T1-SCAC103-RDT	TLO103 SCA	VLAN 46		SICK ATR
172.26.16.162	SFO-T1-SCAC104-A	TLO104 SCA	VLAN 46		SICK ATR
172.26.16.163	SFO-T1-SCAC104-B	TLO104 SCA	VLAN 46		SICK ATR

172.26.16.164	SFO-T1-SCAC104-RDT	TLO104 SCA	VLAN 46		SICK ATR
172.26.16.166	SFO-T1-SCAC113-A	TLI113 SCA	VLAN 46		SICK ATR
172.26.16.167	SFO-T1-SCAC113-B	TLI113 SCA	VLAN 46		SICK ATR
172.26.16.168	SFO-T1-SCAC113-RDT	TLI113 SCA	VLAN 46		SICK ATR

**2.3. Uninterruptible Power Supplies (UPS).**

- 2.3.1. UPS servicing controls, network and related hardware under the contractor’s responsibility in accordance with this Exhibit shall be the responsibility of the contractor to maintain.
- 2.3.2. UPS serving controls, network and related hardware under the responsibility of SFO shall be the responsibility of SFO.
- 2.3.3. UPS serving BHS power systems and equipment (including those in and/or connected to Control Cabinets) shall be the responsibility of the Contractor.

**2.4. Tablets and other Mobile Devices**

- 2.4.1. The Contractor shall be responsible for all support and maintenance (hardware and software) of all mobile devices used in operating, maintaining or managing the BHS. This requirement includes tablets or other mobile devices provided or used by SFO for Terminal 1 BHS purposes. Mobile devices used to scan baggage tags for the baggage drop functionality in the check in areas are not included in this scope.

**3. Hardware, Software and Related Equipment Maintenance and Support Requirements**

- 3.1. Required maintenance and support tasks and frequencies by type of equipment are listed in the following table.
- 3.2. Should a specific type of equipment not be included in the table, or if OEM requirements differ from the table, OEM requirements shall be used.
- 3.3. All maintenance and support activities are to be documented and reported to SFO in a manner acceptable to SFO. Use of the MMS is preferred.

<b>Equipment</b>	<b>Task</b>	<b>Frequency</b>
Cabinets – Except Ethernet Switch Enclosure (ESE) cabinets	Clean with HEPA filtered, ESD safe vacuum cleaner.	Quarterly
	Clean with anti-static cleaning solution and lint-free cloth and swabs.	
E-stop Nodes and Relays	Check panel for faults	Weekly
	Clean with HEPA filtered, ESD safe vacuum cleaner.	Quarterly
	Clean with anti-static cleaning solution and lint-free cloth and swabs.	

Keyboards, Mouse	Clean openings with compressed air held upright. Remove any dislodged dust or debris using HEPA filtered ESD safe portable vacuum cleaner and anti-static cleaning solution and lint free cloth and swabs. Clean outside using anti-static cleaning solution and lint free cloth and swabs.	Monthly
Monitors and Displays	Clean display with OEM recommended solution and lint free cloth.	Monthly
ICS PLC's and ICS PLC Networks (Process Field Bus (PROFIBUS), Actuator Sensor Interface (ASI), and Process Field Net (PROFINET))	Hardware - Check the PLC and smart module status lights. Programmer to go online with the PLC to investigate faults. Check the PLC battery status light - replace low batteries or batteries with expired replacement dates. Check for unusual sounds in MCP panels and check for loose connections. Verify MCP panel interior temperature is lower than 50 degree Celsius. Check for blown fuse indication.	Weekly
	Software - Go online with the PLC and review fault tables. Backup the PLC code as required.	Weekly
Power Supplies	Dust and wipe exterior with anti-static cleaning solution and lint free cloth and swabs. Check all connections.	Quarterly
Uninterruptible Power Supplies (UPS)	Perform OEM recommended preventive maintenance and servicing including periodic replacement of batteries as required.	Per OEM Specifications
Workstations	Hardware - Check power protection devices. Check and clean interior, motherboard, power supply fan and expansion cards with compressed air held upright, HEPA filtered ESD safe portable vacuum cleaner and lint free cloth and swabs.. Check processor temperature, inspect heat sink and fan. Check hard disk for temperature and vibration. Check internal connections and cables. Back up CMOS information, if applicable. Clean floppy disk and CD/DVD drives. Clean case. Reboot the system.	Quarterly
	Software: Check event viewer.	Weekly
	Software - Scan hard disk file systems for errors. Scan for viruses and spyware. Back up data. Defragment hard disks. Update antivirus and antispyware software. Empty the Recycle Bin. Delete .tmp files. Delete files that begin with a tilde. Delete old .zip files. Delete .chk files and switch the swap file. Update OS and applications with the latest service packs, updates and drivers. Update emergency boot media.	Monthly

**Appendix B**  
**Calculation of Charges**

**1) Invoicing – General**

- a) For the complete and satisfactory performance of the services detailed in Appendix A of this Agreement, the City will pay fees and expenses upon proper invoicing and in accordance with the rates set forth in this Appendix B.
- b) The City will not pay any invoices for services provided by law firms or attorneys, including any subcontractors of Contractor, unless the provider receives advance written approval from the City Attorney.
- c) The Contractor shall submit all certified payrolls and timesheets for the invoice period with the monthly invoice in addition to other required submittals of those documents.
  - i) The Contractor shall submit a monthly performance report for the invoice period (see Appendix A of this Agreement) with the monthly invoice.
- d) Documentation of the Airport’s approval for all invoiced amounts requiring advance Airport approval must be included with the Contractor’s monthly invoice for payment to be made.
- e) System Availability Standard Adjustments
  - i) For any invoice period in which Contractor does not achieve the Availability Standard for the BHS and BHS sub-systems provided in Appendix A, 3.3.1 “Availability Standard” of this Agreement, the Contractor’s total monthly payment will be adjusted.
  - ii) The System Availability Standard Adjustment shall be as follows:

SYSTEM AVAILABILITY (in %)	PAYMENT FACTOR
99.0 – 100.00	1.00
98.50 – 98.99	0.99
98.0 – 98.49	0.98
97.50 – 97.99	0.97
97.0 – 97.49	0.96
Below 97.0	0.95

Availability below 97% will, at the Airport’s discretion, constitute a failure to perform under 8.2.1(b) of this Agreement.

- f) For each instance of non-compliance with the Maintenance and Operating Standards as specified in Appendix A of this Agreement, the appropriate dollar amount shall be deducted from the Contractor’s monthly invoice or the Airport’s invoice payment for the month in which the non-compliance occurred.
- g) Unless otherwise approved by the Airport’s Project Manager, the Contractor shall, within ten (10) days after receipt of payment by the Airport pay to all of its immediate subcontractors, if any, the amounts to which they are entitled, after deducting any prior payments and any amounts due and payable to the Contractor by those subcontractors.
- h) Partial release from all suppliers and subcontractors shall be furnished with all but the first invoice.
- i) The Contractor shall provide the invoice and all required supporting forms and information in a format acceptable to the Airport on a monthly basis no later than the 15<sup>th</sup> of the following month.
- j) United States Dollars are to be used for all expense items. Should currency conversion be required the rate of exchange used shall be as found on the website OANDA.com (www.oanda.com) on the date of invoice. A screen capture of the conversion web page shall be attached to the invoice.
- k) If hardcopy documents are requested, all documents shall be submitted on recycled paper and printed on double-sided pages to the maximum extent possible.
- l) All payment requirements shall flow down to sub-contractors.

## 2) Labor

- a) Contractor shall provide staffing in accordance with the Staffing Level and Allocation Plan provided in Attachment 1 of this Appendix B. This is the basic labor included in Contractor's monthly invoice.
- b) Service Level Adjustments: As provided in 4.1.1 of this Agreement, the City may direct Contractor to make Service Level Adjustments by written order. The written order may be used to add, delete, change, increase, or decrease the hours, staffing levels, or equipment being serviced by the Contractor. The Contractor shall comply with the written order and perform its operation and maintenance services in accordance with all provisions of this Agreement. All written orders shall include a description of the adjustment of the services, schedule, duration, impact on performance and cost impact.
- c) State of California and City and County of San Francisco Prevailing Wage requirements are applicable to certain labor performed by the Contractor's employees. See Section 3.6 of this Agreement.
- d) The hourly labor rates for employees performing prevailing wage covered work under this Agreement shall be reviewed whenever the applicable prevailing wage rates are adjusted by the California Department of Industrial Relations, the City and County of San Francisco Office of Labor Standards and Enforcement, or other governmental authority. The hourly labor rates may be adjusted, with agreement of the parties, subsequent to these reviews.
- e) The hourly labor rates for employees not performing prevailing wage covered work under this Agreement may be reviewed whenever the hourly labor rates for employees performing prevailing wage covered work are adjusted. The hourly labor rates for employees not performing prevailing wage covered work may be adjusted, with agreement of the parties, subsequent to these reviews.
- f) In the event that overtime is requested or required by the Airport, overtime charges by classification shall be clearly documented on the weekly time sheets and certified payrolls and identified separately on the monthly invoice. The invoice shall include copies of the Airport's approval of the overtime, the reason for the overtime, the date(s) and time(s) the work was accomplished and the calculations of the overtime rates and charges. Overtime rates shall be based on the applicable prevailing wage determination for prevailing wage covered employees or applicable California state labor law for non-prevailing wage covered employees.
- g) As the services are required to be provided 24/7/365, hours expended on Saturdays and Sundays are not eligible for overtime pay. This does not apply to hours in excess of 40 for the individual's work week or 8 in the employee's working day or for holiday pay.
- h) The monthly charge for labor, exclusive of any overtime requested by the Airport is based upon the Staffing Level and Allocation Plan and the Labor Rates. Should the Contractor not provide the staffing levels defined in the Staffing Level and Allocation Plan, the monthly invoice shall be reduced by the value of any shortfall for the month.
  - i) For employees in the Supervisor, Control Room Operator, Sr. Technician, Jr. Technician and System Support classifications:

For each classification and shift – Subtract total hours scheduled according to the Staffing Level and Allocation Plan from the total hours worked. If the difference is negative multiply the difference by the hourly rate for the classification and shift and deduct that amount from the monthly invoice.

