

File No. 220656

Committee Item No. 4

Board Item No. _____

COMMITTEE/BOARD OF SUPERVISORS

AGENDA PACKET CONTENTS LIST

Committee: Budget and Finance Committee Date July 13, 2022

Board of Supervisors Meeting Date _____

Cmte Board

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OTHER (Use back side if additional space is needed)

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| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>Airport Commission Resolution No. 22-0080 5/17/2022</u> |
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Completed by: Brent Jalipa Date July 7, 2022

Completed by: Brent Jalipa Date _____

1 [Airport Professional Services Agreement - Professional Business Providers, Inc. - Operate,
2 Maintain and Repair Airport-Owned Passenger Boarding Bridges and Baggage Handling
3 Systems - Not to Exceed \$13,114,615]

4 **Resolution approving Award of Professional Services Agreement for Airport Contract**
5 **No. 50240 to operate, maintain, and repair Airport-owned passenger boarding bridges**
6 **and baggage handling systems in the domestic terminals, between Professional**
7 **Business Providers, Inc., and the City and County of San Francisco, acting by and**
8 **through its Airport Commission, in an amount not to exceed \$13,114,615 pursuant to**
9 **Charter, Section 9.118(b), for the period of August 1, 2022, through July 31, 2025.**

10
11 WHEREAS, On May 17, 2022, pursuant to Resolution No. 22-0080, the Airport
12 Commission awarded the Professional Services Agreement – to operate, maintain, and
13 repair Airport-owned passenger boarding bridges and baggage handling systems in the
14 domestic terminals, for a three (3) year term, beginning August 1, 2022, through July 31,
15 2025, in a not to exceed amount of \$13,114,615 with one (1) two-year option, exercisable
16 at the sole discretion of the Airport Commission; and

17 WHEREAS, San Francisco Charter, Section 9.118(b) provides that the agreements
18 entered into by a department, board or commission requiring anticipated expenditures by the
19 City and County of ten million dollars, shall be subject to approval by the Board of Supervisors
20 by Resolution; and

21 WHEREAS, The original contract is on file with the Clerk of the Board of Supervisors in
22 File No. 220656, which is hereby declared to be a part of this Resolution as if set forth fully
23 herein; now, therefore, be it

24 **RESOLVED**, That the Board of Supervisors hereby approves the Award of
25 Professional Services Agreement for Airport Contract 50240 to operate, maintain, and repair

1 Airport-owned passenger boarding bridges and baggage handling systems in the domestic
2 terminals between Professional Business Providers, Inc. and the City and County of San
3 Francisco, acting by and through its Airport Commission, for a three (3) year term, at a not to
4 exceed amount of \$13,114,615, with one (1) two-year option, exercisable at the sole
5 discretion of the Airport Commission, copies of which are contained in Board of Supervisors'
6 File No. 220656; and, be it

7 FURTHER RESOLVED, That within thirty (30) days of the contract being fully executed
8 by all parties, the Airport Commission shall provide the final contract to the Clerk of the Board
9 for inclusion into the official file.

Item 4 File 22-0656	Department: San Francisco International Airport (Airport)
EXECUTIVE SUMMARY	
<p style="text-align: center;">Legislative Objectives</p> <ul style="list-style-type: none"> The proposed resolution would approve a contract between San Francisco International Airport (Airport) and Professional Business Providers, Inc. (PBP) to operate, maintain, and repair Airport-owned passenger boarding bridges and baggage handling systems in the domestic terminals, for a term of three years from August 2022 through July 2025, with one two-year option to extend through July 2027, and an amount not to exceed \$13,114,615. <p style="text-align: center;">Key Points</p> <ul style="list-style-type: none"> In October 2021, the Airport issued a Request for Proposals (RFP) to select a contractor to operate, maintain, and repair the Airport-owned baggage handling systems and passenger boarding bridges in the domestic terminals. Vanderlande, which has been the Airport's contractor for these services since 2016, was the highest-ranking proposer, but was disqualified due to Administrative Code Chapter 12X. Consequently, the Airport awarded a contract to the second highest scoring proposer, Professional Business Providers (PBP), which was determined to be eligible and compliant. Under the proposed contract, PBP would be responsible for providing complete maintenance on the Terminal 2 baggage handling system and 40 passenger boarding bridges in Terminals 1 and 2. PBP would also perform on-call maintenance on Baggage Carousel 10 in Terminal 3, which is not frequently used. There is no change in the scope of work from the current Vanderlande contract. <p style="text-align: center;">Fiscal Impact</p> <ul style="list-style-type: none"> The proposed contract would have a total amount not to exceed \$13,114,615 over three years. PBP estimates that approximately 21 full-time equivalent (FTE) employees would perform services under the contract. The Airport's current contract with Vanderlande funds 17.13 FTE staff at an annual cost of \$3.7 million, or an average cost of \$218,711 per FTE. The proposed contract with PBP funds 21 FTE starting at an annual cost of \$3.2 million, or an average cost of \$152,391 per FTE. The decrease in per-FTE cost is primarily attributed to changes in the calculation of labor costs and job assignments for certain job classifications. Contract costs are billed to airlines. <p style="text-align: center;">Recommendation</p> <ul style="list-style-type: none"> Approve the proposed resolution. 	

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

San Francisco International Airport (Airport) owns three baggage handling systems and 40 common use passenger boarding bridges in the domestic terminals.¹ In October 2021, the Airport issued a Request for Proposals (RFP) to select a contractor to operate, maintain, and repair the Airport-owned baggage handling systems and passenger boarding bridges in the domestic terminals. The Airport received three proposals and a three-member panel scored them, as shown in Exhibit 1 below.²

Exhibit 1: Proposers and Scores from RFP

Proposers	Score (out of 925)
Vanderlande Industries, Inc.	867.33
Professional Business Providers, Inc.	673.93
Symbrant Aviation Services	554.52

Source: Airport

Vanderlande, which has been the Airport's contractor for these services since 2016, was the highest-ranking proposer. However, Vanderlande is headquartered in the State of Georgia, which is a Covered State under Administrative Code Chapter 12X and is therefore prohibited from doing business with the City.³ Consequently, the Airport awarded a contract to the second highest scoring proposer, Professional Business Providers (PBP), which was determined to be eligible and compliant. In May 2022, the Airport Commission approved a contract with PBP.

DETAILS OF PROPOSED LEGISLATION

The proposed resolution would approve a contract between the Airport and PBP to operate, maintain, and repair Airport-owned passenger boarding bridges and baggage handling systems

¹ One baggage handling system is located in Harvey Milk Terminal 1 (Terminal 1), one is located in Terminal 2, and one is located in Terminal 3. The Terminal 1 baggage handling system is a new system operated under a separate contract with Beumer Lifecycle Management LLC (File 20-0698). 26 passenger boarding bridges are located in Terminal 1, and 14 are in Terminal 2. The Terminal 3 boarding bridges and baggage handling system are maintained by United Airlines, which exclusively operates out of Terminal 3.

² The panel consisted of one member from San Jose International Airport, Facilities and Engineering; one member from Oakland International Airport, Airport Equipment Systems; and one member from SFO Terminal Systems.

³ Chapter 12X of the Administrative Code prohibits City contracting with businesses headquartered in states that allow discrimination against LGBT individuals or have restrictive abortion or voter suppression laws. Georgia is a Covered State under Chapter 12X due to restrictive abortion and voter suppression laws.

in the domestic terminals, for a term of three years from August 2022 through July 2025, with one two-year option to extend through July 2027, and an amount not to exceed \$13,114,615.

Scope of Work

Under the proposed contract, PBP would be responsible for providing complete maintenance on the Terminal 2 baggage handling system and 40 passenger boarding bridges in Terminals 1 and 2. PBP would also perform on-call maintenance on Baggage Carousel 10 in Terminal 3, which is not frequently used. There is no change in the scope of work from the current Vanderlande contract.

Performance Management

The Airport uses three performance measures for the contract: the Availability Standard, which tracks the amount of time that equipment is available for use, the Preventive Maintenance Standard, which tracks the percentage of preventive maintenance inspections that are completed on time, and the Tracking Accuracy Standard, which tracks the accuracy of baggage sorted by the baggage handling system. The benchmarks are 98 percent for the Preventive Maintenance Standard and 97 percent for the Availability and Tracking Accuracy Standards.

FISCAL IMPACT

The proposed contract would have a total amount not to exceed \$13,114,615 over three years. PBP estimates that approximately 21 full-time equivalent (FTE) employees would perform services under the contract. The staffing plan and estimated labor costs for Year 1 of the proposed contract are shown in Exhibit 2 below.

Exhibit 2: Estimated Staffing Plan and Labor Costs, Year 1 (August 2022 – July 2023)

Position	FTE Employees	Hourly Cost (with Benefits) ⁴	Annual Total Hours (Excluding PTO)	Estimated Annual Labor Costs
Manager	1.0	\$93.26	1,944	\$181,297
Office Site Administrator	1.0	40.93	1,944	79,568
Head Maintenance Technician	3.0	103.73	5,640	584,981
Maintenance Technician	9.0	97.08	16,920	1,642,594
Laborer/Jammer/Encoder	3.5	65.85	6,580	433,293
Control Room Operator	3.5	40.93	6,804	278,488
Total	21.0			\$3,200,220

Source: Airport. Totals may not add due to rounding.

Labor Costs

The Airport's current contract with Vanderlande funds 17.13 FTE staff at an annual cost of \$3.7 million, or an average cost of \$218,711 per FTE. The proposed contract with PBP funds 21 FTE starting at an annual cost of \$3.2 million, or an average cost of \$152,391 per FTE. The decrease in per-FTE cost is primarily attributed to changes in the calculation of labor costs. The current contract was structured using fully burdened billing rates, including overhead, and job

⁴ Hourly labor costs include health insurance, dental insurance, vision insurance, life insurance, disability insurance, retirement, workers' compensation, payroll taxes, and training.

assignments for laborers and jammers differ between the current and proposed contract. The new contract is structured to pay hourly wages and benefits for actual hours worked. Regarding the increase in FTE positions, PBP's proposal included three Head Maintenance Technician and one Office Site Administrator positions to provide additional support.

PBP estimates that prevailing wage costs will increase approximately 2.6 percent annually, and that other costs will remain constant each year. There is a one-time mobilization charge of up to \$50,000 for the first thirty days of the contract to complete training, obtain licenses, permits, and tools, and develop a maintenance plan.

The total cost breakdown over the three-year contract term is shown in Exhibit 3 below.

Exhibit 3: Estimated Contract Budget

Item	Year 1	Year 2	Year 3	Total
Labor	\$3,200,220	\$3,284,773	\$3,372,013	\$9,857,007
Mobilization	50,000	-	-	50,000
Management Fee ⁵	472,320	472,320	472,320	1,416,961
Other Direct Costs ⁶	176,500	176,500	176,500	529,500
Tools, Equipment, & Radio	115,000	115,000	115,000	345,000
Parts & Materials	200,000	200,000	200,000	600,000
As-Needed Services ⁷	105,382	105,382	105,382	316,146
Total Not to Exceed	\$4,319,423	\$4,353,975	\$4,441,215	\$13,114,613

Source: Airport. Totals may not add due to rounding.

As shown above, total contract costs start at \$4.3 million in year one, which is approximately \$150,000 increase or 3.4 percent increase from the Vanderlande annual contract cost \$4.2 million.

Funding Source

According to Director Guadamos, the contract costs are billed back to the Airlines based on prorated share of passengers and each Airline's portion of those passengers. For those gates assigned as common use, the contract costs are built into the Airport's Common Use Fees and charged to Airlines on a "per use" basis. Under the Airport's FY 2022-23 Rates and Charges, airlines using boarding bridges maintained by the Airport are charged an additional \$25-27 per arriving or departing flight compared to airlines that maintain their own bridges.

RECOMMENDATION

Approve the proposed resolution.

⁵ The management fee includes profit, overhead, and all other costs not specified in another category.

⁶ Other direct costs include security badges, employee parking, uniforms, phones, fuel and consumables, service vehicle maintenance, office supplies, training, licenses and permits, travel, shipping and handling of spare parts, and corporate insurance.

⁷ As-needed services are services that are not part of the regular scope of the contract.

Enrique Guadianos

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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**

**Agreement between the City and County of San Francisco and
Professional Business Providers, Inc.**

Contract No. 50240

This Agreement is made this 1st day of August, 2022, in the City and County of San Francisco, State of California, by and between: Professional Business Providers, Inc. 25759 N. Hillview Ct., Mundelein, IL 60060 (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 operate, maintain and repair Airport-owned Baggage Handling Systems (“BHS”) and Passenger Boarding Bridges (“PBBs”) in the Domestic Terminals for the San Francisco International Airport (the “Airport”); and
- B. The Commission is authorized to enter into all contracts which relate to matters under its jurisdiction; and
- C. On October 22, 2021, the Commission issued a Request for Proposals (“RFP”) as required by San Francisco Administrative Code (“Administrative Code”) Section 21.1 entitled “Airport-owned Baggage Handling System and Passenger Boarding Bridge – Operations, Maintenance, Repairs and On-Call Services—Contract No. 50240,” and as a result of the selection process prescribed in the RFP and upon the recommendation of the Airport Director, the Commission determined that the Contractor was the qualified proposer receiving the highest evaluation score; and
- D. On May 17, 2022, by Resolution No. 22-0080, the Commission awarded this Agreement to the Contractor for term of three (3) years with an option at the Commission’s sole discretion to extend for two (2) years and an amount not to exceed Thirteen Million, One Hundred and Fourteen Thousand Six Hundred and Fifteen Dollars (\$13,114,615); and
- E. On _____, by Resolution No. _____, the San Francisco Board of Supervisors (“BOS”) approved the Agreement under San Francisco Charter Section 9.118; and
- G. There is no Local Business Enterprise (“LBE”) subcontracting participation requirement for this Agreement; and
- H. The Contractor represents and warrants that it is qualified to perform the Services required by City under this Agreement; and
- I. Approval for this Agreement was obtained when the Civil Service Commission approved PSC No. 48746-20/21 on July 19, 2021.

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 “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, the Commission.

1.3 “City Data” means that data as described in Article 13 of this Agreement which includes, without limitation, 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. City Data includes, without limitation, Confidential Information.

1.4 “CMD” means the Contract Monitoring Division of the City.

1.5 “Computerized Maintenance Management System” (“CMMS”) means a software solution used and maintained by the Contractor that, amongst its functionalities, issues and tracks work orders; tracks equipment and other assets (including spare parts); tracks repair history, repair frequencies and part failure modes; performs trend analysis; and generates Performance and Monitoring Reports.

1.6 Confidential Information

1.5.1 “Confidential Information” means confidential City information including, but not limited to, 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 Administrative Code Chapter 12M (“Chapter 12M”).

1.5.2 “Confidential Information” also means any and all nonpublic information, whether written, electronic, or oral, concerning or relating to Airport technology, computer, or data systems, processes, or procedures, or Critical Infrastructure Information or Protected Critical Infrastructure Information as defined under the Homeland Security Act of 2002 and 6 CFR §29.2, which information or access to such information is supplied by the Airport or on behalf of the Airport to Contractor or otherwise acquired by Contractor during the course of dealings with the Airport. Additionally, “Confidential Information” includes security or security-related information, whether or not such information constitutes sensitive security information (“SSI”) as provided under 49 CFR Part 1520. In the event Contractor acquires SSI, it shall treat such information in conformance with federal law and the provisions of this Contract.

1.5.3 “Confidential Information” is confidential regardless of whether such information is in its original form, a copy, or a derivative product. “Derivative” means written or electronic material created from or with, or based on Confidential Information (i.e., a report analyzing Confidential Information shall also be considered Confidential Information). Confidential Information shall also mean proprietary, trade secret or other protected information, identified as Confidential Information by the Airport.

1.7 “Contractor” or “Consultant” means Professional Business Providers, Inc. 25759 N. Hillview Ct., Mundelein, IL 60060

1.8 “Deliverables” means Contractor’s work product resulting from the Services that are provided by Contractor to City during the course of Contractor’s performance of the Agreement, including without limitation, the work product described in the “Scope of Services” attached as Appendix A.

1.9 “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.

1.10 “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.

1.11 “Party” and “Parties” mean the City and Contractor either collectively or individually.

1.12 “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.

1.13 “Successor Service Provider” means a new service provider, if any, selected by City in the event the Services are terminated under this Agreement.

1.14 “Transition Services” means that assistance reasonably requested by City to effect the orderly transition of City Data from Contractor’s CMMS to City or to the CMMS of the Successor Service Provider.