- ii) For employees in the Site Manager, Systems Specialist, Parts/CMMS, and Administrative Assistant classifications:

For each classification – Subtract the total hours scheduled from the total hours paid. If the difference is negative multiply the difference by the hourly rate for the classification and deduct that amount from the monthly invoice.



- i) Documentation of hours worked and calculations shall be provided with the monthly invoice using Excel or a similar format acceptable to the Airport.
- j) The Contractor's monthly invoice may include a charge of up to two percent (2%) of the total monthly charge for employee wages and benefits, as adjusted (see Section 2.h of this Appendix B), for Labor Overhead in consideration for all costs of providing labor other than employee wages and benefits.

**3) Service Fee**

- a) The Contractor's monthly invoice may include a service fee in an amount no greater than five percent (5%) of the total cost of labor for each month through June 30, 2021 and ten percent (10%) of the total cost of labor for each month from July 1, 2021 through June 30, 2023.

**4) Site Overhead**

- a) The Contractors monthly invoice shall include a fixed monthly cost for site overhead.
  - i) Site overhead shall include all of the contractor's costs for tools, hardware, consumables, employee welfare (e.g. drinking water), waste disposal, office supplies, phones (mobile and fixed), internet service, return parts shipping, vehicle operations (maintenance, fuel, licenses and permits) PPE, janitorial service and supplies, employee airport badging fees and employee uniforms and cleaning.
  - ii) The monthly cost for site overhead may be reviewed annually in the month of April and may be adjusted with agreement of the parties. Any adjustments agreed upon shall be effective July 1 of that year.

**5) Parts and Materials and Software Licenses**

- a) The Contractor's monthly invoice shall include detailed costs for all parts, materials, software licenses and support fees.
  - i) For items purchased from sources other than Contractor or its affiliated companies, the original invoices from the OEM/supplier shall be included with the invoice.
  - ii) For purchases exceeding a net cost, including all taxes, shipping, and other fees of \$100 per unit (each) and/or \$100 per OEM/supplier invoice price, quotes for the same or equivalent material from a minimum of three (3) suppliers must be provided to the Airport's Project Manager for approval prior to purchase. Unless extenuating circumstances apply and are documented by the Contractor, the lowest priced quote will be approved. All quotes shall be included with the invoice along with documentation of the approval to purchase. Sole source software licenses or product support agreements are exempt from this requirement upon representation by the Contractor that alternative pricing is not available. Exceptions to the preceding must be approved in writing by the Airport Project Manager
- b) All costs for materials invoiced to the City shall be the best (lowest) prices available to the Contractor.
- c) The Contractor's monthly invoice may include a markup of the following percentage applied to the dollar value of invoiced costs for the purchased material as listed below and agreed to by the Airport and the Contractor:
 

(a) Parts and Materials	10%
(b) Software Licenses (not sole source)	10%
(c) Software Licenses or product support agreements (sole source)	0% (None)

**6) As Needed Services**

- a) As Needed Services may be requested through the issuance of a task order in accordance with Section 4.1 of this Agreement.

- b) If the Task Order includes the use of approved subcontractors, the Contractor's monthly invoice shall include detailed costs for subcontractor services including the original invoices from the subcontractors performing services.
- c) When feasible the Contractor shall obtain a minimum of two (2) price quotes for the service(s) to be contracted for. Exceptions must be approved in writing by the Airport Project Manager. Price quotes and approval(s) of exceptions must be included with the monthly invoice.
- d) The Contractor's monthly invoice shall include detailed costs for any as-needed services provided, and may include markup of the following percentage applied to the dollar value of invoiced costs for contracted services as listed below and agreed to by the Airport and The Contractor. As Needed Services provided by the Contractor are not subject to markup.
- e) The total dollar amount for as-needed services will not exceed \$750,000 for the term of this Agreement.
- f) Contracted services Markup: 10%

**7) SFO Requested Overtime**

- a) The contractor's invoice shall include all costs for SFO Requested Overtime (see Section 2.f of this Appendix B).
  - i) The Contractor may apply a two percent (2%) overhead charge to the total cost of SFO Requested Overtime. This charge is to be calculated and applied separately from the overhead applied to the total monthly charge for employee wages and benefits (see Section 2 i).
  - ii) The Contractor's monthly invoice may include a service fee in an amount no greater than five percent (5%) of the total cost of SFO Requested Overtime for each month through June 30, 2021 and ten percent (10%) of the total cost of labor for each month from July 1, 2021 through June 30, 2023. This service fee is to be calculated and applied separately from the service fee applied to the total monthly charge for employee wages and benefits (see Section 3).

**8) Travel Expenses**

- a) The Contractor's monthly invoice may include costs for SFO approved employee travel. Travel will be approved only if deemed to be directly supporting the provisioning of the services. Travel in support of the Contractor's business activities, including employee meetings or other events will not be approved.
- b) Contractor's representatives who are based outside of the nine-county San Francisco Bay Area must have prior written approval from the Airport Project Manager in order to be reimbursed for travel expenses. No administrative charge, profit, or other markup may be added to travel expenses.
- c) Contractor's executive's travel expenses to visit the local job office are not reimbursable.
- d) Personnel who are shared with other clients or other Airport projects will only be reimbursed on a pro-rata basis, when approved in advance by the Airport.
- e) Travel expenses and cost for vehicle rentals, contractor meals, and per diem are not reimbursable expenses unless Contractor has obtained the prior written approval of the Airport's Project Manager before the expenses are incurred.
- f) Direct and reasonable travel expenses shall be reimbursed at the actual cost when supported by appropriate receipts and submitted with the monthly invoice.
- g) If per diem is approved by the Airport, Contractor travel expense must meet the federal per diem General Services Administration Continental United States rates ("GSA CONUS Rates") for San Mateo County. Current federal per diem rates can be confirmed on the Internet at <http://www.gsa.gov/portal/category/21287>.
- h) The mileage reimbursement for vehicles will be the then current mileage rate established by the Internal Revenue Service. No mileage reimbursement shall be provided for automobile trips within the San Francisco Bay Area, less than fifty (50) miles from SFO and no reimbursement shall be provided when a rental vehicle is used.
- i) The Contractor shall make all commercially reasonable efforts to minimize expenses.

**9) Allowances**

- a) The Airport may establish not-to-exceed, Airport controlled Contract allowances (which are included in the not-to-exceed amount set forth in the Agreement).
- b) Use of allowances will be at the sole discretion of the Airport's Project Manager. However, there is no guaranteed minimum level of compensation for these services.

**10) Mobilization Expenses**

- a) The Contractor may be paid for mobilization related expenses as defined in Appendix A, Section 2.1 ("Mobilization") of this Agreement.
- b) Mobilization expenses are payable in a single lump sum amount of \$205,510 upon completion of the mobilization period.
- c) The Contractor shall submit their request for payment of the lump sum for mobilization expenses as part of their regular monthly invoice.
- d) Contractor shall not be paid for mobilization expenses until the Airport has confirmed that the items under Appendix A, Section 2.1 ("Mobilization") of this Agreement have been made available for use under the Agreement.

## Attachment 1 - Staffing Level and Allocation Plan

The Staffing Level and Allocation plan following is the basis for adequate coverage of all shifts with appropriate skills and responsibilities. The shift times and staffing levels may be adjusted by the Contractor to meet operational requirements and resource availability. The total hours per classification invoiced each month are subject to the requirements of Section 2 of this Appendix B.