Article 2 Term of the Agreement

2.1 The term of this Agreement shall commence on _____ and expire on _____, unless earlier terminated as otherwise provided in this Agreement.

2.2 The City has one option to renew the Agreement for a period of two years. The City may extend this Agreement beyond the expiration date by exercising an 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 BOS. 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 Calculation of Charges. Contractor shall provide an invoice to the City on a monthly basis for goods delivered and/or 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 City, in its sole discretion, concludes has been satisfactorily performed. In no event shall the amount of this Agreement exceed Thirteen Million, One Hundred and Fourteen Thousand, Six Hundred and Fifteen Dollars (\$13,114,615) The breakdown of charges associated with this Agreement appears in Appendix B, "Calculation of Charges." A portion of payment may be withheld until conclusion of the Agreement if agreed to by both Parties as retainage, described in Appendix B. In no event shall City be liable for interest or late charges for any late payments. City will not honor minimum service order charges for any Services covered by this Agreement.

3.3.2 Payment Limited to Satisfactory Services and Delivery of Goods. Contractor is not entitled to any payments from City until the Commission approves the goods and/or Services delivered under this Agreement. Payments to Contractor by City shall not excuse Contractor from its obligation to replace unsatisfactory delivery of goods and/or Services even if the unsatisfactory character may not have been apparent or detected at the time such payment was made. Goods and/or Services delivered under this Agreement that do not conform to the requirements of this Agreement may be rejected by the City and in such case must be replaced by Contractor without delay at no cost to the City.

3.3.3 Withhold Payments. If Contractor fails to provide goods and/or Services consistent with Contractor's obligations under this Agreement, the City may withhold any and all payments due Contractor until such failure to perform is cured, and 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 include a unique invoice number and a specific invoice date. Payment shall be made by City as specified in Section 3.3.7, or in such alternate manner as

the Parties have mutually agreed upon in writing. All invoices must show the City's financial and procurement system ("PeopleSoft") Purchase Order ID Number, PeopleSoft Supplier Name and ID, Item numbers (if applicable), complete description of goods delivered or Services performed, sales/use tax (if applicable), contract payment terms and contract price. Invoices that do not include all required information or contain inaccurate information will not be processed for payment.

3.3.5 **Payment Terms.**

(a) **Payment Due Date.** Unless City notifies the Contractor that a dispute exists, Payment shall be made within 30 calendar days, measured from (1) the delivery of goods and/or the rendering of Services or (2) the date of receipt of the invoice, whichever is later. Payment is deemed to be made on the date on which City has issued a check to Contractor or, if Contractor has agreed to electronic payment, the date on which City has posted electronic payment to Contractor.

(b) **Payment Discount Terms.** – Not applicable.

3.3.6 **LBE Payment and Utilization Tracking System.** – Not applicable.

3.3.7 **Getting Paid by the City for Goods and/or Services.**

(a) The City and County of San Francisco utilizes the Paymode-X[®] service offered by Bank of America Merrill Lynch to pay City contractors. Contractor must sign up to receive electronic payments to be paid under this Agreement. To sign up for electronic payments, visit http://portal.paymode.com/city_countyofsanfrancisco.

(b) At the option of the City, Contractor may be required to submit invoices directly in PeopleSoft via eSettlement. Refer to <https://sfcitypartner.sfgov.org/pages/training.aspx> for more information on eSettlement. For access to PeopleSoft eSettlement, submit a request through sfemployeeportalsupport@sfgov.org.

3.3.8 **Grant Funded Contracts.** – Not applicable.

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 Administrative Code Section 21.35, including the enforcement and penalty provisions, is incorporated into this Agreement. Under Administrative Code Section 21.35, any contractor or subcontractor who submits a false claim shall be liable to the City for the statutory penalties set forth in that section. A contractor or subcontractor will be deemed to have submitted a false claim to the City if the contractor or subcontractor: (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 Administrative Code Section 6.22(e) [Prevailing Wages] or Section 21C [Miscellaneous Prevailing Wage Requirements] (collectively, “Covered Services”). The provisions of Administrative Code Sections 6.22(e) and 21C are incorporated as provisions of this Agreement as if fully set forth in this Agreement and will apply to any Covered Services performed by Contractor and its subcontractors.

3.6.2 Wage Rates. The latest prevailing wage rates for private employment on public contracts as determined by the BOS and the Director of the California Department of Industrial Relations, as such prevailing wage rates may be changed during the term of this Agreement, are hereby incorporated as provisions of this Agreement. Copies of the prevailing wage rates as fixed and determined by the BOS 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 BOS, 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 Administrative Code Section 6.22(e)(5), 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 BOS 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 Administrative Code Section 6.22 are to be performed.

3.6.5 Payroll Records. As required by Administrative Code Section 6.22(e)(6) and California Labor Code Section 1776, 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, such worker’s 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 under 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 Administrative Code Section 6.22(e)(7). 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 Administrative Code Chapter 6; (ii) the Contractor agrees that the Labor Standards Enforcement Officer and designees of the Labor Standards Enforcement Officer, 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 the Labor Standards Enforcement Officer 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 specified in this Agreement, 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 3.6.1 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 California Labor Code Section 1777.5) 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.

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 California Labor Code Section 1777.5, Contractor shall be subject to the penalties prescribed in California Labor Code Section 1777.7. The interpretation and enforcement of California Labor Code Section 1777.5 shall be consistent with rules and procedures prescribed by the California Apprenticeship Council.

3.7.4 Contractor, if not signatory to a recognized apprenticeship training program under California 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 stated 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."

4.1.1 **Service Level Adjustments:** Appendix A includes Service Level Adjustments. The City may issue a written order signed by City and Contractor to make service level adjustments as further defined in Appendix B – Calculation of Charges. Each written order shall be made 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.

4.1.2 **As-Needed Services:** Appendix A includes as-needed services. 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 Personnel

4.2.1 **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.

4.2.2 **Contractor Vaccination Policy.** Contractor shall comply with the Airport Operations Bulletin ("AOB") regarding the COVID-19 Vaccination Requirement for On-Site Personnel, as applicable, and ensure all on-site personnel are either fully vaccinated for COVID-19 or obtain from Contractor an exemption based on medical or religious grounds. For a complete description of the

requirements, refer to the AOB regarding COVID-19 Vaccination Requirement for On-Site Personnel, which can be found here: <https://sfoconnect.com/airport-operations-bulletins>.

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" and Article 13 "Data and Security" 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.

Contractor will not employ subcontractors

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

4.4.1 **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, Federal Insurance Contributions Act, 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. Should City determine that Contractor, or any agent or employee of Contractor, is not performing consistent with the requirements of this Agreement, City shall provide Contractor with written notice of such failure. Within five business days of Contractor's receipt of such notice, and consistent with Contractor policy and procedure, Contractor shall remedy the deficiency. Notwithstanding, if City believes that an action of Contractor, or any agent or employee of Contractor, warrants immediate remedial action by Contractor, City shall contact Contractor and provide Contractor in writing with the reason for requesting such immediate action.

4.4.2 **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 under 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, if requested, shall defend them against any and all claims, losses, costs, damages, and expenses, including attorneys' fees, arising from this Section.

4.5 Assignment. The Services to be performed by Contractor are personal in character. Neither this Agreement, nor any duties or obligations under this Agreement, 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 consistent 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. Any purported Assignment made in violation of this provision shall be null and void.

4.6 Warranty. Contractor warrants to City that 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.

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 under Section 5.2, "Indemnification" of this Agreement, Contractor must maintain in force, during the full term of the Agreement, insurance in the following amounts and coverages:

(a) Commercial General Liability Insurance with limits not less than \$5,000,000 each occurrence and \$10,000,000 for Bodily Injury and Property Damage, including Contractual Liability, Personal Injury, Products and Completed Operations.

(b) 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.

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

(d) Professional Liability Insurance, applicable to Contractor's profession, with limits not less than \$2,000,000 for each claim with respect to negligent acts, errors or omissions in connection with the Services.

(e) Cyber, Privacy, and Network Security Liability coverage, with limits of \$1,000,000 for each claim and each loss and \$1,000,000 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 Agreement 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.

5.1.2 Additional Insured Endorsements.

(a) The Commercial General Liability policy must be endorsed to name as Additional Insured the City and County of San Francisco, its Officers, Agents, and Employees.

(b) The Commercial Automobile Liability Insurance policy must be endorsed to name as Additional Insured the City and County of San Francisco, its Officers, Agents, and Employees.

(c) Reserved. (Pollution Auto Liability Insurance Additional Insured Endorsement)

5.1.3 Waiver of Subrogation Endorsements.

(a) 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.

5.1.4 Primary Insurance Endorsements.

(a) The Commercial General Liability policy shall provide 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.

(b) The Commercial Automobile Liability Insurance policy shall provide 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.

(c) Reserved. (Pollution Liability Insurance Endorsement)

5.1.5 Other Insurance Requirements.

(a) Thirty (30) days' advance written notice shall be provided 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."

(b) 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 Agreement term give rise to claims made after expiration of the Agreement, such claims shall be covered by such claims-made policies.

(c) 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.

(d) 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.

(e) 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 under this Agreement.

(f) 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 from, and, if requested, 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: (a) injury to or death of a person, including employees of City or Contractor; (b) loss of or damage to property; (c) 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; (d) strict liability imposed by any law or regulation; or (e) losses arising from Contractor's execution of subcontracts not consistent with the requirements of this Agreement applicable to subcontractors; so long as such injury, violation, loss, or strict liability (as set forth in subsections (a) – (e) 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, regardless of the negligence of, and regardless of whether liability without fault is imposed or sought to be imposed on City, except to the extent that such indemnity is void or otherwise unenforceable

under applicable law, and except 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 by any omission to perform some duty imposed by law or agreement on Contractor, its subcontractors, or either's agent or employee. The foregoing indemnity shall include, without limitation, reasonable fees of attorneys, consultants and experts and related costs and City's costs of investigating any claims against the City.

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.

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. 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.

6.2 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.

6.3 Liability for Incidental and Consequential Damages. Contractor shall be responsible for incidental and consequential damages resulting in whole or in part from Contractor's acts or omissions.

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 California 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., California Revenue and Taxation 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. Under San Francisco Business and Tax Regulations Code Section 6.10-2, 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 of this Agreement, 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 under 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	11.10	Compliance with Laws
Article 5	Insurance and Indemnity	Article 13	Data and Security
Article 7	Payment of Taxes	--	--

(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 of such default from City to Contractor. 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, 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 or any other agreement between City and Contractor: (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 under the terms of this Agreement; and (iii), any damages imposed by any ordinance or statute that is incorporated into this Agreement by reference, or into any other agreement with the City. This Section 8.2.2 shall survive termination of this Agreement.

8.2.3 All remedies provided for in this Agreement may be exercised individually or in combination with any other remedy available under this Agreement 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. 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 of this Agreement 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
3.4	Audit and Inspection of Records	9.2	Works for Hire
3.5	Submitting False Claims	11.6	Dispute Resolution Procedure
Article 5	Insurance and Indemnity	11.7	Agreement Made in California; Venue
6.1	Liability of City	11.8	Construction
6.3	Liability for Incidental and Consequential Damages	11.9	Entire Agreement
Article 7	Payment of Taxes	11.10	Compliance with Laws
8.1.6	Payment Obligation	11.11	Severability
8.2.2	Exercise of Default Remedies	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. 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.** Any interest of Contractor or its subcontractors, in 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.** If, in connection with Services, Contractor or its subcontractors creates Deliverables including, without limitation, artwork, copy, posters, billboards, photographs, videotapes, audiotapes, systems designs, software, reports, diagrams, surveys, blueprints, 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 Deliverables 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/.

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 Administrative Code Chapters 12B and 12C.

10.5.2 Nondiscrimination in the Provision of Employee Benefits. 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 (“Chapter 12P”) applies to this contract, Contractor shall pay covered employees no less than the minimum compensation required by 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 Chapter 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 (“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 Administrative Code Section 12Q.3. 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 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, Administrative Code Chapter 83 (“Chapter 83”), 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 ("Section 1.1.126"), 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 Administrative Code Chapter 12T ("Chapter 12T"), "City Contractor/Subcontractor Consideration of Criminal History in Hiring and Employment Decisions," 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 in this Agreement. 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 Chapter 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. – Not applicable.

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.

10.19 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: Enrique Guadamos, Director – Terminal Systems & Wayfinding
Operations and Security, San Francisco International Airport
P.O. Box 8097, San Francisco, CA 94128-8097
(650) 821-5145
Enrique.guadamos@flysfso.com

To Contractor: Nicholas P. Fasano, President
Professional Business Providers, Inc.
25759 N. Hillview Ct.
Mundelein, IL 60060
(847)-550-9366
nfasano@pbpservices.com

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

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

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 Section 6250 *et. seq.*), and the San Francisco Sunshine Ordinance, (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 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 this 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 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 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.

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 consistent with the terms and conditions of this Agreement, implementing task orders, the RFP, and Contractor's proposal dated December 13, 2021. The RFP and Contractor's proposal are incorporated by reference as though fully set forth in this Agreement. Should there be a conflict of terms or conditions, this Agreement and any implementing task orders shall control over the RFP and the Contractor's proposal.

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 all City Data, or which in any way might reasonably require access to City Data, and in no event later than 24 hours after it receives the request. 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 consistent 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.

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. Under 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 and Regulations, Contractor shall comply with the Airport's Labor Peace/Card Check Rule, adopted on February 1, 2000, under 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 the Airport Director's 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 the Airport Director's 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 under any covered Contract, a provision requiring the Subcontractor performing services under any covered Contract, a provision requiring the Subcontractor to comply with the requirements of the Labor Peace/Card Check Rule. If the Airport Director determines that Contractor violated the Labor Peace/Card Check Rule, the 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 part 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 part 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 part 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.*).

12.7 Quality Standards Program. This Agreement is subject to the Airport’s Quality Standards Program. The Airport’s Employment and Quality Standards (EQS) office oversees the Airport’s Quality Standards Program (QSP) which is applicable to Service Providers (as defined in the QSP) at the Airport whose employees are involved in performing services that have an impact on Airport security and safety. More information may be found at: <http://www.flysfo.com/about-sfo/the-organization/rules-and-regulations>. EQS may be contacted at (650) 821-1003.

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 Administrative Code Chapter 12M (“Chapter 12M”), Contractor and subcontractor shall use such information only consistent 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, Contractor may have access to, or collect on City’s behalf, City Data and /or Confidential Information, the disclosure of which to third parties may damage City. If City discloses City Data or Confidential Information to Contractor, or Contractor collects such information on City’s behalf, such information must be held by Contractor in confidence and used only in performing the Agreement. Contractor shall exercise the same standard of care to protect such information as a reasonably prudent contractor 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 Ownership of City Data. The Parties agree that as between them, all rights, including all intellectual property rights, in and to the City Data and any derivative works of the City Data is the exclusive property of the City.

13.5 Management of City Data and Confidential Information

13.5.1 Use of City Data and Confidential Information. Contractor agrees to hold City Data received from, or collected on behalf of, the City, in strictest confidence. Contractor shall not use or disclose City Data except as permitted or required by the Agreement or as otherwise authorized in writing by the City. Any work using, or sharing or storage of, City Data outside the United States is subject to prior written authorization by the City. Access to City Data must be strictly controlled and limited to Contractor'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 solely for performing its obligations under the Agreement and not for Contractor's own purposes or later use. Nothing in this Agreement 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 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.

13.5.2 Disposition of Confidential Information. Upon request of City or termination or expiration of this Agreement, and under any document retention period required by this Agreement, Contractor shall promptly, but in no event later than thirty (30) calendar days, return all data given to or collected by Contractor on City's behalf, which includes all original media. Once Contractor has received written confirmation from City that City's Data has been successfully transferred to City, Contractor shall within ten (10) business days clear or purge all City Data from its servers, any hosted environment Contractor has used in performance of this Agreement, including its subcontractors environment(s), work stations that were used to process the data or for production of the data, and any other work files stored by Contractor in whatever medium. Contractor shall provide City with written certification that such purge occurred within five (5) business days of the purge. Secure disposal shall be accomplished by "clearing," "purging" or "physical destruction," consistent with National Institute of Standards and Technology Special Publication 800-88 or most current industry standard.