Classification Position #	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
	Start/End	Start/End	Start/End	Start/End	Start/End	Start/End	Start/End	Hours
Site Manager	Off	0800-1630	0800-1630	0800-1630	0800-1630	0800-1630	Off	40
Admin' Assist''	Off	0800-1630	0800-1630	0800-1630	0800-1630	0800-1630	Off	40
CMMS/Spares	Off	0800-1630	0800-1630	0800-1630	0800-1630	0800-1630	Off	40
Cntl's Specialist'	Off	0800-1630	0800-1630	0800-1630	0800-1630	0800-1630	Off	40
Supervisor #1	0800-1630	0800-1630	0800-1630	0800-1630	Off	Off	0800-1630	40
<b>Shift 1 Supervisor Total Weekly Hours</b>								<b>200</b>
Supervisor #2	Off	1400-2230	1400-2230	1400-2230	1400-2230	1400-2230	Off	
<b>Shift 2 Supervisor Total Weekly Hours</b>								<b>40</b>
Supervisor #3	2200-0630	2200-0630	2200-0630	2200-0630	2200-0630	Off	Off	
<b>Shift 3 Supervisor Total Weekly Hours</b>								<b>40</b>
Cntl' Rm' Op' #1	0600-1430	0600-1430	0600-1430	0600-1430	0600-1430	Off	Off	
Cntl' Rm' Op' #2	Off	Off	0600-1430	0600-1430	0600-1430	0600-1430	0600-1430	
<b>Shift 1 Control Room Operator Total Weekly Hours</b>								<b>80</b>
Cntl' Rm' Op' #3	Off	Off	1400-2230	1400-2230	1400-2230	1400-2230	1400-2230	
<b>Shift 2 Control Room Operator Total Weekly Hours</b>								<b>40</b>
Cntl' Rm' Op' #4	2200-0630	2200-0630	2200-0630	2200-0630	2200-0630	Off	Off	40
<b>Shift 3 Control Room Operator Total Weekly Hours</b>								
Sr. Tech' #1	0600-1430	0600-1430	0600-1430	0600-1430	0600-1430	Off	Off	
Sr. Tech' #2	Off	Off	0600-1430	0600-1430	0600-1430	0600-1430	0600-1430	
Sr. Tech' #3	0600-1430	0600-1430	Off	Off	0600-1430	0600-1430	0600-1430	
<b>Shift 1 Senior Technician Total Weekly Hours</b>								<b>120</b>
Sr. Tech' #4	Off	Off	1400-2230	1400-2230	1400-2230	1400-2230	1400-2230	
Sr. Tech' #5	1400-2230	1400-2230	Off	Off	1400-2230	1400-2230	1400-2230	
<b>Shift 2 Senior Technician Total Weekly Hours</b>								<b>80</b>

Sr. Tech' #6	2200-0630	2200-0630	2200-0630	2200-0630	2200-0630	Off	Off	
Sr. Tech' #7	Off	Off	2200-0630	2200-0630	2200-0630	2200-0630	2200-0630	
Sr. Tech' #8	2200-0630	2200-0630	Off	Off	2200-0630	2200-0630	2200-0630	
<b>Shift 3 Senior Technician Total Weekly Hours</b>								<b>120</b>
Jr. Tech' #1	0600-1430	0600-1430	0600-1430	0600-1430	0600-1430	Off	Off	
Jr. Tech' #2	Off	Off	0600-1430	0600-1430	0600-1430	0600-1430	0600-1430	
<b>Shift 1 Junior Technician Total Weekly Hours</b>								<b>80</b>
Jr. Tech' #3	1400-2230	1400-2230	1400-2230	1400-2230	1400-2230			
Jr. Tech' #4	1400-2230	1400-2230			1400-2230	1400-2230	1400-2230	
<b>Shift 2 Junior Technician Total Weekly Hours</b>								<b>80</b>
Jr. Tech' #5	2200-0630	2200-0630	2200-0630	2200-0630	2200-0630	Off	Off	
Jr. Tech' #6	Off	Off	2200-0630	2200-0630	2200-0630	2200-0630	2200-0630	
<b>Shift 3 Junior Technician Total Weekly Hours</b>								<b>80</b>
System Sup' #1	0600-1430			0600-1430	0600-1430	0600-1430	0600-1430	
System Sup' #2	0600-1430	0600-1430			0600-1430	0600-1430	0600-1430	
<b>Shift 1 System Support Total Weekly Hours</b>								<b>80</b>
System Sup' #3	1400-2230	1400-2230	1400-2230	1400-2230			1400-2230	
System Sup' #4	1400-2230			1400-2230	1400-2230	1400-2230	1400-2230	
<b>Shift 2 System Support Total Weekly Hours</b>								<b>80</b>
System Sup' #5	2200-0630	2200-0630			2200-0630	2200-0630	2200-0630	
System Sup' #6		2200-0630	2200-0630	2200-0630	2200-0630	2200-0630		
<b>Shift 3 System Support Total Weekly Hours</b>								<b>80</b>

**Attachment 2 - Labor Rates**

The prevailing wage rate for Millwrights shall apply to individuals when they are performing work involving installation, inspection, repair and maintenance equipment. The prevailing wage rate for Laborers shall apply to individuals when they are performing all other tasks associated with BHS maintenance duties. For example, an individual may perform the duties of a Junior Technician for six hours in an eight-hour day, and the same individual may perform System Support duties for the remaining two hours of an eight-hour day. In that event, six hours would be paid at the prevailing wage for Millwrights, and two hours would be paid at the rate for Laborers.

Prevailing wages apply only to Senior and Junior Technicians and System Support personnel.

<b>Effective August 2020 through June 2021</b>				
<b>Classification</b>	<b>Shift</b>	<b>Hourly Wage</b>	<b>Burden</b>	<b>Hourly Rate (Wage + Burden)</b>
Site Manager	1	\$65.67	\$45.97	\$111.64
Controls Specialist	1	\$62.54	\$43.78	\$106.32
CMSS and Spares	1	\$36.05	\$25.24	\$61.29
Administrative Assistant	1	\$30.90	\$21.63	\$52.53
Supervisor	1	\$62.54	\$43.78	\$106.32
Supervisor	2	\$66.71	\$43.78	\$110.49
Supervisor	3	\$71.47	\$43.78	\$115.25
Control Room Operator	1	\$32.49	\$25.80	\$58.29
Control Room Operator	2	\$34.65	\$26.35	\$61.00
Control Room Operator	3	\$37.13	\$26.98	\$64.11
Senior Technician	1	\$78.68	\$20.27	\$98.95
Senior Technician	2	\$81.96	\$21.09	\$103.05
Senior Technician	3	\$84.85	\$21.81	\$106.66
Junior Technician	1	\$66.48	\$16.36	\$82.84
Junior Technician	2	\$69.59	\$17.07	\$86.66
Junior Technician	3	\$70.75	\$17.33	\$88.08
System Support	1	\$58.34	\$13.07	\$71.41
System Support	2	\$61.34	\$13.67	\$75.01
System Support	3	\$61.34	\$13.67	\$75.01

<b>Effective July 2021 through June 2022</b>				
<b>Classification</b>	<b>Shift</b>	<b>Hourly Wage</b>	<b>Burden</b>	<b>Hourly Rate (Wage + Burden)</b>
Site Manager	1	\$65.67	\$45.97	\$111.64
Controls Specialist	1	\$62.54	\$43.78	\$106.32
CMSS and Spares	1	\$36.05	\$25.24	\$61.29
Administrative Assistant	1	\$30.90	\$21.63	\$52.53
Supervisor	1	\$62.54	\$43.78	\$106.32

Supervisor	2	\$66.71	\$43.78	\$110.49
Supervisor	3	\$71.47	\$43.78	\$115.25
Control Room Operator	1	\$32.49	\$25.80	\$58.29
Control Room Operator	2	\$34.65	\$26.35	\$61.00
Control Room Operator	3	\$37.13	\$26.98	\$64.11
Senior Technician	1	\$81.42	\$20.62	\$102.04
Senior Technician	2	\$84.69	\$21.43	\$106.12
Senior Technician	3	\$87.59	\$22.15	\$109.74
Junior Technician	1	\$68.77	\$16.60	\$85.37
Junior Technician	2	\$71.88	\$17.32	\$89.20
Junior Technician	3	\$73.04	\$17.58	\$90.62
System Support	1	\$60.34	\$13.23	\$73.57
System Support	2	\$63.34	\$13.83	\$77.17
System Support	3	\$63.34	\$13.83	\$77.17

Effective July 2022 through June 2023				
Classification	Shift	Hourly Wage	Burden	Hourly Rate (Wage + Burden)
Site Manager	1	\$65.67	\$45.97	\$111.64
Controls Specialist	1	\$62.54	\$43.78	\$106.32
CMSS and Spares	1	\$36.05	\$25.24	\$61.29
Administrative Assistant	1	\$30.90	\$21.63	\$52.53
Supervisor	1	\$62.54	\$43.78	\$106.32
Supervisor	2	\$66.71	\$43.78	\$110.49
Supervisor	3	\$71.47	\$43.78	\$115.25
Control Room Operator	1	\$32.49	\$25.80	\$58.29
Control Room Operator	2	\$34.65	\$26.35	\$61.00
Control Room Operator	3	\$37.13	\$26.98	\$64.11
Senior Technician	1	\$84.30	\$20.99	\$105.29
Senior Technician	2	\$87.58	\$21.80	\$109.38
Senior Technician	3	\$90.48	\$22.52	\$113.00
Junior Technician	1	\$71.19	\$16.86	\$88.05
Junior Technician	2	\$74.30	\$17.58	\$91.88
Junior Technician	3	\$75.45	\$17.84	\$93.29
System Support	1	\$62.44	\$13.39	\$75.83
System Support	2	\$65.44	\$13.99	\$79.43
System Support	3	\$65.44	\$13.99	\$79.43

**Attachment 3 – Invoice Pricing Detail**

The Monthly Invoice shall include all expenses, and deductions for staffing shortages and failures to achieve contractual performance standards.