13.6 Transition Services and Disposition of Content. Upon expiration or termination of this Agreement:

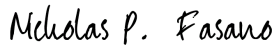
13.6.1 Contractor shall within thirty (30) calendar days of the expiration or termination of the Agreement return City Data in an agreed-upon machine readable format. This provision shall also apply to all City Data that is in the possession of subcontractors, agents or auditors of Contractor. Such data transfer shall be done at no cost to the City. Once Contractor has received written confirmation from City that City Data has been successfully transferred to City, Contractor shall within thirty (30) calendar days purge or physically destroy all City Data from its servers or files and provide City with written certification within five (5) calendar days that such purge and/or physical destruction has occurred. Secure disposal shall be accomplished by "purging" or "physical destruction," in accordance with National Institute of Standards and Technology (NIST) Special Publication 800-88 or most current industry standard.

13.6.2 Contractor shall provide to City and/or Successor Service Provider assistance requested by City to effect the orderly transition of the City Data, in whole or in part, to the City's software solution for tracking maintenance and repair of BHSs and PBBs, or to the CMMS solution used by the Successor Service Provider. During the transition period, the City shall continue to have access to Contractor's CMMS, and to City Data on the CMMS, without alteration. Transition costs may include: (a) developing a plan for the orderly transition of City Data from Contractor's CMMS to the City or to the Successor Service Provider's CMMS; (b) if required, transferring the City Data to Successor Service Provider; (c) using commercially reasonable efforts to assist City in acquiring any necessary rights to legally and physically access and use any third-party technologies and documentation then being used by Contractor in connection with the CMMS; (d) using commercially reasonable efforts to make available to City, pursuant to mutually agreeable terms and conditions, any third-party services then being used by Contractor in connection with the CMMS; and, (e) such other activities upon which the Parties may agree. Notwithstanding the foregoing, should City terminate this Agreement due to Contractor's material breach, City may elect to use the Services for a period of no greater than six (6) months from the date of termination at a reduced rate of twenty (20%) percent off of the then-current Services Fees for the terminated Services. All applicable terms and conditions of this Agreement shall apply to the Transition Services. This Section shall survive the termination of this Agreement.

Article 14 MacBride And Signature

14.1 **MacBride Principles -Northern Ireland.** The provisions of Administrative Code Chapter 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.

<p>CITY AIRPORT COMMISSION CITY AND COUNTY OF SAN FRANCISCO</p> <p>By: _____ Ivar C. Satero, Airport Director</p> <p>Attest:</p> <p>By _____ Katrice Ogletree, Secretary Airport Commission</p> <p>Resolution No: <u>22-0080</u></p> <p>Adopted on: <u>May 17, 2022</u></p> <p>Approved as to Form:</p> <p>David Chiu City Attorney</p> <p>By _____ Sallie Gibson Deputy City Attorney</p>	<p>CONTRACTOR</p> <p>DocuSigned by:  57328E1AC804FF... Authorized Signature</p> <p><u>Nicholas P. Fasano</u> Printed Name</p> <p><u>President</u> Title</p> <p><u>Professional Business Providers, Inc.</u> Company Name</p> <p><u>0000048881</u> City Supplier Number</p> <p><u>25759 N. Hillview Ct.</u> Address</p> <p><u>Mindelein, IL 60060</u> City, State, ZIP</p> <p><u>547-550-9366</u> Telephone Number</p> <p><u>36-4483147</u> Federal Employer ID Number</p>
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Appendices

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- B: Calculation of Charges
- C: Weekly Staffing Schedule

Appendix A – Scope of Services

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Appendix G – Scope of Work

General Requirements and Standards for the Operations (Terminal 2 only), Maintenance and Repair of Airport-owned Baggage Handling Systems (BHS) and Passenger Boarding Bridges (PBB) in the Domestic Terminals.

1. GENERAL

1.1 Technical Definitions

- 1.1.1 “Baggage Handling System” or “BHS” means all BHS related structures, including mechanical and electrical equipment and components that are associated with the specified conveyor lines of the facility. This encompasses all types of check-in collection conveyors, associated door hatches, run outs/laterals, load/unload conveyors, transport conveyor segments, power turns, merges, inclined plate make-up devices, fire/security doors, motor control panels, field control devices (e.g., photo eyes, limit switches, control stations/devices, audio/visual alarms, etc.), motors, motor starters, disconnects, push buttons, 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.
- 1.1.2 “Consumable” includes material or equipment that is necessary for the day-to-day operation and maintenance of the Subject Equipment. Material or equipment that carries a warranty from the Original Equipment Manufacturer (OEM) is not considered a consumable.
- 1.1.3 “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 Subject Equipment.
- 1.1.4 “Original Equipment Manufacturer” or “OEM” mean The original manufacturer of the Subject Equipment component or accessory.
- 1.1.5 “Passenger Boarding Bridge” or “PBB” means the PBB and related structure, accessories, trim and finishes mechanical and electrical equipment and components, controls, software and computer equipment that are associated with the specified PBB. PBB systems are further described in the OEM-provided manuals.
- 1.1.6 “Passenger Loading Bridge” or “PLB” is synonymous with PBB.
- 1.1.7 “Preventive Maintenance” or “PM” is the scheduled cyclical maintenance of the Subject Equipment 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.
- 1.1.8 “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.
- 1.1.9 “Mobilization” means the period consisting of all necessary preparatory work 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 the Subject Equipment. Mobilization does not include cost for purchasing, renting or leasing of tools and equipment.

- 1.1.10 “Routine or Periodic Inspection” or “RI” means periodic and repeated inspections of the Subject Equipment conducted in accordance with the OEM’s requirements and the maintenance plan.
- 1.1.11 “the Subject Equipment” means the Airport-owned PBBs, Fixed Walkways, Accessories in the Domestic Terminals, and Airport-owned BHS in the outbound and inbound BHS in Terminal 2, and inbound baggage Carrousel 10 in Terminal 3.

1.2 Overview of Services

- 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 PBBs, Fixed Walkways, Accessories in the Domestic Terminals, and Airport-owned BHS in the outbound and inbound BHS in Terminal 2, and inbound baggage Carrousel 10 in Terminal 3 (“the Subject Equipment”) beginning with the mobilization period and continuing for the duration of this Agreement.
- 1.2.2 The Contractor shall provide complete maintenance and repair services for the Subject Equipment and On-Call services as required and designated by the equipment list in Appendix G – Attachments 3 and 5. The equipment list may change from time to time, depending on the Airport's annual gate allocation, and other changes to Airport facilities.
- 1.2.3 The Explosive Detection System (EDS) baggage screening equipment components are furnished, maintained and operated by the Transportation Security Administration (TSA) and are not a part of this Agreement.
- 1.2.4 The Contractor shall be responsible for all equipment, supplies, parts, consumables and staffing necessary to operate (During Airline Operations hours) and maintain (on a 24-hour, seven (7) day-a-week, 365 days-a-year 24/7/365) basis of the Subject Equipment in accordance with these requirements, Original Equipment Manufacturer (OEM) requirements, and the design configuration of the Subject Equipment upon the effective date of this Agreement.
- 1.2.5 The Contractor shall be responsible for providing, storing, stocking, replenishing and the overall care and management of a sufficient supply of baggage tubs to ensure that tubs are available and used for every bag inducted that requires their use.
- 1.2.6 The Contractor shall be responsible for maintenance, repair and annual certification of check-in counter scales.
- 1.2.7 The Contractor shall provide sufficient supplies of fallback baggage tags for immediate use when required.
- 1.2.8 The Contractor shall be available on a 24/7/365 basis to perform emergency work. The Contractor shall also perform preventative maintenance services, equipment maintenance, and repair activities, make documentation of system conditions, and report on the Subject Equipment.

- 1.2.9 The Contractor shall keep Subject Equipment operational and available to the Airport and its associated airlines at a rate of 97% of the time or greater.
- 1.2.10 Maintenance and repair duties shall include routine maintenance; scheduled and preventative maintenance; non-scheduled maintenance; ordinary wear; maintenance and update of manuals and other reference resources; maintenance and testing of equipment; maintenance of tools and other equipment; and on-call maintenance as required by SFO.
- 1.2.11 Operations and maintenance services shall be performed in accordance with the Operations and Maintenance Plan developed by the Contractor and approved by SFO.
- 1.2.12 Whenever service on the Subject Equipment is interrupted, restoration of the affected Subject Equipment shall be the Contractor's top priority.
- 1.2.13 The Contractor shall cooperate in all respects with SFO or its designee, the TSA, and user airlines and/or representatives. Preventative maintenance (PM) and non-scheduled maintenance tasks shall be coordinated with and scheduled around the requirements of the user airlines' operation. The Contractor shall submit a PM schedule to SFO for review and approval. The PM schedule shall be 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 presented to SFO for approval and implementation.
- 1.2.14 The Contractor shall, as set forth herein, assure the operation and maintenance of the Subject Equipment in conformance with the best industry practices, consistent with the intended design and usage of the Subject Equipment and as acceptable to SFO.
- 1.2.15 The Contractor shall ensure that the Subject Equipment is operated and maintained consistent with all applicable local, state, Occupational Safety and Health Administration (OSHA), and federal laws and regulations, Airport Rules and Regulations, Airport Operations Bulletins, 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.
- 1.2.16 The Contractor shall maintain and operate the Subject Equipment 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.
- 1.2.17 The Contractor shall provide all services in accordance with documented procedures that meet or exceed industry and Airport standards, including good business practices, quality of work performed, projected management, maintenance, and engineering practices.
- 1.2.18 The Contractor shall maintain all records generated in the performance of this Agreement and transfer them to the Airport in accordance with documented plans and procedures and records transfer schedule.
- 1.2.19 The Contractor, upon notice to proceed, shall conduct a baseline audit of the Subject Equipment. The results of this baseline audit shall be included in a Maintenance Plan to be submitted to SFO for review and approval.

- 1.2.20 The Contractor, upon notice to proceed, shall review all equipment warranties, make a schedule regarding when the term of each warranty ends, and shall track labor hours for repairs and other costs for accomplishing warranty work as approved by the OEM. All of these records shall be provided to the Airport on a quarterly basis.
- 1.2.21 The Contractor shall consult with the OEM of the Subject Equipment, if necessary, to maintain the required operational rates and performance information.
- 1.2.22 The Contractor shall observe all Airport rules and provisions of the Tenant Improvement Guide in undertaking any of its activities under these requirements.
- 1.2.23 The Contractor shall coordinate with SFO and airline(s) in undertaking any of its activities in support of these requirements where such activities may affect SFO or the airline(s).
- 1.2.24 The Contractor's procurement and storage of fluids (e.g. hydraulic, cleaning, lubricating) and other materials used for operation and maintenance of the Subject Equipment 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 a material safety data sheet to SFO in addition to all other required contributions and/or postings.
- 1.2.25 SFO reserves the right, at its discretion, to inspect any part of the Subject Equipment 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.
- 1.2.26 The Contractor shall be fully responsible for the facilities made available to it. Any damage to the Subject Equipment, personal injury, or other incident associated with the Subject Equipment must be reported immediately to Terminal Systems. The Contractor shall cooperate fully with any incident investigation conducted by SFO or other authorities.
- 1.2.27 The Contractor shall be responsible for collecting and disposing of all waste generated in the operations and maintenance of the Subject Equipment, and disposal shall be at an off-Airport location.
- 1.2.28 Preventative Maintenance and all scheduled maintenance performed during operating hours shall, in no way delay operations and shall not affect any part of the Subject Equipment.
- 1.2.29 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.
- 1.2.30 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.
- 1.2.31 The Contractor shall ensure that its personnel and/or subcontractor personnel 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, any of its employees or subcontractor employees enter an area not authorized for access by the Contractor or subcontractor.
- 1.2.32 The Contractor shall manage the procurement, inventory control, storing, and re-ordering of spare parts as required for the maintenance of the Subject Equipment. 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 parts, and all such spare parts shall immediately become SFO property. Spare parts invoices must clearly state the amount the Contractor paid to suppliers for the procurement of spare parts. The Airport will not pay a markup for any spare parts.

1.2.33 At the conclusion of this Agreement, the Contractor shall deliver to SFO all manuals, drawings, computer programs, procedures, records, tools, spare parts, equipment, and testing devices that SFO and the OEM have provided the Contractor for use in maintaining the Subject Equipment. All records, logs, reports, and related documentation relative to the maintenance of the Subject Equipment 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.

1.2.34 The Contractor shall be responsible for the maintenance and support of the Low-Level Controls (LLC) including all Programmable Login Controls (PLC) hardware and software components and PLC programs for operating and maintaining the BHS. SFO will provide maintenance and support of the Upper-Level Controls (ULC) for the inbound and outbound BHS, including:

- 1) Sortation computer systems including BHS Sort Control Servers
- 2) Human Machine Interfaces (HMI)
- 3) Reporting and tracking systems
- 4) Dedicated Ethernet Networks to support the BHS
- 5) Programmable Logic Controls (PLC) – Upper Level
- 6) PLC software auditing systems
- 7) PLC Interfaces with Transportation Security Administration (TSA) Explosive Detection System (EDS)
- 8) Remote Start/Stop system of EDS CTX Machines
- 9) Baggage Reconciliation System (BRS)

1.2.35 As Needed Services

- 1) As-Needed Operations and Maintenance: From time to time, the Airport may issue a written task order increasing or decreasing the level of service, additions, or deletions, in which event the Contractor shall comply with such task orders and perform its operation and maintenance services in accordance with all provisions of this Agreement and associated task orders. In the event of changes in the number of PBBs and/or BHS system operation and maintenance due to additions, deletions, changes, increases or decreases, the Monthly Invoice for maintenance and operation of the BHS system and PBBs shall be adjusted in accordance with the applicable unit prices shown in the Staffing Level and Allocation Plan submitted by the Contractor.
- 2) Miscellaneous Expenses: Miscellaneous expenses are not reimbursable unless Contractor has obtained the prior written approval of the Airport's Project Manager before expenses are incurred. Reimbursement shall be for actual expenses incurred by Contractor or Contractor's independent professional associates or sub-consultants with receipts.

- 3) As-Needed Mechanical and Electrical Component Replacement: As-Needed mechanical and electrical component replacement may be authorized by the City only upon written task order issued in advance of any work to be performed. City will not pay for any as-needed work whatsoever except by written task order. Task orders shall state the time, quantity and price of the work. All work shall be compensated at the prevailing wage in effect at the time the task order is approved. Burden includes the worker's compensation, company overhead and employer Federal Insurance Contributions Act (FICA) which include Medicare and Social Security taxes.
- 4) Travel Expenses: 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. Contractor must obtain Airport agreement and availability of funding prior to scheduling travel. Direct and reasonable travel expenses shall be reimbursed at the actual cost when supported by appropriate receipts. Contractor shall submit all requests for reimbursement to the Airport via invoice. 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>.

The mileage charge 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. Contractor will use commercially reasonable efforts to minimize expenses.

1.3 Personnel

- 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 other locations unless approved by the Airport.
- 1.3.3 The Contractor shall be responsible for providing skilled technicians with mechanical and electrical aptitude relevant to the Subject Equipment. Technicians must have a minimum of one (1) year experience working on the Subject Equipment before working independently.
- 1.3.4 The Contractor shall provide a sufficient number of computer programmers and technicians to operate, maintain, troubleshoot, update, and repair the Subject Equipment computer systems and software.
- 1.3.5 BHS Control Room Personnel. The Contractor shall provide personnel to monitor and operate the Terminal 2 BHS during airline operating hours, including updating databases, resource assignments, and related tasks.

- 1.3.6 All employees must have an SFO Security Badge as required for unescorted access to the Airport's Security Identification Display Area (SIDA).
- 1.3.7 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.
- 1.3.8 The Contractor's and subcontractor's employees, who operate motorized vehicles in the performance of this Agreement, must possess a valid California Driver's License and valid San Francisco International Airport Operator's license. The Contractor shall have in place procedures to ensure that employee's driver's licenses always remain valid. Participation in the California Department of Motor Vehicle's "PULL" program is strongly recommended.
- 1.3.9 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 be responsible for overseeing and directing operations services and the maintenance and repairs of the Subject Equipment. The O&M Manager, or his/her authorized representative (person designated by the Contractor), shall always be available and on-site. This will include attendance at regularly scheduled or on- demand meetings by SFO and/or the user airlines to discuss the operation and maintenance of the Subject Equipment. The Contractor shall attend all daily briefings as required in the Airport's discretion. The O&M Manager shall also be available for periodic tours or inspections of the premises to be made with SFO 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 O&M Manager shall be responsible for providing equal level replacement when the O&M Manager is absent due to sick or vacation leave. SFO shall have the right to approve or reject any O&M Manager selected by the Contractor and/or demand replacement at its sole discretion.
- 1.4.2 Staffing Levels: The Contractor shall continuously maintain on-site the staffing levels and experienced staff necessary to meet the operational and maintenance requirements of this Agreement. Contractor shall submit their proposed staffing levels using the Weekly Staffing Schedule attached as Appendix H and the Price Proposal attached as Appendix B. These documents will be used for negotiation of the final Staffing scheduled to be included in the agreement. The Contractor's failure to meet the minimum staffing levels required by the Staffing Schedule does not relieve it of the obligation to ensure full performance of the work at no additional cost.
- 1.4.3 The Contractor shall provide adequate staffing for each Manual Encode console for every shift.
- 1.4.4 The Contractor shall provide Baggage Jam Responders. The Baggage Jam Responder's job duties shall consist of, but not be limited to clearing all baggage jams safely and expediently. The Baggage Jam Responder may also be used to help in any other area and perform any other duties the Contractor may require.