<b>August 2020 through June 2021</b>			
		<b>Annual Total</b>	<b>Monthly Total</b>
<b>LABOR</b>			
<b>Wages and Benefits</b>	Basic Labor	\$4,965,904	\$451,446
Adjustments for hours not worked	Deduction \$		Actual monthly
<b>Wages and Benefits – Adjusted</b>			Actual monthly
<b>SFO Requested Overtime</b>			Actual monthly
<b>Labor Overhead 2% of Wages and Benefits – Adjusted</b>			Actual monthly
<b>Total Monthly Cost for Labor</b>			Actual monthly
<b>Service Fee – 5% of Total Monthly Cost for Labor</b>			Actual monthly
<b>NON - LABOR</b>			
<b>Site Overhead</b>		\$83,804	\$7,619
<b>Mobilization Expenses</b>	One-time payment	\$205,510	\$205,510
<b>Parts, Materials, Software Licenses and Support Fees</b>			Actual monthly
<b>As Needed Services</b>	Per Task Order		Actual monthly
<b>Travel Expenses</b>			Actual monthly
<b>Deductions for Performance Non-Compliance</b>	Deduction \$		Actual monthly
<b>Total Monthly Invoice Value</b>			Actual monthly



July 2021 through June 2022			
		Annual Total	Monthly Total
<b>LABOR</b>			
<b>Wages and Benefits</b>	Basic Labor	\$5,976,002	\$498,000
Adjustments for hours not worked	Deduction \$		Actual monthly
<b>Wages and Benefits – Adjusted</b>			Actual monthly
<b>SFO Requested Overtime</b>			Actual monthly
<b>Labor Overhead 2% of Wages and Benefits – Adjusted</b>			Actual monthly
<b>Total Monthly Cost for Labor</b>			Actual monthly
<b>Service Fee – 10% of Total Monthly Cost for Labor</b>			Actual monthly
<b>NON - LABOR</b>			
<b>Site Overhead</b>		\$91,422	\$7,619
<b>Parts, Materials, Software Licenses and Support Fees</b>			Actual monthly
<b>As Needed Services</b>	Per Task Order		Actual monthly
<b>Travel Expenses</b>			Actual monthly
<b>Deductions for Performance Non-Compliance</b>	Deduction \$		Actual monthly
<b>Total Monthly Invoice Value</b>			Actual monthly

July 2022 through June 2023			
		Annual Total	Monthly Total
<b>LABOR</b>			
Wages and Benefits	Basic Labor	\$6,115,633	\$509,636
Adjustments for hours not worked	Deduction \$		Actual monthly
<b>Wages and Benefits – Adjusted</b>			Actual monthly
<b>SFO Requested Overtime</b>			Actual monthly
<b>Labor Overhead 2% of Wages and Benefits – Adjusted</b>			Actual monthly
<b>Total Monthly Cost for Labor</b>			Actual monthly
<b>Service Fee – 10% of Total Monthly Cost for Labor</b>			Actual monthly
<b>NON - LABOR</b>			
Site Overhead		\$91,422	\$7,619
<b>Parts, Materials, Software Licenses and Support Fees</b>			Actual monthly
<b>As Needed Services</b>	Per Task Order		Actual monthly
<b>Travel Expenses</b>			Actual monthly
<b>Deductions for Performance Non-Compliance</b>	Deduction \$		Actual monthly
<b>Total Monthly Invoice Value</b>			Actual monthly

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Garry Alley  
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Eva Cheong  
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Jeff Littlefield  
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**City and County of San Francisco  
Airport Commission  
P.O. Box 8097  
San Francisco, California 94128**

**Modification No. 1**

This Modification is made this 17th day of May, 2023, in the City and County of San Francisco, State of California, by and between: **BEUMER Lifecycle Management LLC, 800 Apgar Drive, Somerset, NJ 08873** (the “Contractor”) and the City and County of San Francisco, a municipal corporation (the “City”), acting by and through its Airport Commission (the “Commission”).

**Recitals**

- A. City and Contractor have entered into the Agreement for the San Francisco International Airport (the “Airport” or “SFO”) (as defined below); and,
- B. On February 4, 2020, the Office of Contract Administration approved this Agreement under San Francisco Administrative Code Chapter 21.5(d), Proprietary Article No. 12 for the procurement of repairs for equipment, including service and parts when repairs must be done by the manufacturer of the system; and
- C. On June 16, 2020, by Resolution No. 20-0111, the Commission awarded this Agreement to the Contractor for a term commencing August 1, 2020, and ending June 30, 2023, and a not-to-exceed amount of \$21,000,000; and
- D. On July 28, 2020, by Resolution No. 356-20, the Board of Supervisors approved the Agreement under San Francisco Charter Section 9.118; and
- E. City and Contractor desire to administratively modify the Agreement to add six months to the original contract term for a new contract end date of December 31, 2023 while preserving the single option to extend the term of the Agreement, add a subcontractor, modify Contractor’s responsibilities related to installed software and hardware, and to update standard contractual language; and
- F. The contract extension in this Modification No. 1 is authorized under Section 21.24 of the Administrative Code (“Short-Term Contract Extensions and Amendments”) which authorized contract extensions of up to 12 months of any contract that expires on or before July 1, 2023; and
- G. There is no Local Business Entity (“LBE”) subcontracting participation requirement for this Agreement; and
- H. Approval for the Agreement was obtained when the Civil Service Commission approved PSC No. 47310-19/20 on January 6, 2020.

NOW, THEREFORE, Contractor and the City agree as follows:

**1. Article 1, Definitions, Section 1.1** is replaced in its entirety as follows:

1.1 “Agreement” means the contract document dated June 16, 2020, including all attached appendices, and all applicable city ordinances and “Mandatory City Requirements” which are specifically incorporated by reference into the Agreement.

**2. Article 1, Definitions, Section 1.29** is added to this Agreement to read as follows:

1.29 “Digital Signature” means an electronic identifier, created by computer, intended by the party using it to have the same force and effect as the use of a manual signature.

**3. Article 2, Term of the Agreement, Section 2.1** is modified to change the expiration date of the Agreement to December 31, 2023.

**4. Article 4, Services and Resources, Section 4.3.2** is hereby amended to add a subcontractor to the Agreement, and read as follows:

4.3.2 City’s execution of this Agreement constitutes its approval of the subcontractors listed below:

Lloyd W. Aubrey Co., Inc.

**5. Article 12, General Provisions, Section 12.1 Notices to the Parties** is hereby amended to add Section 12.1.1 as follows:

12.1.1 The Parties consent to the use of Digital Signatures, affixed using the City’s DocuSign platform, to execute this Agreement and all subsequent modifications.

**6. Appendix A, Scope of Services** is amended as follows:

a) **Section 1.2.8** is replaced in its entirety to correct a minor grammatical error in the last sentence:

1.2.8. Maintenance and repair duties shall include routine maintenance, scheduled and preventative maintenance, non-scheduled maintenance, ordinary wear maintenance, maintenance and testing of equipment, maintenance of tools and other equipment, on-call maintenance, and the update of manuals and other reference resources.

AIRPORT COMMISSION

CITY AND COUNTY OF SAN FRANCISCO

RESOLUTION NO. 20-0111

**AWARD OF SOLE SOURCE CONTRACT NO. 50195 FOR THE OPERATIONS AND MAINTENANCE OF THE HARVEY MILK TERMINAL 1 BAGGAGE HANDLING SYSTEM TO BEUMER LIFECYCLE MANAGEMENT, LLC, FOR AN INITIAL TERM OF TWO YEARS AND ELEVEN MONTHS COMMENCING AUGUST 1, 2020 AND ENDING JUNE 30, 2023 IN A NOT-TO-EXCEED CONTRACT AMOUNT OF \$21,000,000, WITH ONE 2-YEAR OPTION TO EXTEND AND A TOTAL NOT-TO-EXCEED CONTRACT AMOUNT OF \$35,000,000 IF THE OPTION IS EXERCISED**

- WHEREAS, on July 21, 2015, by Resolution No. 15-0149, the Commission awarded Contract No. 10012.66, Design-Build Services for the Terminal 1 Baggage Handling System Project, to Beumer Corporation; and
- WHEREAS, Contract No. 10012.66 provides that the Airport will enter into an Operations and Maintenance contract with the BHS provider for up to five years after the start of system operation; and
- WHEREAS, the initial phase of the Baggage Handling System was completed in March 2020, triggering the need for operations and maintenance of the system by Beumer's operations and maintenance unit, BEUMER Lifecycle Management, LLC; and
- WHEREAS, Staff has successfully negotiated an agreement with BEUMER Lifecycle Management, LLC and recommends the agreement for award; now, therefore, be it
- RESOLVED, that this Commission hereby awards Sole Source Contract No. 50195 to BEUMER Lifecycle Management, LLC for the operations and maintenance of the baggage handling system in the Harvey Milk Terminal 1 for a total not-to-exceed Contract amount of \$21,000,000 for an initial term of two years and eleven months commencing August 1, 2020 and ending June 30, 2020; and a total Contract amount not-to-exceed of \$35,000,000 if the option is exercised; and, be it further
- RESOLVED, that the Commission Secretary is hereby directed to request Board of Supervisor's approval of Sole Source Contract No. 50195 pursuant to San Francisco Charter Section 9.118(b).

*I hereby certify that the foregoing resolution was adopted by the Airport Commission*  
*at its meeting of* \_\_\_\_\_

~~---~~ JUN 16 2020

  
\_\_\_\_\_  
Secretary





**MEMORANDUM**

June 16, 2020

TO: AIRPORT COMMISSION  
Hon. Larry Mazzola, President  
Hon. Eleanor Johns, Vice President  
Hon. Richard J. Guggenlime  
Hon. Everett A. Hewlett, Jr.  
Hon. Malcolm Yeung

20-0111

JUN 16 2020

FROM: Airport Director

SUBJECT: Award of Sole Source Contract No. 50195 for the Operations and Maintenance of the Baggage Handling System in the Harvey Milk Terminal 1 to BEUMER Lifecycle Management, LLC

DIRECTOR'S RECOMMENDATION: AWARD SOLE SOURCE CONTRACT NO. 50195 FOR THE OPERATIONS AND MAINTENANCE OF THE HARVEY MILK TERMINAL 1 BAGGAGE HANDLING SYSTEM TO BEUMER LIFECYCLE MANAGEMENT LLC, FOR AN INITIAL TERM OF TWO YEARS AND ELEVEN MONTHS COMMENCING AUGUST 1, 2020 AND ENDING JUNE 30, 2023 IN A NOT-TO-EXCEED CONTRACT AMOUNT OF \$21,000,000, WITH ONE 2-YEAR OPTION TO EXTEND AND A TOTAL CONTRACT NOT-TO-EXCEED AMOUNT OF \$35,000,000 IF THE OPTION IS EXERCISED.

**Executive Summary**

Beumer Corporation is currently installing a proprietary, state-of-the art Baggage Handling System (BHS) in Harvey Milk Terminal 1 under an existing design-build contract. The existing contract requires the Airport to enter into a separate operations and maintenance contract with the BHS provider. BEUMER Lifecycle Management, LLC (BLM), an affiliate of Beumer Corporation, has been tasked with operating and maintaining the BHS as it comes online. Staff therefore recommends award of Sole Source Contract No. 50195 for the Operations and Maintenance of the Baggage Handling System in Harvey Milk Terminal 1 to BEUMER Lifecycle Management, LLC.

In light of the COVID-19 crisis and its impact on Airport finances, Staff has considered the financial implications of the proposed contract award and has determined that the services are necessary for the continued safe and secure Airport operations. The proposed Contract accounts for appropriate fee reductions to assure the financial feasibility of the procurement of the services specified in the Contract.

**Background**

On July 21, 2015, by Resolution No. 15-0149, the Commission awarded Contract No. 10012.66, Design-Build Services for the Terminal 1 Baggage Handling System Project, to Beumer Corporation. Refer to Attachment A for a map of the system's location.

THIS PRINT COVERS CALENDAR ITEM NO. 9

Contract No. 10012.66 provides that the Airport will enter into an operations and maintenance contract with the BHS provider for up to five years after the start of system operation.

Staff has successfully negotiated the scope of work, billing rates, and fees with BLM, the operations and maintenance unit of Beumer Corporation. Under this Agreement, BLM will provide for 24/7/365 operational availability as well as all labor, materials, parts, and equipment to perform maintenance services related to the Harvey Milk Terminal 1 BHS. The work includes scheduled and preventative maintenance, on-call unscheduled maintenance and various reports. Labor rates for work directly related to the new BHS shall comply with California State and San Francisco prevailing wage requirements.

The Agreement shall have an original term of two years and eleven months commencing August 1, 2020 and ending June 30, 2023. The term establishes a fiscal year contract cycle. The Airport shall have one option to extend the term for a period of two years, which the Commission may exercise in its sole and absolute discretion.

On December 3, 2019, the City's Contract Monitoring Division approved a waiver of Administrative Code Chapter 14B Local Business Enterprise subcontracting requirements due to the absence of any subcontracting opportunities.


On January 6, 2020, the Civil Service Commission approved PSC 47310-19/20 for this contract.

On February 4, 2020, the Office of Contract Administration waived the solicitation requirement for this transaction under Administrative Code 21.5(d) Proprietary Article 12.

Because the contract amount exceeds \$10,000,000, approval of the Board of Supervisors is required for this contract pursuant to San Francisco Charter Section 9.118(b).

**Recommendation**

I recommend the Commission award Sole Source Contract No. 50195 to BEUMER Lifecycle Management, LLC. The Contract shall have an initial term of two years and eleven months commencing August 1, 2020 and ending June 30, 2023, for a not-to-exceed Contract amount of \$21,000,000 for the initial term with an option to extend for an additional two years and a total contract amount not-to-exceed of \$35,000,000 if the option is exercised.



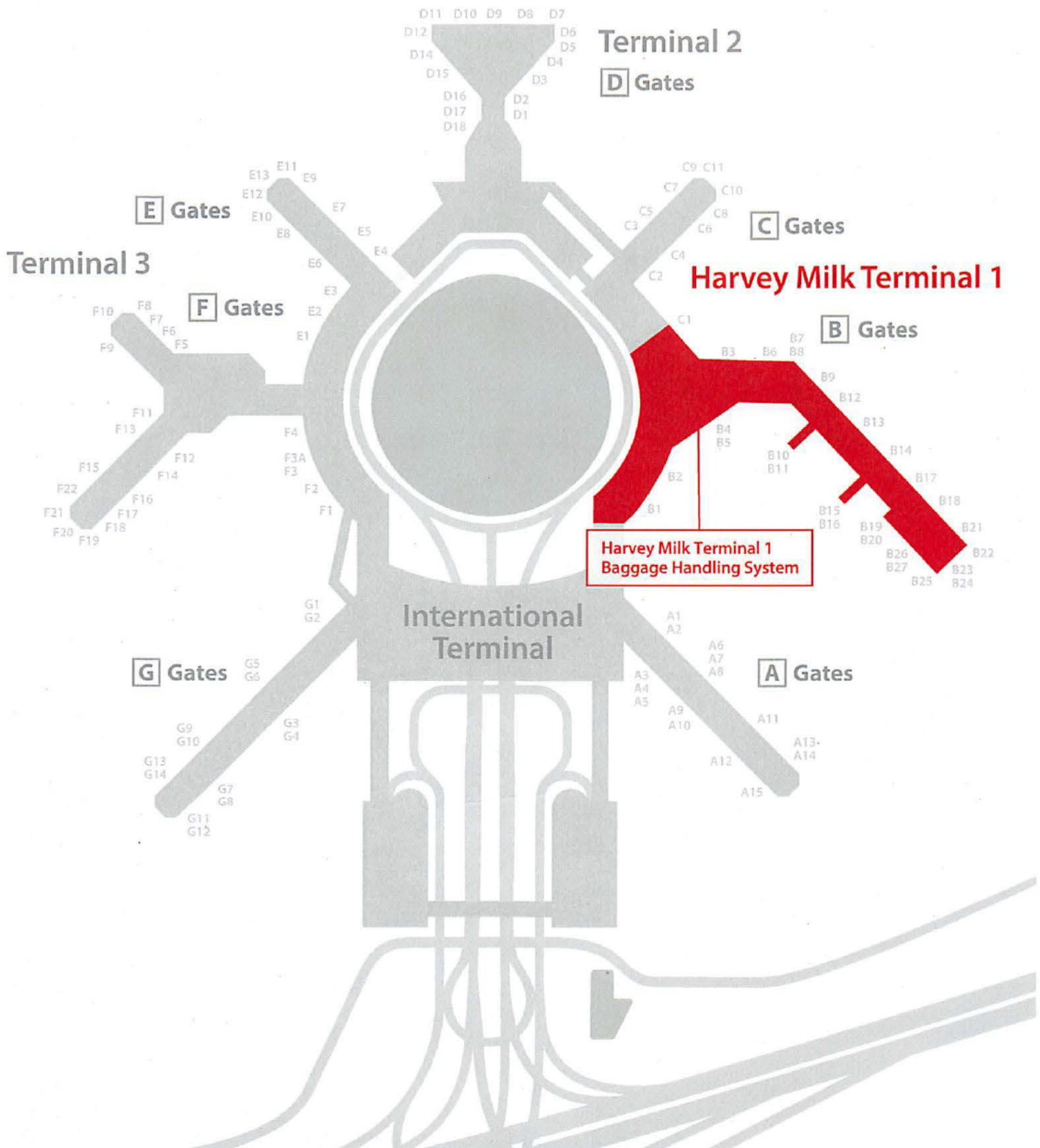
Ivar C. Satero  
Airport Director

Prepared by: Jeff Littlefield  
Chief Operating Officer

Attachments

# Harvey Milk Terminal 1 Baggage Handling System

Maintained by Beumer





- b) **Section 1.2.14** is amended to add “cybersecurity” to the list of TSA Planning Guidance and Design Standards:

1.2.14. Contractor shall maintain and operate the BHS in accordance with all TSA regulations and guidance, including applicable TSA Planning Guidance and Design Standards (PGDS) regarding performance, modification, record keeping, cybersecurity, and general operating and security standards.