1.5 Training

The Contractor is responsible for providing initial and recurrent training to all employees involved in the maintenance, repair, and operation of the Subject Equipment. The Contractor shall ensure and establish to the Airport's satisfaction that all employees who will be involved in the operation, repair, and maintenance of the Subject Equipment 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 the necessary work required for the successful start of full operations and maintenance services during the mobilization period. The mobilization period shall not exceed thirty days (30). The start of the mobilization period will be agreed upon by the SFO and Contractor. Activities and requirements shall include, but not be limited to:

- 2.1.1 Hiring the full complement of the Subject Equipment maintenance staff who shall have completed all required security checks and received an SFO security badge. 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 Training maintenance staff for the Subject Equipment, such that staff is fully proficient on the specific requirements of the Subject Equipment. Training shall include operational practice.
- 2.1.3 Ensuring that the Operations and Maintenance Manager or his designated representative is on-site full-time during mobilization.
- 2.1.4 Making the Operations and Maintenance Manager available for periodic tours and or inspection of the Subject Equipment to be made with SFO and/or others as requested by SFO.
- 2.1.5 Obtaining all necessary licenses and permits.
- 2.1.6 Provide adequate staffing during the mobilization period for all testing as directed by SFO.
- 2.1.7 In the event of a new component or subsystem installation, the Contractor shall assure that its employees are fully trained by the installation contractor and/or the OEM. Operations and maintenance employees hired subsequently shall receive equivalent training (in both content and duration) administered by the Contractor in accordance with the Contractor's training plan as approved by SFO.
- 2.1.8 All operations and maintenance staff shall meet all requirements of Airport Rules and Regulations including security checks, security badging, and driver requirements.
- 2.1.9 Provide an inventory of all maintenance tools and equipment provided during the 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 all components and subsystems of the Subject Equipment.
- 2.1.10 Procure all tools and equipment required to perform preventive 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.
- 2.1.11 Provide storage for 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 Airport-provided parts and equipment.

- 2.1.12 Develop and maintain an automated maintenance management and inventory control program for all work related to the Subject Equipment, which shall be reviewed with SFO prior to implementation.
- 2.1.13 Organize a maintenance library of available as-built documents, manuals, and other resources. The Contractor shall be thoroughly familiar with the contents of these documents in order to operate capably, maintain, diagnose and repair components and subsystems of the Subject Equipment.
- 2.1.14 Provide a 24/7/365 contact telephone number for any service issues related to the Subject Equipment. The contact telephone number may be the same number provided to SFO for general emergency contact for the Contractor.
- 2.1.15 The above tasks 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 the time of commencement of responsibilities for operation and maintenance of the Subject Equipment. The mobilization requirements shall be maintained throughout the term of this agreement.

2.2 Maintenance Plan and Required Experience

- 2.2.2 SFO must approve the Maintenance Plan prior to the Contractor's start of operations and maintenance of the Subject Equipment. Additional subsystems or components for which the Contractor is responsible will automatically be subject to the existing Maintenance Plan after SFO approves any revisions necessary to account for differing equipment or other changes. The Maintenance Plan shall be submitted to SFO a minimum of twenty (20) business days before the Contractor's commencement of operation and maintenance of the Subject Equipment. SFO shall respond to the Contractor's proposed Maintenance Plan within fifteen (15) business days of submittal. SFO must approve subsequent revisions to the Maintenance Plan before the 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.
- 2.2.3 The Contractor's Maintenance Plan shall include the following:
 - 1) A "real-time" organizational and implementation framework around which the Contractor's operations and maintenance activities are conducted.
 - 2) A scope of work that provides complete maintenance services for the Subject Equipment. Any other services that the Contractor determines are required to assume complete responsibility for operation and maintenance of the Subject Equipment that are not described herein shall be referred to in the Maintenance Plan as "additional services."
 - 3) A training plan detailing how the Contractor will meet initial and recurrent training requirements.
 - a) The Contractor must include an initial training schedule to be completed by maintenance workers during mobilization period and prior to performing maintenance on the Subject Equipment.

- b) The Contractor shall be responsible for training all operations and maintenance workers. The Contractor shall not allow personnel who have not successfully completed the approved training program(s) to operate or perform maintenance on the Subject Equipment. 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.
 - c) The Contractor shall develop a Training Plan that includes a list of training classes and programs, a summary of their content, duration, and the objective of each class or program, and the qualifications of the instructor(s). SFO must approve the Training Plan and all revisions to it. The approved Training Plan shall be included in the Maintenance Plan.
 - d) The Contractor shall develop a program of recurrent training including Subject Equipment operations, 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 upon request.
 - e) The initial operator training and maintenance training specific to the requirements for newly installed Subject Equipment subsystems or components shall be included in the purchase cost if the Airport provided installation of the subsystems or components. Subsequent training requested from the OEM by the Contractor shall be at the Contractor's expense.
- 4) A Safety Plan detailing how the work will be accomplished in a safe manner to protect the Subject Equipment from damage.
- a) During the term of this Agreement, the Contractor shall provide all materials, training, and other resources required to ensure that the Subject Equipment can be safely operated and maintained in conformance with all applicable federal, state, local, Airport Rules and the approved documents developed concerning the Subject Equipment.
 - b) The Safety Plan shall be reviewed and updated annually along with the Maintenance Plan.
- 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 related to the Subject Equipment) 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.

Maintenance Manager –The Maintenance Manager shall be the individual with a primary responsibility to implement the Maintenance Plan and fulfill the Contractor's obligations regarding the operation and maintenance of the Subject Equipment. The Maintenance Manager shall have a minimum of two (2) years of experience in operation, maintenance,

repair, and on-call services of BHS and PBBs of various ages at an airport(s) within North America serving more than 7 million annual enplanements. The BHS and PBBs Maintenance and Operations Manager may be a working member of the staff. The Contractor shall provide to SFO sufficient documentation, including resumes and proof of experience, to demonstrate that the proposed staff meet the minimum qualifications.

- 6) Proof of Experience: Provide information on the prior experience of the Contractor and the Maintenance Manager in the following areas:
 - a) Managing the Subject Equipment operations and maintenance services to achieve maximum levels of safety and reliability.
 - b) Inventory management.
 - c) Preparing and automating the Subject Equipment operation and maintenance documentation and reports.
 - d) Establishing and sustaining an effective quality control program.
 - e) Establishing a maintenance program and plan, to include establishing automated maintenance management and inventory control program.
 - f) Performing corrective maintenance of all Subject Equipment components.
 - g) Performing preventative maintenance per OEM standards.
 - h) Maintaining maintenance records including warranty repairs, scheduled preventative maintenance, and non-warranty repairs.
 - i) Establishing a safety plan and asset protection plan.
 - j) Establishing and sustaining a training program.
- 7) Provide one example of each report as required in the Performance Monitoring and Reports section.

2.3 Operational Duties

- 2.3.1 The Contractor shall execute the maintenance of the Subject Equipment to meet, at a minimum, the Operations, and Maintenance requirements specified in this Agreement. Should the Contractor specify more stringent performance requirements, those requirements shall govern.
- 2.3.2 It is the Contractor's responsibility to consult with the OEM of the Subject Equipment, if necessary, to maintain the required operational rates and performance.
- 2.3.3 The Contractor shall be responsible to provide, train, and supervise all maintenance personnel and provide all materials, tools, equipment, and services required to accomplish the tasks specified to assure that the Subject Equipment provides safe and reliable service, meeting the specified minimum performance criteria.
- 2.3.4 The Contractor will monitor the status of the Subject Equipment 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 Subject Equipment (or any subcomponent thereof) unserviceable or non-compliant to the performance specifications.
- 2.3.5 The Contractor is responsible for responding to and rectifying all fault conditions. Whenever the service of the Subject Equipment is interrupted, the restoration of such service shall be accomplished in accordance with the Maintenance Plan and the OEM maintenance manuals.
- 2.3.6 Baggage Removal – 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 failures and emergencies as required allowing the transport of bags to their intended destination.

- 2.3.7 The Contractor shall staff the BHS Control Room during airline operating hours and provide monitoring of the BHS via the BHS Management Information System (MIS) and the Maintenance Diagnostics System (MDS) while the systems are operational. The Control Room operator's general duties include, but are not limited to:

- 1) Alert maintenance personnel through radio communications of faults or failures and dispatch them to the appropriate location
- 2) Monitor system balancing
- 3) Monitor statistical reports
- 4) Monitor set make-up assignments as required by the user airline(s)
- 5) Make BHS operational decisions, maintaining and coordinating implementation of any backup/fallback procedures necessary to facilitate continued operations
- 6) Ensure smooth daily start-ups by establishing and following start-up check lists and procedures

2.3.8 Baggage Tag Duties

- 1) Fallback Tags – The 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) Initial stock 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.

2.3.9 The BHS Control Room staff shall perform the following tasks

Daily Tasks:

- 1) Log onto the User interface workstation.
- 2) Ensure that BHS Sortation and MDS computers are operational.
- 3) Verify, via MDS, that there are no devices in an alarm state or condition that will prevent the BHS conveyors from starting and contact maintenance operations to correct any conditions that may prevent system start-up.
- 4) Verify, via the MDS, that all communication links are running and operational (Host/Message Broker BSM, PLC).
- 5) Monitor MDS for any visual and audible alerts and notify maintenance operations of identified conditions that may need correction.
- 6) Verify that the flight schedule loaded is the correct flight schedule for the current days' flights and make any corrections needed.
- 7) Set and verify that all flights to make-up assignments are correct, and make changes as required.

- 8) Assist the TSA as necessary for system start-up and operation.
- 9) Verify readiness to exercise/initiate any and all back-up or fallback modes or procedures at any time.
- 10) Coordinate and communicate with users, maintenance and operations staff as required for baggage tub management, ensuring availability at load points at all times.
- 11) Monitor and accept/reject automatic Flight Information Display (FID)/Baggage Information Display (BID) downloads.
- 12) Retrieve and file all Alarm Log Reports from all Alarm Printers.
- 13) Print End-of-Shift reports, log and file.
- 14) Operator Log-Off.
- 15) Fully advise the next shift of current conditions and relevant issues as required.
- 16) Ensure that all previous days' "End of Day Tasks" have been completed.
- 17) Collect, log and file all "End of Day" reports printed during the nightly End-of-Day processing.

Other Regular Tasks:

- 1) Perform regular Preventative Maintenance (PM) of Control Room equipment (e.g., clean/dust computer areas and inside and outside of cabinets, check cables, clean or replace computer air filters)
- 2) Download and edit New Flight Schedules (If not provided by FIDS).
- 3) Maintain flight schedule.
- 4) Check spare parts inventory and initiate any required purchase requests.
- 5) Ensure/request maintenance staff performs scheduled PM.
- 6) Prepare and save weekly, monthly and yearly reports.
- 7) Print, distribute and file weekly, monthly and yearly reports.
- 8) Collect, label and store Incremental System Back-up tapes/CDs.
- 9) Prepare a blank tape/CD for automatic Incremental system- back up.
- 10) Prepare a blank tape/CD for Monthly Full System Back-up.
- 11) Perform Monthly Full System Back-up.
- 12) Collect, label and store Full System Back-up tapes/CDs.

2.3.10 The Contractor is responsible for coordinating decisions and managing those decisions regarding the Subject Equipment fallback operational procedures.

2.3.11 The Contractor shall keep SFO and any other user airlines informed of all Subject Equipment outages or failures that impact the airlines' operations. The Contractor shall inform SFO of these equipment outages or failures as soon as practicable after each occurrence. Additionally, these periods of equipment outages or failures shall be reported via daily and weekly reports.

2.3.12 The Contractor shall promptly notify SFO in writing of all available software upgrades for each piece of BHS equipment including, but not limited to Programmable Logic Controllers (PLCs), Automated Tag Readers (ATRs) and controllers, and shall purchase and install upgrades upon written approval by SFO.

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 available personnel to act at the emergency job site

within five (5) minutes following notification of a problem with the Subject Equipment. Emergency Work is defined as the correction of any mechanical, electrical or controls issue or any condition in which the Subject Equipment is 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 the correction of any condition that is not causing the Subject Equipment 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**: Bag Jams shall be responded within two (2) minutes of the occurrence.
- 2.4.5 After work has begun, the Contractor shall maintain continued and steady progress to ensure completion in the minimum reasonable time, considering the competing workload, etc., except when a specific performance period is noted on the work request.
- 2.4.6 A “Downtime Event” shall be defined as the time in which a Subject Equipment related problem causes an interruption in the normally scheduled use of Subject Equipment. Duration of such events shall be measured from the initial notification to the Airline (beginning of the interruption) until the effected Subject Equipment or other devices/system is returned to service and the normal operation is restored. For the chart below, a month shall be defined as a calendar month.
- 2.4.7 Situations resulting solely from operator error, and resolved solely by correction of that error, do not constitute Downtime Events. If the operator error results in a condition requiring maintenance action, a downtime event is to be recorded.

Down Time Event Limits (the Event starts from the time the Airline is notified of a non-operational PBB and/or BHS)	Number of Down Time Events Allowed Per Month
Greater than ten (10) minutes and less than or equal to (15) fifteen minutes	2
Greater than fifteen (15) minutes and less than or equal to thirty (30) minutes	1
Greater than thirty (30) minutes and less than or equal to forty-five (45) minutes	1
Greater than forty-five (45) minutes every single event counted as three (3) events.	0

2.5 Corrective Action

- 2.5.1 For any calendar month during the Agreement that the number of cumulative downtime events exceeds 5 (five) occurrences per every Subject Equipment covered under this Agreement, the Contractor shall promptly undertake reviews of maintenance procedures and shall propose a plan to

SFO to correct the problems and return performance to within the allowed number of events.

- 2.5.2 Corrective actions shall be documented in a Failure Analysis Report to be issued by the Contractor to SFO. This report shall 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 hours of the return to service of the specified Subject Equipment.
- 2.5.4 Should a downtime event exceed 24 hours, SFO may at its sole discretion arrange for restoration of the specified Subject Equipment to operational condition using Airport and/or contracted resources at the Contractor's expense.

2.6 Terminal 2 Baggage Handling System Related Facilities and Supporting Infrastructure

- 2.6.1 The Airport provides space rental and utilities required to operate and maintain these facilities. Janitorial maintenance and supplies are the responsibility of the Contractor.
- 2.6.2 The Contractor shall be fully responsible and liable for the facilities made available to it, including loss or damage to facilities. This responsibility includes the observance of safety security and sanitary directives. The Contractor may not use any SFO facilities other than those specifically provided. The Contractor shall promptly notify the San Francisco Police Department – Airport Bureau of all equipment and supply theft and assist in determining loss.
- 2.6.3 BHS Control Room – T2.1.E119, 376 square feet. 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.
- 2.6.4 Shared Equipment Room – T2.1.E111. The BHS Sort Control Servers are located in an equipment room in which equipment used by others may also be located. The Contractor is required to participate in maintaining the cleanliness and security of the space in cooperation with the other users whose equipment is located therein. The other primary user is the TSA.
- 2.6.5 BHS Parts Storage and Work Room – T2.1.036, 1465 square feet. This space houses parts and equipment storage and workshop use as part of the original terminal space plan. 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.
- 2.6.6 BHS Administrative Office – T2.1.013, 163 square feet. 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.

2.7 General Safety

SFO reserves the right at its discretion to inspect any Subject Equipment for safety violations or deficiencies and 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 Subject Equipment in conformance with the SFO-approved maintenance plan and maintenance manuals provided by the OEM(s). The Contractor shall provide complete maintenance services for common use equipment and on-call services as required and designated on the equipment list in Attachment 3 and 5 to this Appendix G. The work shall be performed diligently with top quality supplies, materials, equipment, and workmanship. Maintenance duties for the Subject Equipment and accessories to be undertaken by the Contractor shall include the following:

- 3.1.1 **Routine maintenance:** Activities including, but not limited to, routine inspections and testing designed to identify any unusual or abnormal equipment condition. The Contractor shall adhere to the OEM's requirements for routine inspections of the Subject Equipment and accessories 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 the Subject Equipment in adverse climatic conditions such as locations near saltwater will require more frequent inspections of some items and a more frequent lubrication schedule.
- 3.1.2 **Scheduled/Preventative Maintenance:** Activities required for keeping the Subject Equipment and Accessories operating at the prescribed levels of safety, efficiency and reliability, as defined in the OEM Manuals, which are performed regularly 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 always be followed to maintain or exceed the Subject Equipment system design life expectancy. See Attachments 1 and 4 for examples of Preventative Maintenance Inspection Checklists. Execution of all tasks included on a checklist in a manner consistent with the standards outlined in this Agreement and recording/retention of the completed checklist constitutes a completed Preventative Maintenance Inspection.
- 3.1.3 **Non-Scheduled Maintenance:** Activities requiring corrective measures or repairs necessitated by inspection, a failure, or unusual circumstances adversely affecting the normal operations of the Subject Equipment or component(s). Non-scheduled maintenance shall be performed on a priority basis as necessary to meet the specified performance criteria.
- 3.1.4 **Ordinary Wear:** Activities requiring corrective measures or repair that may be required because of ordinary wear.
- 3.1.5 **Other Maintenance:** Updating maintenance manuals or other resources, maintenance of testing equipment, maintenance of tools, equipment, and fixtures.
- 3.1.6 **On-Call Maintenance:** Maintenance as requested by SFO.
- 3.1.7 Maintenance of Accessories including specific components of pre-conditioned air (PCA), aircraft ground power (400 Hz, or GPU) and potable water supply cabinet (PWC) equipment as follows:
 - 1) All PCA supply components from the air handling unit to the aircraft including hoses, connectors, clamps, aircraft connectors, and carriages, baskets, reels or other stowage devices for the components. The Contractor shall also maintain the cabin temperature sensor (probe)

assembly, including the sensor unit, cable(s) and connectors.

- 2) Aircraft GPU (400hz) components from the gate box to the aircraft, including supply cable assemblies, all conductors, cable hoist assembly, anti-abrasion devices, and cable controls (mounted on the supply cable and/or remotely).
- 3) Aircraft Docking System (ADS) and components installed on building façade and/or pole, including manual and electronic controls.
- 4) Potable Water Cabinet (PWC) components from the output side of the backflow prevention device to the aircraft, including all components inside the cabinet and the cabinet assembly itself.
- 5) Baggage Lift and components installed on PBB including steel framework, lift cart, lift mast, electric motors, brake, gearbox and cable drum, electrical control panel, and call stations.

3.1.8 The Contractor shall not remove the Subject Equipment 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 Subject Equipment and any subsystems or components. In no case may Subject Equipment be used as sources 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.

3.1.9 The Contractor shall ensure that OEM requirements necessary to retain warranty coverage, when such coverage is available, are fully complied with.

3.1.10 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 Subject Equipment. All records, logs, reports and related documentation relative to the operation and maintenance of the Subject Equipment developed by the Contractor are also to be turned over to SFO.

3.1.11 The Contractor shall be responsible for providing and maintaining all necessary vehicles, including, but not limited to lift devices, fork-lift trucks, etc. that will be required and used under this Agreement.

3.1.12 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.

3.2 Maintenance Tasks. The following work tasks provide a general listing of activities assumed necessary to maintain and repair the Subject Equipment. In addition to the general listing below, the Contractor agrees to perform maintenance work in accordance with the requirements of this Agreement.

3.2.1 The Contractor shall manage the Subject Equipment maintenance services to achieve maximum levels of safety and reliability.

3.2.2 The Contractor shall manage the inventory of parts and equipment and work with the Airport to ensure sufficient quantities of spare parts are available to maximize the Subject Equipment

availability

- 3.2.3 The Contractor shall establish and sustain an effective quality control program.
- 3.2.4 The Contractor shall establish a maintenance program and plan, which shall include an automated maintenance management and inventory control program.
- 3.2.5 The Contractor shall maintain maintenance records, including records of warranty repairs, scheduled preventative maintenance, and non-warranty repairs. Maintenance records to be available upon request except for warranty records which should be reported monthly.
- 3.2.6 The Contractor shall provide a visual check of the following items: missing or worn hardware, weathered paint, rust and corrosion, frayed or torn carpet and wall coverings, cracked or broken windows, water damage, oil leaks, loose crooked or poorly adjusted components.
- 3.2.7 The Contractor shall follow all required checklists as indicated in the Subject Equipment OEM's manuals or utilized SFO approved checklists. Trained maintenance personnel must complete all checklists. Discrepancies not corrected on the spot must be scheduled for further maintenance attention. The Subject Equipment 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 systems as mentioned above and or equipment.
- 3.2.8 The Contractor shall inspect the functionality of potable water equipment; stair casters and baggage slide; PC Air hoses and aircraft attachment mechanism; bridge cables and limit switch conditions; 400 Hz cable ends and conditions; bridge tire conditions and conditions; inspect for damage due to neglect, and inspect for leaks or abnormal condition.
- 3.2.9 The Contractor shall inspect bridge controls and functionality; console illumination and safety features; mirror or camera visibility and adjustment; bridge canopy condition and functionality; condition and functionality of auto leveler; vertical column functionality and condition; extend bridge to assure proper adjustment and alignment; extend PC Air hose and inspect conditions; inspect all internal and external lights; inspect temperature probe; inspect and clear gutters and drains of obstructions; cab rotation and alignment; inspect rotunda flooring and side curtains for alignment; assure bridge doors are square and latches function and operate properly; note any unusual odors; note areas that will require paint touch up-both exterior and interior; and repair any damaged paint areas.

3.3 Availability Standard. The Contractor is required to keep all Subject Equipment and subsystems operational and available to SFO and its associated airlines.

- 3.3.1 A monthly availability percentage of 97%, 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 Subject Equipment. A monthly availability percentage below 97% shall constitute non-compliance. Measurements of availability shall not include pre-planned downtime for preventive maintenance. The availability percentage will be calculated using a weighted reliability time metric of four (4) levels of criticality. The Airport and the Contractor shall meet and review the Subject Equipment in detail and determine the best level of criticality of sub-systems, components or combination of each

prior to the start of work.

The levels are:

Level	Description	Weight
Level 1	Highly Critical A single point of failure area with maximum operational impact.	1.5
Level 2	Critical Failures with minimal levels of redundancy to mitigate the operational impact.	1.2
Level 3	Moderate Failures with levels of redundancy that mitigate the most operational impact.	1.0
Level 4	Minor Failures that can be mitigated to eliminate the operational impact.	0.8

The availability percentage will be calculated monthly as follows:

- 1) Each Subject Equipment component outage shall be reported in minutes, and multiplied times weight to determine weighted minutes.
- 2) 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.
- 3) The Actual Available Monthly Minutes is then divided by the agreed-upon total minutes minus scheduled PM minutes to determine the availability percentage.

$$\frac{\text{Actual Available Monthly Minutes}}{\text{Total Monthly Minutes} - (\text{minus}) \text{ Scheduled Preventative Maintenance Minutes}}$$

- 3.3.2 It is the Contractor's responsibility to consult with the Subject Equipment and/or component Original Equipment Manufacturers, if necessary, to maintain the required availability standards.

3.4 Tracking Accuracy. The Contractor is required to maintain the highest possible tracking accuracy of bags throughout the BHS, including the sortation sub-system. The Contractor is required to achieve, monthly, the following tracking percentages:

3.1.1 In the Checked Baggage Inspection System (CBIS):

- 98% accuracy ($\leq 2\%$ lost in tracking) if CBRA does not include a re-induction line, or current TSA PGDS standards if lower.
- 97% accuracy ($\leq 3\%$ lost in tracking) if CBRA includes a re-induction line, or current TSA

PGDS standards if lower.

- 3.1.2 Sortation Accuracy equal or higher than 97% ($\leq 3\%$ lost in tracking)
- 3.1.3 Automated Tag Reader (ATR) read rates of 97% of valid tags ($\leq 3\%$ not read), or as specified by TSA for ATR read rates used for risk-based baggage screening, should such system be in use.

3.5 Preventative Maintenance Standard. The Contractor shall maintain a monthly Preventative Maintenance Inspection Completion Rate of 98% or higher. A completion rate below 98% shall constitute non-compliance.

The Preventative Maintenance Inspection Completion Rate is calculated as follows:

$$\frac{\text{Completed and "on-time" Preventative Maintenance Inspections}}{\text{Scheduled Preventative Maintenance Inspections}}$$

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

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

3.6 Preventive Maintenance – Measuring Non-Compliance

- 3.6.1 The Contractor shall adhere to the OEM's requirements for Preventive Maintenance (PM) and Routine Inspections (RI) of the Subject Equipment in accordance with the schedules and requirements of the OEM(s) as stated in the maintenance manuals. 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 Subject Equipment components and equipment covered under this Agreement. 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. The non-compliant PM and RI will be considered incomplete for purposes of calculating the Preventative Maintenance Inspections Completion Rate as required in this Agreement. For each incident of non-compliance, the Contractor shall submit a written explanation and a plan to prevent the recurrence of similar failures.
- 3.6.2 See Attachments 1 and 4 of this Appendix G, for example, Preventative Maintenance Inspection Checklists. Accurate and timely completion of the checklist and recording/retention of the completed checklist constitutes a completed preventative maintenance inspection.

3.7 Repair and Replacement of Damaged Parts, Components or Materials

- 3.7.1 The Contractor shall maintain an inventory of spare parts, equipment, and consumables at a level sufficient to maintain the Subject Equipment and all components in accordance with these 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., the same quantities of specific parts, equipment, and consumables) with allowance for reasonable resupply intervals, throughout the term of this Agreement.
- 3.7.2 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. The Contractor will work with the Airport to bring spare parts to a sufficient inventory level to ensure system uptime. In the event of an extended downtime event or disruption due to an “out of stock” occurrence, the Contractor shall demonstrate its good faith efforts, including pursuit of alternates, to 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.

- 3.7.3 Only OEM approved or recommended methods, parts, equipment, and consumables shall be used in any Subject Equipment operation, maintenance or repair. Exceptions may be granted for functionally equivalent items upon written request to SFO and at SFO’s discretion.
- 3.7.4 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.
- 3.7.5 At the conclusion of this Agreement, equivalent quantities of all or any 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. The Contractor shall reimburse SFO for items that are not accounted for or returned from the original inventory.
- 3.7.6 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 Subject Equipment and components.

Repair and/or replacement of parts, components, or materials that become damaged as a consequence of system operation and/or maintenance shall be paid for by SFO in addition to the Monthly Invoice, excluding all tools and consumables. The Contractor shall promptly repair and/or replace damaged parts, components, or materials, regardless of the cause of such damage. SFO will reimburse the Contractor for the cost of such repairs and replacements where the need for the repairs did not result from or was caused by, in whole or part:

- 3.7.7 If it is necessary for the Contractor to replace any materials or spare parts, excluding all tools and consumables, of the Subject Equipment, 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, excluding markup. There shall be no reimbursement for repairs or replacements for items covered under warranty.
- 3.7.8 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. 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.
- 3.7.9 The Contractor shall assume responsibility for tracking the warranties available from the vendors on all purchased spare parts and exercise those warranties when required.

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. Spare parts invoices must clearly state the amount the Contractor paid to suppliers for the procurement of spare parts. The Airport will not pay a markup for any 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 to its most preferred customers. 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.

3.8 Restriction on Certain Maintenance and Repair Activities

- 3.8.1 All cutting or welding must be in compliance with Airport Commission's Rules and Regulations and under permit from SFO.
- 3.8.2 Use of cranes, lifts, and hoists shall not occur when the affected gate and the two adjacent gates are in service unless otherwise approved by SFO. All crane operations must be coordinated with SFO prior to beginning work.
- 3.8.3 Whenever practical, the Contractor will perform maintenance/repair activities when the affected gate is not in service.
- 3.8.4 The Contractor's procurement and storage of fluids (hydraulic, lubricating, etc.) and other materials used for the Subject Equipment maintenance and operation shall be in accordance with the State of California and all other applicable regulations for the handling and storage of hazardous materials. Upon request, the Contractor shall provide material safety data sheets to SFO in addition to all other required distributions and/or postings.

4. PERFORMANCE MONITORING AND REPORTS

- 4.1 The Contractor shall, at its sole cost, use and maintain a Computerized Maintenance Management System (CMMS) that provides the ability to track and issue work orders, track equipment and repair history, track 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 CMMS. Performance and Monitoring reports shall be generated using the CMMS.
- 4.2 The Contractor shall develop reports in collaboration with and in a format acceptable to the Airport and shall be updated as required, and which shall include complete information concerning the Subject Equipment problems, including a 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 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 The Contractor shall submit to SFO Project Manager the following reports at the time(s) specified:

Interval	Systems	Report Name	Description
Per each Incident	BHS and PBBs	Accident and/or Injury Report	Report shall include the following information: 1. Date, time and location of accident and/or injury. 2. Accident and/or injury description. 3. Date and time when SFO was notified of accident and/or injury. 4. Any other relevant information.
Daily	BHS	BHS Activity	Report shall include the following information: 1. Total airline baggage processed (Daily Airline Baggage. Outbound in Inbound). 2. Total baggage jams (Daily Bag Jams). 3. Total miss sort bags (Daily Miss Sort). 4. Total outbound bags processed (Daily Outbound Processed Baggage). 5. Shift Activity.
Weekly	BHS and PBBs	Quality Control (QC)	Report shall include the following information: A summary of results of all quality control inspections performed. The summary must include, at a minimum, date of QC inspection, description of system inspected, name of technician, name of QC inspector, and result.
Weekly	BHS and PBBs	System Downtime	Report shall include the following information: A summary of all systems downtime experienced during the reporting period. The summary must include, at a minimum, date, start time, end time, system, subsystem, system failure description, resolution, and total downtime.
Monthly	BHS	Sortation and Baggage Tracking (If applicable)	Report shall include: 1. Number and percentage of bags tracked at CBIS. 2. Number and percentage of bags tacked at Sortation.
Monthly	BHS and PBB	Faults and Downtime	Report shall include: 1. Number of faults and downtime events. 2. Response time. 3. Downtime duration. 4. Responsibility.
Monthly	BHS and PBB	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 and PBB	Preventative Maintenance Rate	A summary of the percentage and number of completed Preventative Maintenance tasks and Required Inspections for each month. The report must include: 1. All PM and RI scheduled to be performed that month.

			<ol style="list-style-type: none"> 2. PM services accomplished/completed and on-time for that month. 3. A list of PM services not timely completed together with a schedule of when the Contractor will perform delinquent PM and RI services. 4. All non-scheduled maintenance performed that month.
Monthly	BHS and PBB	Spare Parts	<p>The report must include:</p> <ol style="list-style-type: none"> 1. A list of all parts used during the month. 2. A list of all parts purchased during the month. 3. A list of all parts on-hand and any shortages from planned stocks.
Monthly	BHS and PBB	Corrective Action	<p>The report must include:</p> <ol style="list-style-type: none"> 1. A list of all non-scheduled repairs by system and subsystem. 2. A description of each failure, including cause. 3. A plan to mitigate said failures.
Annual	BHS and PBB	Parts Inventory	<p>A report indicating all parts on-hand at SFO. The report must include:</p> <ol style="list-style-type: none"> 1. Part number. 2. Part ID. 3. Location. 4. Part Name. 5. Actual Quantity.

4.5 Quality Assurance Monitoring and Reporting

During the term of this Agreement, the Contractor shall collect operational data for analysis. These data shall measure the actual performance of the Subject Equipment 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 Subject Equipment components that may be desirable due to technological advancements. At a minimum, this report shall contain the following:

- Description of the component to be replaced
- Reason for replacement
- Description of new components
- Advantages for replacement
- Cost to replace the component
- The time required to complete replacement

ATTACHMENT 1 - BHS INSPECTION CHECKLISTS

1. A variety of inspections and checklists are required. 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. Checklists are to be completed as inspection items are accomplished. Completed checklists are to be retained and available for review by SFO for a duration specified by SFO. Completed checklists may be entered into an automated Maintenance Management System. 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. 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.
4. Daily Operator Checklist
 - 4.1 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.
 - 4.2 Completed Daily operator Checklists shall be retained and for a rolling one year period and provided to the Airport quarterly.
5. Weekly Preventive Maintenance Checklist
 - 5.1 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.
 - 5.2 Completed Weekly Preventive Maintenance Checklists shall be retained for a rolling two year period and provided to the Airport quarterly.
6. Bi-Weekly Preventive Maintenance Checklist
 - 6.1 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.
 - 6.2 Completed Bi-Weekly Preventive Maintenance Checklists shall be retained for a rolling two year period and provided to the Airport quarterly.