- c) **Section 1.2.22** is amended to add the Airport Duty Manager as one of the required parties to be notified:

1.2.22. Contractor shall be fully responsible for the facilities made available by the Airport including repairs, replacements and refurbishment necessitated by ordinary use and wear. Contractor shall not be responsible for facility related repairs or replacements necessitated by causes beyond Contractor’s control. Any damage to the BHS or related facilities, personal injury, or other incident associated with the BHS must be reported immediately to SFO’s Airfield Operations and Airport Duty Manager. Contractor shall cooperate fully with any incident investigation conducted by SFO or other authorities.

- d) **Section 1.2.32** is amended to add the Flight Information Feed to and from the BHS and the Baggage Messaging System to the list of SFO maintained and supported components.

1.2.32. The Contractor shall be responsible for the maintenance and support of the BHS Lower Level Controls (LLC) for ICS (CrisBag) components including Programmable Logic Controls (PLC) hardware and software components and Upper Level Controls (ULC) (see Appendix A, Exhibit 1 for the complete list). SFO will provide maintenance and support of all other elements of the ULC and the LLC including PLC for the conventional conveyor components, make up and claim units, and all other non- ICS components. SFO’s responsibility shall also include, but not be limited to maintenance and support of the following:

- BHS Sort Control Servers
- Human Machine Interfaces (HMI)
- BHS reporting systems
- BHS local area network (BHS LAN).
- Programmable Logic Controls (PLC) – Non ICS
- Remote Start / Stop system of EDS CTX Machines
- Baggage Reconciliation System (BRS)
- Flight Information Feed to and from the BHS

- **Baggage Messaging System**

- e) **Section 1.3.8** is amended as follows to clarify that the proof of citizenship or right to work in the United States extends to subcontractor employees:

1.3.8. Contractor shall require all prospective employees, including subcontractor's employees, to show proof of citizenship or proof from the United States Immigration Authority that they have the legal right to work in the United States. Contractor and its subcontractor(s) shall comply with all badging requirements.

- f) **Section 1.4.3** is amended as follows to change "key personnel" to "Contractor's personnel".

1.4.3. SFO or its Representatives reserve the right, upon reasonable cause, to reject Contractor's personnel assigned to this Agreement.

- g) **Section 2.2.2.3.3** is amended as follows to add TSA and TSA contractor staff to the parties that Contractor shall make baggage hygiene training available to.

2.2.2.3.3 Contractor shall develop a program of recurrent training including baggage hygiene, new or modified equipment, procedures, techniques and any other updated content. Such training shall be conducted annually at minimum, or more frequently if deemed necessary by Contractor or SFO. Baggage hygiene training shall be made available to airline, TSA, and TSA contractor staff using the BHS.

- h) **Section 4.1, Maintenance Management System (MMS)** is amended as follows to allow Airport to use the MMS at other locations within SFO:

**4.1. Maintenance Management System (MMS)**

Contractor shall use and maintain a computerized Maintenance Management System (MMS) provided by SFO that provides the ability to track and issue work orders, equipment and repair history, repair frequencies and part failure modes and perform trend analysis. All assets including spare parts provided by the Airport must be entered, managed, and maintained through the MMS. Performance and Monitoring reports shall be generated using the MMS. SFO shall have full and unrestricted access to and use of the MMS. SFO may use the MMS at other locations with licensing and support provided by Contractor at pricing agreed to by the parties.

**7. Attachment 2 to Appendix A, BHS Controls and Related Hardware, Software and Infrastructure Maintenance and Operation, Section 4.1, Software Maintenance and Support, is amended as follows:**

- a) **Section 4.1.2** is amended as follows to require Contractor to maintain additional information in its inventory of installed software, to provide its inventory to the City, and to require City approval for changes to the inventory:

4.1.2 Contractor shall maintain a comprehensive inventory of all installed software (including operating systems, network software and applications), including, for third-party software, the entities providing the software licenses and software support, and the expiration dates of those licenses and support agreements, in a form and format acceptable to the Airport. This inventory shall be provided to the City on a bi-annual basis, or if requested, on-demand.

If Contractor seeks to replace, add, or delete a software provider, Contractor shall provide the City with written notice, and shall not make the change until the City provides written approval of the change.

- b) **Section 4.2.2** is amended as follows to require Contractor to maintain additional information in its inventory of installed hardware, to provide the inventory to the City, and to require City approval of changes to the inventory:

4.2.2 Contractor shall maintain a comprehensive inventory of all installed hardware, including, for all third-party hardware, the entities providing the hardware support, and the expiration dates of those support agreements, in a form and format acceptable to the Airport. This inventory shall be provided to the City on a bi-annual basis, or if requested, on-demand.

If Contractor seeks to replace, add, or delete a hardware provider, Contractor shall provide the City with written notice, and shall not make the change until the City provides written approval of the change

**8. Appendix B, Calculation of Charges, Section 3, Service Fee, Paragraph a) is amended as follows:**

3) Service Fee

- a) The Contractor's monthly invoice may include a service fee in an amount no greater than five percent (5%) of the total cost of labor for each month through June 30, 2021 and ten percent (10%) of the total cost of labor for each month starting July 1, 2021.

**9. Appendix B, Calculation of Charges, Section 5, Parts and Materials Software Licenses, Paragraph a.ii is amended as follows to increase the threshold for requiring supplier quotes from \$100 to \$200:**

- ii) For purchases exceeding a net cost, including all taxes, shipping, and other fees of \$200 per unit (each) and/or \$200 per OEM/supplier invoice price, quotes for the same or equivalent material from a minimum of three (3) suppliers must be provided to the Airport's Project Manager for approval prior to purchase. Unless extenuating circumstances apply and are documented by the Contractor, the lowest priced quote will be approved. All quotes shall be included with the invoice along with documentation of the approval to purchase. Sole source software licenses or product support agreements are exempt from this requirement upon representation by the Contractor that alternative pricing is not available. Exceptions to the preceding must be approved in writing by the Airport Project Manager

**10. Appendix B, Calculation of Charges, Section 7, SFO Requested Overtime, Paragraph a.ii is amended as follows:**

- ii) The Contractor's monthly invoice may include a service fee in an amount no greater than five percent (5%) of the total cost of SFO Requested Overtime for each month through June 30, 2021 and ten percent (10%) of the total cost of labor for each month starting July 1, 2021. This service Fee is to be calculated and applied separately from the service fee applied to the total monthly charge for employee wages and benefits (see Section 3).

**11. Appendix B, Calculation of Charges, Attachment 1, Staffing Level and Allocation Plan is amended as follows to include a requirement for prior approval of the Airport Project Manager for adjustments to the shift times and staffing levels.**

The Staffing Level and Allocation plan following is the basis for adequate coverage of all shifts with appropriate skills and responsibilities. With prior approval of the Airport Project Manager, the shift times and staffing levels may be adjusted by the Contractor to meet operational requirements and resource availability. The total hours per classification invoiced each month are subject to the requirements of Section 2 of this Appendix B.

**12. Appendix B, Calculation of Charges, Attachment 2, Labor Rates and Attachment 3, Invoice Pricing Details are amended to include the following labor rates and invoice pricing effective July 1, 2023 through December 31, 2023.**

Effective July 1, 2023 through December 31, 2023				
Classification	Shift	Hourly Wage	Burden	Hourly Rate (Wage + Burden)
Site Manager	1	\$68.95	\$48.27	\$117.22

Controls Specialist	1	\$65.67	\$45.97	\$111.63
CMSS and Spares	1	\$37.85	\$26.50	\$64.35
Administrative Assistant	1	\$32.45	\$22.71	\$55.16
Supervisor	1	\$65.67	\$45.97	\$111.63
Supervisor	2	\$68.23	\$47.76	\$115.99
Supervisor	3	\$71.18	\$49.83	\$121.01
Control Room Operator	1	\$36.23	\$25.36	\$61.58
Control Room Operator	2	\$37.64	\$26.35	\$63.98
Control Room Operator	3	\$39.27	\$27.49	\$66.76
Senior Technician	1	\$88.13	\$17.63	\$105.76
Senior Technician	2	\$91.74	\$18.35	\$110.09
Senior Technician	3	\$95.01	\$19.00	\$114.01
Junior Technician	1	\$74.14	\$14.83	\$88.97
Junior Technician	2	\$77.38	\$15.48	\$92.86
Junior Technician	3	\$78.69	\$15.74	\$94.43
System Support	1	\$64.81	\$12.96	\$77.77
System Support	2	\$67.81	\$13.56	\$81.37
System Support	3	\$67.81	\$13.56	\$81.37

<b>July 1, 2023 through December 31, 2023</b>			
		<b>Total</b>	<b>Monthly Total</b>
<b>LABOR</b>			
<b>Wages and Benefits</b>	Basic Labor	\$3,014,130	\$502,355
Adjustments for hours not worked	Deduction \$		Actual monthly
<b>Wages and Benefits – Adjusted</b>			Actual monthly
<b>SFO Requested Overtime</b>			Actual monthly
<b>Labor Overhead 2% of Wages and Benefits – Adjusted</b>			Actual monthly
<b>Total Monthly Cost for Labor</b>			Actual monthly
<b>Service Fee – 10% of Total Monthly Cost for Labor</b>			Actual monthly
<b>NON - LABOR</b>			
<b>Site Overhead</b>		\$48,000	\$8,000
<b>Parts, Materials, Software Licenses and Support Fees</b>			Actual monthly
<b>Beumer Help Desk Fee</b>		\$45,501	\$7,584

<b>As Needed Services</b>	Per Task Order	Actual monthly
<b>Travel Expenses</b>		Actual monthly
<b>Deductions for Performance Non-Compliance</b>	Deduction \$	Actual monthly
<b>Total Monthly Invoice Value</b>		Actual monthly

**13. Effective Date.** Each of the changes set forth in this Modification shall be effective on and after the date of this Modification.