7. Monthly Preventive Maintenance Checklist

- 7.1 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.
- 7.2 Completed Monthly Preventive Maintenance Checklists shall be retained for a rolling two year period and provided to the Airport quarterly.

8. Quarterly Preventive Maintenance Checklist

- 8.1 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.
- 8.2 Completed Quarterly Preventive Maintenance Checklists shall be retained for a rolling two year period and provided to the Airport quarterly.

9. Semi-Annual Preventive Maintenance Checklist

- 9.1 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.
- 9.2 Completed Semi-Annual Preventive Maintenance Checklists shall be retained for a rolling two year period and provided to the Airport annually.

10. Annual Preventive Maintenance Checklist

- 10.1 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.
- 10.2 Completed Annual Preventive Maintenance Checklists shall be retained for the duration of this Agreement and provided to the Airport at the end of the Contract term.

DAILY BHS OPERATOR CHECKLIST	BHS – ALL	DATE/TIME	
COMPLETED BY			
This checklist is to be completed at the beginning of each shift/day.			
	<i>Page 1 of 1</i>		
ITEM	DESCRIPTION	OK	REPAIR REQUIRED
1	Walk through system and observe operation.		
2	Listen for squeaks and/or grinding noise, which may indicate bearing failure.		
3	Observe belt tracking.		
4	Inspect for any safety hazards.		
5	Check gearboxes for oil leaks.		
6	Check for excessive drive vibration		
7	Check for excessive movement of the drives.		
8	Check fire door operation and sills		
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED			

WEEKLY PREVENTIVE MAINTENANCE CHECKLIST		BHS – VERTICAL SORTATION UNIT II		DATE/TIME	
COMPLETED BY					
	<i>Page 1 of 1</i>				
ITEM	DESCRIPTION			OK	REPAIR REQUIRED
1	Inspect clutch/break for loose or damaged hardware and any evidence of external damage or excessive noise.				
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED					

BI-WEEKLY PREVENTIVE MAINTENANCE CHECKLIST		BHS – VERTICAL SORTATION UNIT II		DATE/TIME	
COMPLETED BY					
		<i>Page 1 of 1</i>			
ITEM	DESCRIPTION	OK	REPAIR REQUIRED		
1	Belt should be checked to ensure that is tracking properly.				
2	Inspect all belting surfaces for tears, frays or exposed cord, and the accumulation of dirt or other foreign matter.				
3	Clean belt surfaces as required to ensure that belting will not slip around drive pulley				
4	Remove all tears to ensure that belting will not slip around drive pulley.				
5	Trim and seal with lacquer paint frayed edges.				
6	Remove and replace any belt lacing hooks that pulled from the belt.				
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED					

MONTHLY PREVENTIVE MAINTENANCE CHECKLIST		BHS – BELT CONVEYOR	DATE/TIME	
COMPLETED BY				
	<i>Page 1 of 1</i>			
ITEM	DESCRIPTION	OK	REPAIR REQUIRED	
1	Inspect condition of conveyor belting.			
2	Inspect conveyor belt tracking and adjust as necessary.			
3	Inspect belting for proper tension and adjust as required.			
4	Inspect belt lacing for broken or missing teeth and repair as necessary.			
5	Inspect bearing locking collars for security and tighten as required.			
6	Inspect bearing housing for cracks.			
7	Check the security of all bearings and tighten as necessary.			
8	Inspect pulley position on shaft to assure that the bushings are tight.			
9	Check condition of lagging on lagged pulleys.			
10	Inspect all Return Rollers, bearings and mounting plates.			
11	Check the security and alignment of conveyor side guards.			
12	Check the security of supports and hangers.			
13	Check all section fasteners.			
14	Check the oil level in all gearboxes. Remove the plug located on the side of the gearbox, just below the output shaft, to check oil levels. The gearbox can be filled through the vent plug at the top of the unit. Fill until oil starts coming out of the plughole located just below the output shaft.			
15	Clean oil out of drip pans and off of gearbox.			
16	Check gearboxes for leaks.			
17	Remove all debris from under and around the conveyors.			
18	Use a shop vacuum to clean under and around conveyors.			
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED				

MONTHLY PREVENTIVE MAINTENANCE CHECKLIST		BHS – POWER TURN CONVEYOR	DATE/TIME	
COMPLETED BY				
	<i>Page 1 of 1</i>			
ITEM	DESCRIPTION	OK	REPAIR REQUIRED	
1	Inspect belting for rub marks and/or abrasions.			
2	Inspect conveyor belt chain for looseness or damage.			
3	Inspect belting for proper tension and adjust as required.			
4	Check that all guards and safety devices are in place.			
5	Inspect all fasteners for security.			
6	Check the security of supports and hangers.			
7	Check the oil level in all gearboxes. Remove the plug located on the side of the gearbox, just below the output shaft, to check oil levels. The gearbox can be filled through the vent plug at the top of the unit. Fill until oil starts coming out of the plughole located just below the output shaft.			
8	Clean oil out of drip pans and off of gearbox.			
9	Check gearboxes for leaks.			
10	Remove all debris from under and around the conveyors.			
11	Use a shop vacuum to clean under and around conveyors.			
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED				

MONTHLY PREVENTIVE MAINTENANCE CHECKLIST		BHS - SLOPE PLATE MAKE-UP UNITS (INBOUND AND OUTBOUND)	DATE/TIME	
COMPLETED BY				
<i>Page 1 of 1</i>				
ITEM	DESCRIPTION	OK	REPAIR REQUIRED	
1	Remove a section of front trim from the drive section through which most inspections can be performed.			
2	Inspect the main chain and cam followers for wear and security, at the drive section, by moving the unit in increments until the entire perimeter has been inspected.			
3	Check drive chain tension and adjust as required.			
4	Inspect sprockets for alignment and wear, and adjust or replace as required.			
5	Inspect sprocket security.			
6	Inspect bearing locking collars for security and tighten as required.			
7	Inspect bearing housing for cracks.			
8	Check the security of all bearings and tighten as necessary.			
9	Check motors for security.			
10	Check motor electrical connections.			
11	Check the oil level in all gearboxes. Remove the plug located on the side of the gearbox, just below the output shaft, to check oil levels. The gearbox can be filled through the vent plug at the top of the unit. Fill until oil starts coming out of the plughole located just below the output shaft.			
12	Inspect support wheels for cracks, deterioration and/or worn bearings and replace as required.			
13	Check tie straps for wear and security and replace or repair as necessary.			
14	Inspect and adjust drive v-belts.			
15	Inspect the bumpers and finger guard for wear and security and replace or repair as necessary.			
16	Use a shop vacuum to clean under and around conveyors.			
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED				

MONTHLY PREVENTIVE MAINTENANCE CHECKLIST		BHS – VERTICAL SORTATION UNIT II	DATE/TIME	
COMPLETED BY				
	<i>Page 1 of 1</i>			
ITEM	DESCRIPTION	OK	REPAIR REQUIRED	
1	Inspect bearing to ensure proper attachment to hardware.			
2	Inspect bearing are properly bolted in place.			
3	Inspect condition of grease seal for damage.			
4	Check bearings are running cool and quietly.			
5	Check pulleys' and end pulley's setscrews and keyway are firmly locked in place.			
6	Check pulley's and end pulley's bearings, securing hardware, and locking collars are tight and not damaged.			
7	Check all guards to ensure they are securely mounted and in good condition.			
8	Check sensors, pushbuttons and photoelectric sensors for normal operations.			
9	Inspect timing pulley and timing belt to ensure attachment to shaft is secure and grooves are in good condition.			
10	Inspect timing belt for teeth wear. Replace as needed.			
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED				

QUARTERLY PREVENTIVE MAINTENANCE CHECKLIST		BHS – CONVEYOR CONTROLS	DATE/TIME
COMPLETED BY			
	<i>Page 1 of 1</i>		
ITEM	DESCRIPTION	OK	REPAIR REQUIRED
1	Inspect control cabinets for contamination.		
2	Inspect Motor Starters, Coils and Overload Heaters for signs of overheating.		
3	Check controls for proper voltage.		
4	Test all warning alarms and beacons.		
5	Inspect all pilot lights to insure that they are lighting and that there is no damage to lenses. Replace bulbs and/or lenses as required.		
6	Inspect all pushbutton stations to insure they are functional.		
7	Check all pushbutton bulbs and/or lenses and replace as necessary.		
8	Check the alignment and security of all photo eyes and reflectors.		
9	Clean any dust or dirt from the photo eye lenses and reflectors.		
10	Inspect junction box covers and mounting.		
11	Clean and grease all bearings, pivots, dogs and chains		
12	Check for loose hardware		
13	Check gearbox fluid level		
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED			

QUARTERLY PREVENTIVE MAINTENANCE CHECKLIST		BHS – POWER TURN CONVEYOR		DATE/TIME	
COMPLETED BY					
	<i>Page 1 of 1</i>				
ITEM	DESCRIPTION			OK	REPAIR REQUIRED
1	Clean and lubricate the chain.				
2	Lubricate the upper and lower chain plate.				
3	Take and record motor amperage readings to check the motors condition.				
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED					

QUARTERLY PREVENTIVE MAINTENANCE CHECKLIST		BHS – SLOPE PLATE CARROUSELS (INBOUND & OUTBOUND)		DATE/TIME	
COMPLETED BY					
<i>Page 1 of 1</i>					
ITEM	DESCRIPTION	OK	REPAIR REQUIRED		
1	Clean and lubricate the drive chain.				
2	Clean and lubricate pillow block bearings. Do Not over grease most bearings will require only two or three pumps with grease gun.				
3	Check pallet chain tension and expand unit as required.				
4	Inspect leveling pads and screws to insure they are contacting the floor and adjust as necessary.				
5	Take and record motor amperage readings to check the motors condition.				
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED					

QUARTERLY PREVENTIVE MAINTENANCE CHECKLIST		BHS – BELT CONVEYOR	DATE/TIME
COMPLETED BY			
	<i>Page 1 of 1</i>		
ITEM	DESCRIPTION	OK	REPAIR REQUIRED
1	Clean all old grease from around the seals on all bearings.		
2	Grease all bearings that are equipped with zerk fittings. Do not over grease – most bearings will require only two or three pumps with grease gun.		
3	Take and record motor amperage readings to check the motors condition.		
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED			

SEMI-ANNUAL PREVENTIVE MAINTENANCE CHECKLIST		BHS – VERTICAL SORTATION UNIT II		DATE/TIME	
COMPLETED BY					
		<i>Page 1 of 1</i>			
ITEM	DESCRIPTION	OK	REPAIR REQUIRED		
1	Inspect SEW gearmotor for general overall condition.				
2	Inspect SEW gearmotor oil condition and correct oil level and needed.				
3	Inspect SEW gearmotor seal leakage.				
4	Inspect SEW gearmotor for torque arm (if applicable), and rubber bushing and change it if necessary.				
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED					

ANNUAL PREVENTIVE MAINTENANCE CHECKLIST		BHS – BELT CONVEYOR	DATE/TIME
COMPLETED BY			
	<i>Page 1 of 1</i>		
ITEM	DESCRIPTION	OK	REPAIR REQUIRED
1	Change gear box oil		
2	Tighten all electrical connections		
3	Clean clutch brakes with brake cleaner		
4	Grease motors (1/2 pump of grease)		
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED			

ANNUAL PREVENTIVE MAINTENANCE CHECKLIST		BHS – POWER TURN CONVEYOR	DATE/TIME	
COMPLETED BY				
	<i>Page 1 of 1</i>			
ITEM	DESCRIPTION	OK	REPAIR REQUIRED	
1	Change gear box oil			
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED				

ANNUAL PREVENTIVE MAINTENANCE CHECKLIST		BHS – SLOPE PLATE MAKE-UP UNITS (INBOUND AND OUTBOUND)		DATE/TIME	
COMPLETED BY					
		<i>Page 1 of 1</i>			
ITEM	DESCRIPTION			OK	REPAIR REQUIRED
1	Change gear box oil				
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED					

ANNUAL PREVENTIVE MAINTENANCE CHECKLIST		BHS – VERTICAL SORTATION UNIT II	DATE/TIME	
COMPLETED BY				
	<i>Page 1 of 1</i>			
ITEM	DESCRIPTION	OK	REPAIR REQUIRED	
1	Clean outer surface of gear motor with clean cloth and degreaser.			
2	Clean outer surface of motors with clean cloth and degreaser.			
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED				

ATTACHMENT 2 - TERMINAL 2 BAGGAGE HANDLING SYSTEM COMPONENTS AND SUBSYSTEMS

1. Conveyor Subsystems:

- 1.1 Outbound Baggage Systems: These systems include transport conveyors originating on Terminal Level 2 (ticket counter and curbside) and terminating at the sort device(s) located on the ramp level. A Checked Baggage Inspection System (CBIS) is located on the ramp level and composed of two sortation lines (clear and suspect). Bags are inspected and then transported to the Checked Baggage Reconciliation Area(s) (CBRA) or the sortation area as applicable.
 - 1.1.1 Ticket Counter Baggage System: This system consists of 2 conveyor lines that transport baggage from load conveyors located behind the check-in counters on Terminal Level 2 to the CBIS area located on Level 1.
 - 1.1.2 Curbside Baggage System: 2 conveyor lines from 2 curbside induction points on Terminal Level 2 that merge with the ticket counter belt system prior to entering the CBIS area.
 - 1.1.3 CBIS Area: The Ticket Counter system feeds the CBIS area containing the federally owned and maintained Explosive Detection System (EDS) machines.
 - 1) Transport conveyors: Composed of the conveyor(s) routing baggage from the EDS machines in the CBIS to the baggage sortation area.
 - 2) Re-introduction System: Consists of re-introduction input(s) that transport baggage from the CBRA back to the CBIS area.
 - 1.1.4 Transfer Convey Systems: Two conveyor lines that transport transfer baggage from ramp-level induction points to either the CBIS for bags requiring screening or to the sortation system for bags already screened.
 - 1.1.5 Sortation Area: After scanning by Automated Tag Readers (ATR's) baggage is routed to one of 6 make up units (slope plate carousels). Make up units are separated by diverter(s) in to two individual areas with three independent make up units each fed by the lateral makeup conveyors.
 - 1.1.6 Cross-over Lines: 4 lines that allow bags to be transferred between two input lines/paths between the ticket counter and CBIS areas. Cross-over lines are used in the sortation area to route baggage to assigned mark-up units.
- 1.2 INBOUND BAGGAGE SYSTEM: this system includes 4 slope plate baggage claim carousels, 2 oversize baggage claim belts, all input conveyors located in the terminal ramp area which feed baggage claim devices and belts inside the terminal and the associated baggage input control (BIC) stations.
 - 1.2.1 Ramp Area Input: 4 conveyor systems that transport baggage from the ramp area induction points to the baggage claim carousels in the terminal and 2 Oversize conveyor systems that transport Oversize baggage to the oversize baggage claim belts in the terminal. Each conveyor system feeds only the associated claim device. Each of the six induction

points/conveyor systems are equipped with a Baggage Input Controller (BIC) which controls baggage input by flight assignments and records activity (first bag/last bag).

- 1.2.2 Baggage Claim Carousels: 4 sloped -plate claim devices (carousels) located on Terminal Level 1. Note that belt and claim device numbers shown are in accordance with BHS construction drawings and may not correspond with claim device numbers posted for the public.
- 1.2.3 Oversize Baggage Claim Belts: 2 baggage claim conveyors located on Terminal Level 1 for the delivery of oversize baggage to passengers. Note that belt and claim device numbers shown are in accordance with BHS construction drawings and may not correspond with claim device numbers posted for the public.

2. Baggage Handling System Major Components:

2.2 Structural Components

- 2.2.1 Standard Belt Conveyors. Standard slider conveyors are used to transport baggage in public and non-public areas. The conveyor is belt-driven and capable of horizontal and incline/decline transportation.
- 2.2.2 Drive Conveyors. Drive assemblies are constructed in various lengths and use either an end or center drive depending on conveyor layout and load requirements.
- 2.2.3 Transportation Conveyors. Transportation conveyors move the baggage through the system and have side guards on both sides of the conveyor.
- 2.2.4 Load/Unload Conveyors. Used in areas where baggage is to be loaded to or unloaded from the conveyor and have side guards on only one side to allow for baggage loading or unloading.
- 2.2.5 Conveyor Mechanical Components
 - 1) Conveyor Frames. Conveyor frames and side guards are welded steel construction. The bed channels are formed from steel, braced with angle stiffeners welded to the underside.
 - 2) Side Guards. Provided along the full length of both sides of all conveyors except at points where baggage is loaded or removed.
 - 3) Shrouding. Provided for all conveyor equipment exposed to public view.
 - 4) Spill Plates, Transition Plates. Conveyors feeding and inclined plate device are equipped with a spill plate to aid in baggage transfer.
 - 5) Supports, Floor. Floor mounted conveyors are supported on formed channel leg assemblies.
 - 6) Supports, Hanger. Overhead conveyors are supported by building structural steel or by using expandable type anchors in concrete ceilings.

- 7) Seismic Hangers. Elevated conveyors are seismically sway braced in both lateral and longitudinal directions.
 - 8) Belt Lacing. Belt lacing is Clipper or Anchor type with a hook-type of the proper size recommended by the belt manufacturer for the belt being used.
 - 9) Pulleys. The BHS utilizes a variety of pulleys including End Pulley; Power Pulley; Take-Up Pulley; and Snub Pulley.
 - 10) Take-Up Mechanisms. Each conveyor is equipped with a manual take-up mechanism bolted to the outside of the conveyor bed.
 - 11) Return Rollers. Located on centers not to exceed 10 feet with spacing being reduced in areas where belting may drag against the floor or conveyor structure. All return rollers have internally mounted precision ball bearings that are greased, packed, and sealed for the life of the roller.
 - 12) Belt Conveyor Drives. The drives are sized to operate continuously and meet load specifications.
 - 13) Catwalks. Access ladders provide access to catwalks. Catwalks and walkways are constructed with a heavy gage walking surface.
 - 14) Draft Curtains. Draft curtains are provided at conveyor wall penetrations where installed.
 - 15) Fire/Security Doors. Powered, roll-up fire/security doors are provided at conveyor wall penetrations in specified locations.
- 2.2.6 45 Degree Merge Conveyors. The 45 degree merge is a belt on slider bed conveyor which uses two fixed tubular nose bar elements to achieve the 45 degree change of direction.
- 2.2.7 Queue Conveyors. A self-contained belt conveyor system used primarily for accumulation and spacing of baggage to move baggage quickly and efficiently throughout the conveyor system.
- 2.2.8 Vertical Sortation Unit II (VSUII). The VSUII is an electromechanical conveyor module that is used to sort baggage between two vertically stacked conveyor lines. The divert units divert bags from a single conveyor line to two separate vertically stacked take-away conveyors.
- 2.2.9 High Speed Diverter II (HSDII). The HSDII is a device with two paddles mounted on a horizontal belt conveyor used to divert the flow of one of several bags by moving the paddles into the baggage stream. The activated paddles of the diverter from a 45 degree vertical powered belt wall for the transfer of baggage from the main sort line to a pier chute or take-away conveyor.
- 2.2.10 Power Turns. Power Turns are belt curved conveyors used at locations where there is a change of flow direction in the conveyor system. The turns are made up of a welded steel frame, a circular belt with a special “side bow” roller chain attached, tapered end pulleys

mounted on steel shafting, roller chain sprockets mounted on the pulley shafts and a motor/reducer drive assembly.

- 2.2.11 Incline Slope Plate claim or Sortation Devices. These devices are arranged to receive baggage from a feed conveyor(s) at a point on the inside and are automatically fed via belt conveyors.

2.3 Other Mechanical Components

- 2.3.1 Platforms and Walkways. All platforms and walkways are attached to the BHS structure and provide adequate space for operating and maintenance personnel.
- 2.3.2 Toe boards. Toe boards are provided on both sides of all platforms, walkways and ramps 24” or more above the finished floor except where adjacent equipment or building structure provides the required function.
- 2.3.3 Handrails. Where installed, top rails consist of a top rail with one intermediate rail positioned halfway between the top of the walking surface and the top of the top rail.
- 2.3.4 Maintenance Ladders. Maintenance ladders are used to access platforms and walkways.
- 2.3.5 Fire Doors (Powered and Non-Powered). Consist of rolling shutters, slat-type, and interior-face-mounted fire doors with up and down limit switches connected to PLC input. Fire/heat/smoke detectors are located to sense approaching fire, heat or smoke source on the conveyor.
- 2.3.6 Security Doors (Powered and Non-powered). Consist of rolling shutter, slat-type, and interior-face-mounted security door equipped with an externally mounted limit switch that senses a “fully open” position.
- 2.3.7 Draft Curtains. Draft curtains are constructed with of 6” wide by 1/8 thick vinyl strips with a stainless steel fascia in public areas.
- 2.3.8 Conveyor Impact Protection. Installed at specific locations, impact protection and supports are constructed of steel, heavy walled sections to match specific conveyor shape.

2.4 Electrical Components and Controls

- 2.4.1 Power distribution. All electrical power provided to the BHS is separately metered. Electrical power for the BHS control system is provided from 2 independent load centers. Each provides 480VAC power to Power Distribution Panels (PDP) which have appropriate sized circuit breakers feeding the BHS equipment.
- 2.4.2 Baggage Area Lighting. All lighting (lamps and fixtures) provided to illuminate the BHS or access to the BHS (illuminating ladders, platforms, and walkways) shall be the responsibility of the Contractor. This lighting is typically present in crawlspace between levels and/or other areas where the BHS components are the only areas requiring illumination or for example on the baggage claim devices, where lighting is mounted directly on, or in, the baggage system components. General area lighting in spaces where there are needs for

illumination other than the BHS (exclusive of other utilities) is the responsibility of the permitted user(s) of that space.

- 2.4.3 Controls Architecture. The system architecture is based on Ethernet networks for communication with networks outside the BHS and local devices. ControlNet is used for machine-level communications and DeviceNet is used for device-level communications. Centralized or decentralized architecture is used depending on the subsystem. The BHS control system is divided into five main subsystems:

- 1-Ticket Counters
- 2-Oversize (inbound and outbound)
- 3-Inbound
- 4-EDS Matrix (CBIS)
- 5-Sortation

- 1) Centralized Architecture. The Ticket Counters, Oversize, Inbound and Sortation subsystems are based on a centralized input/output (I/O) system design with all motors and control elements wired back to centralized Motor Control Panels (MCP).
- 2) Decentralized Architecture. The EDS Matrix (CBIS) subsystem is based on a decentralized I/O system design with all motors and control elements wired to nearby, small control panels referred to as CN2DN panels that contain DeviceNet modules connecting directly to motor-mounted variable frequency drives (VFD) and control equipment on the conveyors.

2.4.4 Upper Level Control Components

The Airport supports all Upper Level Control Components except for Motor Control Panels (MCPs) which are the responsibility of the Contractor.

- 1) Sortation Allocation Controller (SAC or sort controller). The SAC acts as the central server of the system. The SAC is built on a Windows Server platform and contains the database to store all sortation control information for the system including flight schedules and bag related data. The SAC also hosts multiple applications for airport communication, sortation control, flight schedule, and PLC status images.
- 2) Data Historian System (DHS). The DHS server acts as a central repository of data for the system. It is built on a Windows Server platform and includes a Microsoft SQL Server database. The DHS server communicates directly with the system PLCs and acts as a server for the MIS and Web MIS client applications. It also collects and stores historical statistical data generated by the PLCs for use in searches and reports.
- 3) Human Machine Interface (HMI). The HMI application provides a graphical overview of the conveyor system showing status and allowing operator control.
- 4) Maintenance Information System (MIS). The MIS application provides access to flight schedule management, data management and set-up facilities necessary to operate the BHS and generate system reports. This application resides on the operator workstations and is also installed on the SAC and DHS servers.
- 5) Baggage Messaging System Servers (BMS). The Baggage Messaging Servers route baggage service messages (BSM) and baggage processed messages (BPM) between the

airline's host system and the SAC. These servers are part of the Airport's common use system and are supported by the Airport.

- 6) Input/Output (I/O) Gateways. There are 2 I/O gateways. Each I/O gateway has 2 functions; transferring data from the ATRs to the system for sortation and tracking and serving as the HMI server.
- 7) Lower Level Control Components: Programmable Logic Controllers (PLC). The PLCs control the mechanical system, communicating with the device-level equipment.
- 8) Remote Racks. Contain modules that provide a connection to each field device. These connections allow the PLC to communicate with and control the devices.
- 9) Ethernet Switches. These switches are used to manage the connections between the various components on the Ethernet network.
- 10) Manual Encode Console (MEC). The MEC is used to manually route baggage to the correct sort destination. Bags are sent to the MEC station if the bar code on the bag tag cannot be read by the ATR, the flight number is invalid, or there is no BSM for the bag.
- 11) Baggage Dimensioning System (BDS). The BDS measures the height, width and length of each bag that passes through the scanning heads. The BDS determines if a bag is in, or out, of "gauge."
- 12) Automatic Tag Reader (ATR). The ATRs read bar code data from the baggage tag affixed prior to induction by scanning every side of each bag that passes through the its

scanning head array. The array consists of 12 individual scanning heads. The data from the bar code is transmitted to the PLC using serial communications.

- 13) ControlNet to DeviceNet Box. These devices are used to bridge communication between the ControlNet and the DeviceNet networks.
- 14) EDS Equipment. The in-line EDS machines are used as part of the security screening process of the BHS. These machines are maintained by the TSA.
- 15) Motor Control Panels (MCP). There are 18 MCPs and approximately 45 smaller control panels. VFDs control all motors in the EDS Matrix (CBIS). The main components in the MCP panels are:
 - a) PLC with Ethernet ports
 - b) ControlNet module
 - c) IO modules
 - d) E-Stop relays
 - e) 24VDC power supplies
 - f) Main disconnect switch with lock out
 - g) Circuit Breaker (CB) and fusing
 - h) Motor starters, contactors, and relays
 - i) Amber warning beacon
 - j) Red (E-Stop) warning beacon
 - k) Start-up/Fault warning alarm
 - l) Control station
 - m) Hour meter
 - n) Control Transformers
 - o) Utility outlet
 - p) Fluorescent lights

2.5 BHS Control Room T2.1.E119. The BHS Control Room provides 2 control operator workstations and, with the exception of field devices and the SAC, DHS (located in equipment room T2.1.E111) and BMS servers (located in the International Terminal), all of the equipment necessary to operate and monitor the BHS including:

- 2.5.1 Large Screen Display Workstation. This workstation is used to display the graphical overview images from the HMI application. It is designed to provide a dynamic display of BHS status however a mouse is provided to allow navigation to other HMI content.
- 2.5.2 Operator Interface Terminals. Touch-screen workstations that display HMI and MIS applications to allow operators to operate the system, display status, modify system parameters and generate reports. 2 operator Interface Terminals are provided in the Control Room 2 are

installed in the CBRA area, and 1 is installed in the TSA central system monitoring section of the International Terminal BHS Control Room.

- 2.5.3 LCD Displays. Five 46 inch NEC liquid crystal displays, wall mounting hardware, controllers and cables used to display system status (3 displays) and flight information (2 displays).
- 2.5.4 Closed Circuit Television Equipment (CCTV). Two displays and one controller are installed to provide views of T2 BHS related CCTV cameras.
- 2.5.5 Manual Encode Interface Computer. 1 Manual Encode Interface Computer is installed.
- 2.5.6 HMI Interface Computers. 5 HMI Interface Computers are installed.
- 2.5.7 Uninterruptible Power Supply Units (UPS). 2 UPS are provided to support the installed computer equipment.
- 2.5.8 Furnishings. Desks, tables, racks, and shelving used to accommodate equipment and supplies.

ATTACHMENT 3 – BHS EQUIPMENT LIST**1. Equipment List - Summary**

TERMINAL 2 BHS	
EQUIPMENT	TOTAL
TICKET COUNTER CONV	9
LOAD/UNLOAD CONV	13
TRANSPORT COV	116
SHORT TRANSPORT CONV	22
INCLINE/DECLINE CONV	55
QUEUE CONV	123
LONG MERGE	20
SHORT MERGE	4
INDEXING CONV	6
POWERTURNS	106
VERTASORT	6
HIGH SPEED DIVERTERS (HSDII)	15
FIRE DOORS	10
AUTOMATIC TAG READERS	4
BAGGAGE DIMENSIONER	1
MAIN CONTROL PANELS	17
CONTROL PANELS	6
CN2DN PANELS	26
MPLC PANELS	2

2. Equipment list- Detailed**SFO T2 BHS Detailed Equipment List**

	SECTION	TYPE	LENGTH	PT DEGREE	DRIVE	HP	SPEED
1	IB1-01	LOAD/UNLOAD CONV	33.0	0	STD	3.0	120
2	IB1-02	LOAD/UNLOAD CONV	33.0	0	STD	3.0	120
3	IB1-03	INCL/DECL CONV	27.6	0	BKM	5.0	155
4	IB1-04	POWERTURN	9.0	90	STD	2.0	150
5	IB1-05	TRANSPORT CONV	43.7	0	STD	3.0	165
6	IB1-06	POWERTURN	6.0	60	STD	2.0	150
7	IB1-07	SHORT TRANSPORT	4.7	0	STD	2.0	160
8	IB1-08	POWERTURN	1.5	45	STD	2.0	150
9	IB1-09	TRANSPORT CONV	29.1	0	STD	2.0	155
10	IB1-10A	POWERTURN	4.5	45	BKM	2.0	150
	IB1-10B	QUEUE CONV			BKM	2.0	150

11	IB1-10/SD	DOOR	0.0	0		N/A	0
12	IB1-11	INCL/DECL CONV	38.5	0	BKM	3.0	120
13	CD-01	CLAIM DEVICE	0.0	0	STD	7.5	0
14	IB4-01	LOAD/UNLOAD CONV	39.5	0	STD	3.0	120
15	IB4-02	INCL/DECL CONV	27.6	0	BKM	5.0	155
16	IB4-03	TRANSPORT CONV	30.7	0	STD	3.0	145
17	IB4-04	POWERTURN	4.5	45	STD	2.0	150
18	IB4-05	TRANSPORT CONV	7.1	0	STD	2.0	155
19	IB4-06	POWERTURN	4.5	45	STD	2.0	150
20	IB4-07	TRANSPORT CONV	44.6	0	STD	5.0	155
21	IB4-08	POWERTURN	9.0	90	STD	2.0	150
22	IB4-09	TRANSPORT CONV	38.3	0	STD	3.0	145
23	IB4-10	TRANSPORT CONV	42.1	0	STD	3.0	145
24	IB4-11A	POWERTURN	4.5	45	BKM	2.0	150
	IB4-11B	QUEUE CONV			BKM	2.0	150
25	IB4-12	INCL/DECL CONV	39.5	0	BKM	3.0	120
26	IB4-12/SD	DOOR	0.0	0		N/A	0
27	C4-02	CLAIM DEVICE	0.0	0	STD	7.5	0
28	IB2-01	LOAD/UNLOAD CONV	33.0	0	STD	3.0	120
29	IB2-02	LOAD/UNLOAD CONV	33.0	0	STD	3.0	120
30	IB2-03	INCL/DECL CONV	32.7	0	BKM	5.0	155
31	IB2-04	TRANSPORT CONV	38.9	0	STD	3.0	165
32	IB2-05	TRANSPORT CONV	44.7		STD	3.0	165
	SECTION	TYPE	LENGTH	PT DEGREE	DRIVE	HP	SPEED
33	IB2-06	POWERTURN	9.0	90	STD	2.0	150
34	IB2-07	TRANSPORT CONV	45.2	0	STD	3.0	165
35	IB2-08	TRANSPORT CONV	44.6		STD	3.0	165
36	IB2-09A	POWERTURN	4.5	45	BKM	2.0	150
	IB2-09B	QUEUE CONV			BKM	2.0	150
37	IB2-10	TRANSPORT CONV	31.9	0	BKM	3.0	150
38	IB2-10/SD	DOOR	0.0	0		N/A	0
39	IB2-11	INCL/DECL CONV	65.0	0	BKM	5.0	150
40	IB2-12	POWERTURN	3.0	30	STD	2.0	150
41	IB2-13	TRANSPORT CONV	9.5	0	STD	2.0	120
42	CD-02	CLAIM DEVICE	0.0	0	STD	7.5	0
43	IB3-01	LOAD/UNLOAD CONV	39.5	0	STD	3.0	120
44	IB3-02	INCL/DECL CONV	27.6	0	BKM	5.0	155
45	IB3-03	TRANSPORT CONV	20.0	0	STD	2.0	155
46	IB3-04	POWERTURN	9.0	90	STD	2.0	150