**14. Legal Effect.** Except as expressly changed by this Modification, all of the terms and conditions of the Agreement shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day first mentioned above.

CITY	CONTRACTOR
AIRPORT COMMISSION CITY AND COUNTY OF SAN FRANCISCO	
By: <u>DocuSigned by: Ivar C. Satero</u> 8CFDC3E9128544B... Ivar C. Satero, Airport Director	<u>DocuSigned by: Mark J. Sibley</u> 2653F239680843D... Authorized Signature
	<u>Mark J. Sibley</u> Printed Name
	<u>President</u> Title
	<u>BEUMER Lifecycle Management, LLC</u> Company Name
	<u>0000040977</u> City Supplier Number
Approved as to Form:	
David Chiu City Attorney	
By: <u>DocuSigned by: Sallie Gibson</u> DE0F4C2305AE4DA... Sallie Gibson Deputy City Attorney	<u>800 Apgar Drive</u> Address
	<u>Somerset, NJ 08873</u> City, State, ZIP
	<u>732-893-2800</u> Telephone Number
	<u>82-3745033</u> Federal Employer ID Number

AIRPORT COMMISSION

CITY AND COUNTY OF SAN FRANCISCO

RESOLUTION NO. 23-0145

**APPROVAL OF MODIFICATION NO. 2 TO SOLE SOURCE CONTRACT NO. 50195 WITH BEUMER LIFECYCLE MANAGEMENT, LLC, FOR THE OPERATION AND MAINTENANCE OF THE BAGGAGE HANDLING SYSTEM IN HARVEY MILK TERMINAL 1, TO EXTEND THE CONTRACT BY ONE YEAR AND SIX MONTHS FOR A NEW CONTRACT END DATE OF JUNE 30, 2025, AND TO INCREASE THE CONTRACT AMOUNT BY \$17,000,000, FOR A NEW TOTAL NOT-TO-EXCEED CONTRACT AMOUNT OF \$38,000,000.**

- WHEREAS, on June 16, 2020, by Resolution No. 20-0111, the Commission awarded Sole Source Contract No. 50195 to BEUMER Lifecycle Management, LLC (BEUMER), in an amount not to exceed \$21,000,000, and a term from August 1, 2020, through June 30, 2023, with a single option to extend the Contract by two years; and
- WHEREAS, on July 28, 2020, by Resolution No. 356-20, the Board of Supervisors approved Sole Source Contract No. 50195 under San Francisco Charter Section 9.118(b); and
- WHEREAS, on May 17, 2023, the parties agreed to Modification No. 1, to administratively modify the Contract as permitted under Administrative Code Section 21.24, to extend the Contract term by six months for a new Contract end date of December 31, 2023; and
- WHEREAS, BEUMER has provided 24/7/365 operational availability of the HMT1 baggage handling system, as well as all labor, materials, parts, and equipment to perform scheduled preventative maintenance repairs and breakdown restoration as well as on call-services; and
- WHEREAS, BEUMER has performed these services to the satisfaction of Airport staff and tenant airlines, and has continued to gain experience in the specialized aspects of the work; and
- WHEREAS, Airport staff recommends that BEUMER continue to perform services for the baggage handling system at HMT1, and requests the Commission's approval to exercise the option to extend the Contract term, for a new end date of June 30, 2025, and to increase the Contract amount by \$17,000,000, for a new Contract amount not to exceed \$38,000,000; and
- WHEREAS, because the proposed contract modification exceeds \$500,000, the Board of Supervisors must approve Modification No. 2 to Sole Source Contract No. 50195, pursuant to San Francisco Charter Section 9.118(b); now, therefore, be it







San Francisco International Airport

**MEMORANDUM**

June 20, 2023

TO: AIRPORT COMMISSION  
Hon. Malcolm Yeung, President  
Hon. Everett A. Hewlett, Jr., Vice President  
Hon. Jane Natoli  
Hon. Jose F. Almanza

23-0145

JUN 20 2023

FROM: Airport Director

SUBJECT: Approval of Modification No. 2 to Sole Source Contract No. 50195 with BEUMER Lifecycle Management, LLC for the Operation and Maintenance of the Baggage Handling System in Harvey Milk Terminal 1

DIRECTOR'S RECOMMENDATION: APPROVE MODIFICATION NO. 2 TO SOLE SOURCE CONTRACT NO. 50195 WITH BEUMER LIFECYCLE MANAGEMENT, LLC FOR THE OPERATION AND MAINTENANCE OF THE BAGGAGE HANDLING SYSTEM IN HARVEY MILK TERMINAL 1, TO EXTEND THE CONTRACT BY ONE YEAR AND SIX MONTHS FOR A NEW CONTRACT END DATE OF JUNE 30, 2025, AND TO INCREASE THE CONTRACT AMOUNT BY \$17,000,000 FOR A NEW TOTAL NOT-TO-EXCEED CONTRACT AMOUNT OF \$38,000,000.

**Executive Summary**

BEUMER Lifecycle Management, LLC (BEUMER) operates and maintains the Airport's Baggage Handling System (BHS) in Harvey Milk Terminal 1 (HMT1). Staff seeks Commission approval to extend the Contract by one year and six months for a new Contract end date of June 30, 2025 and to increase the Contract amount by \$17,000,000, for a new not-to-exceed amount of \$38,000,000.

**Background**

On June 16, 2020, by Resolution No. 20-0111, the Commission awarded Sole Source Contract No. 50195 to BEUMER, in an amount not to exceed \$21,000,000, and a term from August 1, 2020, through June 30, 2023, with an option to extend the Contract by two years. At the time of award, the total anticipated not-to-exceed Contract amount reported to this Commission, assuming the option were exercised, was \$35,000,000.

On July 28, 2020, by Resolution No. 356-20, the Board of Supervisors approved Sole Source Contract No. 50195 under San Francisco Charter Section 9.118(b).

On May 17, 2023, Sole Source Contract No. 50195 was administratively modified through Modification No. 1 to extend the Contract term by six months for a new Contract end date of December 31, 2023, as authorized by Administrative Code section 21.24, which allows short-term contract extensions for any contract that expires on or before July 1, 2023. Modification No. 1 also added a subcontractor and updated standard contract language.

Under this Contract, BEUMER provides 24/7/365 operational availability of the HMT1 BHS, as well as all labor, materials, parts, and equipment to perform scheduled preventative maintenance, repairs, and breakdown restoration, as well as on call-services. BEUMER has performed these services to the satisfaction of Airport staff and tenant airlines and has continued to gain experience in the specialized aspects of the work.

Staff recommends that BEUMER continue to perform these services, and requests Commission approval to exercise the option to extend the Contract term for a new Contract end date of June 30, 2025, and to increase the Contract amount by \$17,000,000, for a new Contract amount not to exceed \$38,000,000. This requested increase exceeds the previously reported anticipated increase of \$14,000,000 by \$3,000,000. The additional amount is primarily due to unanticipated rates of inflation in the general economy, higher than anticipated increases in prevailing wage rate, and costs for additional services required as a result of additional BHS components in HMT1 North.

Because the proposed contract modification exceeds \$500,000, Board of Supervisors approval is required pursuant to San Francisco Charter Section 9.118(b).

**Recommendation**

I recommend the Commission 1) approve Modification No. 2 to Sole Source Contract No. 50195 with BEUMER Lifecycle Management, LLC to extend the Contract term for a new Contract end date of June 30, 2025 and to increase the Contract amount by \$17,000,000 for a new not-to-exceed Contract amount of \$38,000,000, and 2) direct the Commission Secretary to seek approval of Modification No. 2 to Sole Source Contract No. 50195 from the Board of Supervisors pursuant to San Francisco Charter Section 9.118(b).



War C. Satero  
Airport Director

Prepared by: Jeff Littlefield  
Chief Operating Officer

Attachment



San Francisco International Airport

June 30, 2023

Ms. Angela Calvillo  
Clerk of the Board  
Board of Supervisors  
City Hall  
1 Dr. Carlton B. Goodlett Place, Room 244  
San Francisco, California 94102-4689

**Subject:** Approval of Modification No. 2 to Professional Services Contract No. 50195 for Operations and Maintenance of the Baggage Handling System in Harvey Milk Terminal 1, between BEUMER Lifecycle Management LLC. and the City and County of San Francisco, acting by and through its Airport Commission

Dear Ms. Calvillo:

Pursuant to Section 9.118 of the City Charter, I am forwarding for the Board of Supervisors a proposed Resolution approving Modification No. 2 to Professional Services Contract No. 50195 for Operations and Maintenance of the Baggage Handling System in Harvey Milk Terminal 1, between BEUMER Lifecycle Management LLC. and the City and County of San Francisco, acting by and through its Airport Commission. Modification No. 2 increases the contract amount by \$17,000,000 for a new total contract amount not to exceed \$38,000,000, and extends the contract term by one year and six months to a new end date of June 30, 2025.

The following is a list of accompanying documents:

- Board of Supervisors Resolution;
- Approved Airport Commission Resolution Nos. 20-011 and 23-0145, and accompanying memoranda;
- Form SFEC-126 for the Board of Supervisors;
- Copy of Contract No. 50195 and Modification No. 1; and
- Copy of Modification No. 2 to Contract No. 50195, executed by BEUMER Lifecycle Management LLC.

Please contact Cathy Widener, Chief External Affairs Officer at (650) 821-5023 if you have any questions or concerns regarding this matter.

Very truly yours,

*Kantrice Ogletree /s/*

Kantrice Ogletree  
Commission Secretary

Enclosures

cc: Cathy Widener, Chief External Affairs Officer



## San Francisco Ethics Commission

25 Van Ness Avenue, Suite 220, San Francisco, CA 94102

Phone: 415.252.3100 . Fax: 415.252.3112

[ethics.commission@sfgov.org](mailto:ethics.commission@sfgov.org) . [www.sfethics.org](http://www.sfethics.org)

Received On:

File #: 230801

Bid/RFP #:

### Notification of Contract Approval

SFEC Form 126(f)4

(S.F. Campaign and Governmental Conduct Code § 1.126(f)4)

A Public Document

Each City elective officer who approves a contract that has a total anticipated or actual value of \$100,000 or more must file this form with the Ethics Commission within five business days of approval by: (a) the City elective officer, (b) any board on which the City elective officer serves, or (c) the board of any state agency on which an appointee of the City elective officer serves. For more information, see: <https://sfethics.org/compliance/city-officers/contract-approval-city-officers>

#### 1. FILING INFORMATION

TYPE OF FILING	DATE OF ORIGINAL FILING <i>(for amendment only)</i>
Original	
AMENDMENT DESCRIPTION – Explain reason for amendment	

#### 2. CITY ELECTIVE OFFICE OR BOARD

OFFICE OR BOARD	NAME OF CITY ELECTIVE OFFICER
Board of Supervisors	Members

#### 3. FILER'S CONTACT

NAME OF FILER'S CONTACT	TELEPHONE NUMBER
Angela Calvillo	415-554-5184
FULL DEPARTMENT NAME	EMAIL
office of the Clerk of the Board	Board.of.Supervisors@sfgov.org

#### 4. CONTRACTING DEPARTMENT CONTACT

NAME OF DEPARTMENTAL CONTACT	DEPARTMENT CONTACT TELEPHONE NUMBER
Cathy Widener	650-821-5023
FULL DEPARTMENT NAME	DEPARTMENT CONTACT EMAIL
AIR                      Airport Commission	cathy.widener@flsfo.com



5. CONTRACTOR	
<b>NAME OF CONTRACTOR</b> BEUMER Lifecycle Management LLC (BLM)	<b>TELEPHONE NUMBER</b> 732-893-2800
<b>STREET ADDRESS (including City, State and Zip Code)</b> 800 Apgar Drive, Somerset, NJ 08873	<b>EMAIL</b>

6. CONTRACT		
<b>DATE CONTRACT WAS APPROVED BY THE CITY ELECTIVE OFFICER(S)</b>	<b>ORIGINAL BID/RFP NUMBER</b>	<b>FILE NUMBER (If applicable)</b> 230801
<b>DESCRIPTION OF AMOUNT OF CONTRACT</b> \$38,000,000		
<b>NATURE OF THE CONTRACT (Please describe)</b> Contractor to provide all labor, supervision, materials, repair, replacement parts, tools, supplies, equipment and other incidentals necessary to perform 24/7/365 operations and maintenance of the Baggage Handling System in the Harvey Milk Terminal 1 at San Francisco International Airport.		

7. COMMENTS

8. CONTRACT APPROVAL	
This contract was approved by:	
<input type="checkbox"/>	<b>THE CITY ELECTIVE OFFICER(S) IDENTIFIED ON THIS FORM</b>
<input checked="" type="checkbox"/>	<b>A BOARD ON WHICH THE CITY ELECTIVE OFFICER(S) SERVES</b> Board of Supervisors
<input type="checkbox"/>	<b>THE BOARD OF A STATE AGENCY ON WHICH AN APPOINTEE OF THE CITY ELECTIVE OFFICER(S) IDENTIFIED ON THIS FORM SITS</b>

**9. AFFILIATES AND SUBCONTRACTORS**

List the names of (A) members of the contractor's board of directors; (B) the contractor's principal officers, including chief executive officer, chief financial officer, chief operating officer, or other persons with similar titles; (C) any individual or entity who has an ownership interest of 10 percent or more in the contractor; and (D) any subcontractor listed in the bid or contract.

#	LAST NAME/ENTITY/SUBCONTRACTOR	FIRST NAME	TYPE
1	Dzierzawski/BLM/Contractor	Joe	Board of Directors
2	Laugesen/BLM/Contractor	Finn	Board of Directors
3	Fontius/BLM/Contractor	Jorn	Board of Directors
4	Sibley/BLM/Contractor	Mark	Other Principal Officer
5	Kinski/BLM/Contractor	Uwe	CFO
6	Beumer Corporation		Shareholder
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**9. AFFILIATES AND SUBCONTRACTORS**

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#	LAST NAME/ENTITY/SUBCONTRACTOR	FIRST NAME	TYPE
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**9. AFFILIATES AND SUBCONTRACTORS**

List the names of (A) members of the contractor’s board of directors; (B) the contractor’s principal officers, including chief executive officer, chief financial officer, chief operating officer, or other persons with similar titles; (C) any individual or entity who has an ownership interest of 10 percent or more in the contractor; and (D) any subcontractor listed in the bid or contract.

#	LAST NAME/ENTITY/SUBCONTRACTOR	FIRST NAME	TYPE
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<input type="checkbox"/>	Check this box if you need to include additional names. Please submit a separate form with complete information. Select "Supplemental" for filing type.		

**10. VERIFICATION**

I have used all reasonable diligence in preparing this statement. I have reviewed this statement and to the best of my knowledge the information I have provided here is true and complete.

**I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.**

SIGNATURE OF CITY ELECTIVE OFFICER OR BOARD SECRETARY OR CLERK   <p style="text-align: center;">BOS Clerk of the Board</p>	DATE SIGNED
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**From:** [Francis Tsang \(AIR\)](#)  
**To:** [BOS Legislation, \(BOS\)](#)  
**Cc:** [Cathy Widener \(AIR\)](#); [Kantrice Ogletree \(AIR\)](#); [Carolyn Jayin \(AIR\)](#); [Karen Ng \(AIR\)](#)  
**Subject:** BOS E-FILE SUBMITTAL: Modification No. 2 to Contract No. 50195 for Operations and Maintenance of the Baggage Handling System in the Harvey Milk Terminal 1, between BEUMER and Airport  
**Date:** Friday, June 30, 2023 11:56:25 AM  
**Attachments:** [20-0111 AWARD Sole Source Contract No. 50195 - BEUMER Lifecycle Management LLC.pdf](#)  
[23-0145 APPROVAL of Mod 2 SS Contract No 50195 - BEUMER Lifecycle Mgmt LLC.pdf](#)  
[SFEC Form 126f4BOS---Notification of Contract.pdf](#)  
[\\_Original \(fully executed\).pdf](#)  
[50195 Mod 1 \(fully executed\).pdf](#)  
[CT 50195 Mod 2\\_Final.pdf](#)  
[BEUMER Ct 50195 Mod 2 Board Cover Letter KO Signed.pdf](#)  
[image001.png](#)  
[BOS Res Ct 50195 Mod 2 FINAL.doc](#)

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CITY AND COUNTY OF SAN FRANCISCO

AIRPORT COMMISSION

BOARD OF SUPERVISORS LEGISLATION

To: BOS Legislation

Date: June 30, 2023

RE: Approval of Modification No. 2 to Contract No. 50195 for Operations and Maintenance of the Baggage Handling System in the Harvey Milk Terminal 1, between BEUMER Lifecycle Management LLC and the City and County of San Francisco, acting by and through its Airport Commission

Attached is proposed legislation concerning approval of Modification No. 2 to Professional Services Contract No. 50195 for Operations and Maintenance of the Baggage Handling System in the Harvey Milk Terminal 1, between BEUMER Lifecycle Management LLC and the City and County of San Francisco, acting by and through its Airport Commission.

The following is a list of accompanying documents:

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- Form SFEC-126 for the Board of Supervisors;
- Copy of Original Contract No. 50195 and Modification No. 1; and
- Copy of Modification No. 2 to Contract No. 50195, executed by BEUMER Lifecycle Management LLC.

Contacts:

Cathy Widener, Chief External Affairs Officer 650-821-5023

Thanks!

Francis



**Francis Tsang**

Strategic Communication Advisor | External Affairs

San Francisco International Airport | P.O. Box 8097 | San Francisco, CA 94128

Tel 650-821-5051 | [francis.tsang@flysfo.com](mailto:francis.tsang@flysfo.com) | [flysfo.com](http://flysfo.com)

*(preferred pronouns: he/him/his)*

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