47	IB3-05	TRANSPORT CONV	42.1	0	STD	3.0	145
48	IB3-06	TRANSPORT CONV	42.1	0	STD	3.0	145
49	IB3-07A	POWERTURN	4.5	45	BKM	2.0	150
	IB3-07B	QUEUE CONV			BKM	2.0	150
50	IB3-08	TRANSPORT CONV	31.1	0	BKM	3.0	150
51	IB3-08/SD	DOOR	0.0	0		N/A	0
52	IB3-09	INCL/DECL CONV	61.9	0	BKM	5.0	150
53	IB3-10	POWERTURN	3.0	30	STD	2.0	150
54	IB3-11	SHORT TRANSPORT	4.6		STD	2.0	120
55	CD-03	CLAIM DEVICE	0.0	0	STD	7.5	0
56	CB1-01	INCL/DECL CONV	8.9	0	VBM	2.0	150
57	CB1-02	POWERTURN	9.0	90	VFD	3.0	200
58	CB1-03	TRANSPORT CONV	18.1	0	VFD	3.0	250
59	CB1-04	TRANSPORT CONV	12.7	0	VFD	2.0	250
60	CB1-05	TRANSPORT CONV	28.3		VFD	5.0	270
61	CB1-06	POWERTURN	9.0	90	VFD	3.0	290
62	CB1-07	QUEUE CONV	3.5	0	VFD	2.0	290
63	CB1-08	QUEUE CONV	3.5		VFD	2.0	290
64	CB1-09	QUEUE CONV	3.5	0	VFD	2.0	290
65	ATR/CB1-09	TAG READER	0.0	0		N/A	0
66	CB2-01	INCL/DECL CONV	9.5	0	VBM	2.0	150
67	CB2-02	QUEUE CONV	3.5	0	VFD	2.0	180
68	CB2-03	POWERTURN	9.0	90	VFD	3.0	210
PT							
	SECTION	TYPE	LENGTH	DEGREE	DRIVE	HP	SPEED
69	CB2-04	TRANSPORT CONV	29.9		VFD	5.0	240
70	CB2-05	TRANSPORT CONV	36.5	0	VFD	5.0	240
71	CB2-06	INCL/DECL CONV	14.5	0	VFD	2.0	270
72	CB2-07	POWERTURN	4.5	45	VFD	2.0	290
73	CB2-08	TRANSPORT CONV	13.2		VFD	2.0	270
74	CB2-09	POWERTURN	4.5	45	VFD	2.0	290
75	CB2-10	QUEUE CONV	3.5		VFD	2.0	290
76	CB2-11	QUEUE CONV	3.5	0	VFD	2.0	290
77	CB2-12	QUEUE CONV	3.5	0	VFD	2.0	290
78	ATR/CB2-12	TAG READER	0.0	0		N/A	0
79	CB3-01	INCL/DECL CONV	10.8	0	VBM	2.0	150
80	CB3-02	QUEUE CONV	3.5	0	VFD	2.0	180
81	CB3-03	QUEUE CONV	3.5	0	VFD	2.0	180
82	CB3-04	POWERTURN	4.5	45	VFD	2.0	180
83	CB3-05	LONG MERGE	6.3	0	VFD	3.0	180

84	CB4-01	INCL/DECL CONV	9.5	0	VBM	2.0	150
85	CB4-02	QUEUE CONV	3.5	0	VFD	2.0	180
86	CB4-03	QUEUE CONV	3.5		VFD	2.0	180
87	CB4-04	POWERTURN	4.5	45	VFD	2.0	180
88	CB4-05	LONG MERGE	6.3	0	VFD	3.0	180
89	CB5-01	INCL/DECL CONV	9.5	0	VBM	2.0	150
90	CB5-02	POWERTURN	9.0	90	VFD	3.0	150
91	CB5-03	POWERTURN	9.0	90	VFD	3.0	180
92	CB5-04	TRANSPORT CONV	40.3	0	VFD	5.0	200
93	CB5-05	TRANSPORT CONV	40.3	0	VFD	5.0	200
94	CB5-06	QUEUE CONV	3.5	0	VFD	2.0	200
95	CB5-07	QUEUE CONV	3.5	0	VFD	2.0	200
96	CB5-08	POWERTURN	4.5	45	VFD	2.0	200
97	CB5-09	LONG MERGE	6.0	0	VFD	3.0	180
98	CB6-01	INCL/DECL CONV	9.5	0	VBM	2.0	120
99	CB6-02	POWERTURN	9.0	90	VFD	3.0	150
100	CB6-03	POWERTURN	9.0	90	VFD	3.0	180
101	CB6-04	TRANSPORT CONV	22.9	0	VFD	3.0	200
102	CB6-05	INCL/DECL CONV	21.5	0	VBM	2.0	200
103	CB6-06	TRANSPORT CONV	50.0	0	VFD	5.0	200
104	CB6-07	TRANSPORT CONV	21.0	0	VFD	2.0	200
105	CB6-08	POWERTURN	9.0	90	VFD	3.0	200
106	CB6-09	INCL/DECL CONV	18.5	0	VFD	3.0	200
PT							
	SECTION	TYPE	LENGTH	DEGREE	DRIVE	HP	SPEED
107	CB6-10	POWERTURN	4.5	45	VFD	2.0	200
108	CB6-11	POWERTURN	4.5	45	VFD	2.0	200
109	CB6-12	POWERTURN	4.5	45	VFD	2.0	200
110	CB6-13	LONG MERGE	6.3		VFD	3.0	180
111	CB7-01	LOAD/UNLOAD CONV	24.6	0	STD	2.0	120
112	CB7-02	INCL/DECL CONV	26.6	0	BKM	3.0	145
113	CB7-03	QUEUE CONV	3.5	0	BKM	2.0	160
114	CB7-04	POWERTURN	4.5	45	BKM	2.0	150
115	CB7-05	LONG MERGE	6.3	0	BKM	3.0	155
116	CB8-01	LOAD/UNLOAD CONV	34.0	0	BKM	3.0	110
117	CB8-02	INCL/DECL CONV	25.0	0	BKM	3.0	145
118	CB8-03	QUEUE CONV	3.5	0	BKM	2.0	160
119	CB8-04	POWERTURN	4.5	45	BKM	2.0	150
120	CB8-05	LONG MERGE	6.5		BKM	3.0	155

121	CS1-01	TICKET COUNTER CONV	8.6	0	STD	2.0	90
122	OS3-02/SD	DOOR	0.0	0		N/A	0
123	CS1-02	POWERTURN	4.5	68	BKM	2.0	85
124	CS1-03	INCL/DECL CONV	21.8		BKM	2.0	110
125	CS1-04	TRANSPORT CONV	41.0	0	STD	3.0	145
126	CS1-05	POWERTURN	2.5	23	STD	2.0	205
127	CS1-06	INCL/DECL CONV	37.3		BKM	5.0	225
128	CS1-07	POWERTURN	9.0	90	BKM	3.0	215
129	CS1-08	INCL/DECL CONV	25.9	0	BKM	3.0	220
130	CS1-09	QUEUE CONV	3.5		BKM	2.0	200
131	CS1-10	QUEUE CONV	3.5	0	BKM	2.0	200
132	CS1-11	POWERTURN	4.5	45	BKM	2.0	205
133	CS1-12	SHORT MERGE	3.0	0	BKM	2.0	190
134	CS2-01	TICKET COUNTER CONV	8.6	0	STD	2.0	90
135	CS2-01/SD	DOOR	0.0	0			0
136	CS2-02	POWERTURN	4.5	68	BKM	2.0	85
137	CS2-03	INCL/DECL CONV	21.8	0	BKM	2.0	110
138	CS2-04	TRANSPORT CONV	50.5	0	STD	3.0	145
139	CS2-05	POWERTURN	2.5	23	STD	2.0	205
140	CS2-06	TRANSPORT CONV	38.8	0	STD	5.0	205
141	CS2-07	POWERTURN	9.0	90	STD	3.0	205
142	SECTION	TYPE	LENGTH	PT DEGREE	DRIVE	HP	SPEED
	CS2-08	TRANSPORT CONV	42.0	0	STD	3.0	180
	SECTION	TYPE	LENGTH	PT DEGREE	DRIVE	HP	SPEED
143	CS2-09	TRANSPORT CONV	15.0	0	STD	2.0	205
144	CS2-10	QUEUE CONV	3.5	0	BKM	2.0	205
145	CS2-11	QUEUE CONV	4.0	0	BKM	2.0	205
146	CS2-12	POWERTURN	4.5	45	BKM	2.0	205
147	CS2-13	LONG MERGE	3.0	0	BKM	3.0	195
148	ED1-01	SHORT MERGE	3.0	0	VFD	2.0	215
149	ED1-02	TRANSPORT CONV	10.5	0	VFD	2.0	280
150	ED1-03	POWERTURN	4.5	45	VFD	2.0	250
151	ED1-04	TRANSPORT CONV	11.8	0	VFD	2.0	220
152	ED1-05	QUEUE CONV	3.5		VFD	2.0	220
153	ED1-06	QUEUE CONV	3.5	0	VFD	2.0	190
154	ED1-07	QUEUE CONV	3.5	0	VFD	2.0	160
155	ED1-08	QUEUE CONV	3.5	0	VFD	2.0	160

156	ED1-09	QUEUE CONV	3.5	0	VFD	2.0	160
157	ED1-10	QUEUE CONV	6.0	0	VFD	2.0	160
158	ED1-11	QUEUE CONV	6.5	0	VFD	2.0	150
159	ED1-12	QUEUE CONV	3.5	0	VFD	2.0	150
160	ED1-13	QUEUE CONV	3.5	0	VFD	2.0	150
161	VSU-ED1-A	VERTICAL SORTER	9.0	0	BKM	2.0	
162	ED2-01	SHORT MERGE	3.0	0	VFD	2.0	280
163	ED2-02	POWERTURN	4.5	45	VFD	2.0	280
164	ED2-03	SHORT TRANSPORT	5.0	0	VFD	2.0	250
165	ED2-04	POWERTURN	4.5	45	VFD	2.0	250
166	ED2-05	POWERTURN	4.5	45	VFD	2.0	250
167	ED2-06	TRANSPORT CONV	12.6	0	VFD	2.0	220
168	ED2-07	QUEUE CONV	3.5	0	VFD	2.0	190
169	ED2-08	QUEUE CONV	3.5	0	VFD	2.0	160
170	ED2-09	QUEUE CONV	3.5	0	VFD	2.0	160
171	ED2-10	QUEUE CONV	3.5	0	VFD	2.0	160
172	ED2-11	QUEUE CONV	6.0	0	VFD	2.0	160
173	ED2-12	QUEUE CONV	6.5	0	VFD	2.0	150
174	ED2-13	QUEUE CONV	3.5	0	VFD	2.0	150
175	ED2-14	QUEUE CONV	3.5	0	VFD	2.0	150
176	ED2-15	QUEUE CONV	3.5	0	VFD	2.0	150
177	VSU-ED2-A	VERTICAL SORTER	9.0	0	BKM	2.0	
178	ED3-01	SHORT MERGE	4.0	0	VFD	2.0	280
179	ED3-02	QUEUE CONV	6.1		VFD	2.0	250
180	ED3-03	POWERTURN	4.5	45	VFD	2.0	200
	PT						
	SECTION	TYPE	LENGTH	DEGREE	DRIVE	HP	SPEED
181	ED3-04	QUEUE CONV	3.5	0	VFD	2.0	160
182	ED3-05	QUEUE CONV	3.5	0	VFD	2.0	160
183	ED3-06	QUEUE CONV	3.5	0	VFD	2.0	160
184	ED3-07	QUEUE CONV	6.0	0	VFD	2.0	160
185	ED3-08	QUEUE CONV	6.5	0	VFD	2.0	150
186	ED3-09	QUEUE CONV	6.5	0	VFD	2.0	150
187	ED3-10	QUEUE CONV	3.5		VFD	2.0	150
188	ED3-11	QUEUE CONV	3.5	0	VFD	2.0	150
189	ED3-12	QUEUE CONV	3.5	0	VFD	2.0	150
190	VSU-ED3-A	VERTICAL SORTER	9.0	0	BKM	2.0	
191	ED4-01	POWERTURN	9.0	90	VFD	3.0	280
192	ED4-02	SHORT TRANSPORT	5.3	0	VFD	2.0	280
193	ED4-03	QUEUE CONV	3.5		VFD	2.0	250

194	ED4-04	QUEUE CONV	3.5	0	VFD	2.0	220
195	ED4-05	POWERTURN	4.5	45	VFD	2.0	190
196	ED4-06	QUEUE CONV	5.7	0	VFD	2.0	160
197	ED4-07	POWERTURN	4.5	45	VFD	2.0	160
198	ED4-08	QUEUE CONV	3.5	0	VFD	2.0	160
199	ED4-09	QUEUE CONV	3.5	0	VFD	2.0	160
200	ED4-10	QUEUE CONV	4.0	0	VFD	2.0	160
201	ED4-11	QUEUE CONV	6.0	0	VFD	2.0	150
202	ED4-12	TRANSPORT CONV	14.2	0	VFD	2.0	150
203	ED4-13	QUEUE CONV	3.5	0	VFD	2.0	150
204	ED4-14	QUEUE CONV	3.5	0	VFD	2.0	150
205	ED4-15	QUEUE CONV	3.5	0	VFD	2.0	150
206	VSU-ED4-A	VERTICAL SORTER	9.0	0	BKM	2.0	
207	ME1-01	INDEXING CONV	21.0		VFD	3.0	200
208	ME1-02	POWERTURN	9.0	90	VFD	3.0	180
209	ME1-03	QUEUE CONV	3.5	0	VFD	2.0	180
210	ME1-04	QUEUE CONV	3.5	0	VFD	2.0	180
211	ME1-05	QUEUE CONV	3.5	0	VFD	2.0	180
212	ME1-06	QUEUE CONV	3.5	0	VFD	2.0	150
213	ME1-07	QUEUE CONV	3.5	0	VFD	2.0	150
214	ME1-08	QUEUE CONV	3.5	0	VFD	2.0	150
215	ME1-09	TRANSPORT CONV	26.1	0	VFD	3.0	150
216	ME1-10	QUEUE CONV	3.5	0	VFD	2.0	150
217	ME1-11	POWERTURN	4.5	45	VFD	2.0	190
218	ME1-12	LONG MERGE	6.0	0	VFD	3.0	220
	SECTION	TYPE	LENGTH	PT DEGREE	DRIVE	HP	SPEED
219	ML1-01	SHORT TRANSPORT	3.5	0	VFD	2.0	290
220	ML1-02	INCL/DECL CONV	38.0	0	VFD	5.0	290
221	HSD-XO3	HSD	0.0	0	VFD	1.0	
222	ML1-03	INCL/DECL CONV	25.5	0	VFD	3.0	290
223	ML1-04	TRANSPORT CONV	28.6	0	VFD	5.0	290
224	ML1-05	POWERTURN	9.0	90	VFD	3.0	290
225	ML1-06	TRANSPORT CONV	22.9	0	VFD	3.0	290
226	ML1-07	POWERTURN	9.0	90	VFD	3.0	290
227	ML1-08	INCL/DECL CONV	22.2	0	VFD	3.0	290
228	ML1-09	POWERTURN	9.0	90	VFD	3.0	290
229	ML1-10	TRANSPORT CONV	41.3	0	VFD	5.0	290
230	HSD-MS1	HSD	0.0	0	VFD	1.0	
231	ML1-11	TRANSPORT CONV	41.4	0	VFD	5.0	290

232	HSD-MS3	HSD	0.0	0	VFD	1.0	
233	ML1-12	TRANSPORT CONV	41.4	0	VFD	5.0	290
234	HSD-MS5	HSD	0.0	0	VFD	1.0	
235	ML2-01	TRANSPORT CONV	10.1	0	VFD	2.0	290
236	ML2-02	TRANSPORT CONV	38.1	0	VFD	5.0	290
237	ML2-03	INCL/DECL CONV	17.1	0	VBM	3.0	290
238	ML2-04	TRANSPORT CONV	17.1	0	VFD	2.0	290
239	HSD-XO4	HSD	0.0	0	VFD	1.0	
240	ML2-05	POWERTURN	9.0	90	VFD	3.0	290
241	ML2-06	SHORT TRANSPORT	4.5	0	VFD	2.0	290
242	ML2-07	POWERTURN	9.0	90	VFD	3.0	290
243	ML2-08	INCL/DECL CONV	27.0	0	VFD	5.0	290
244	ML2-09	TRANSPORT CONV	34.0	0	VFD	5.0	290
245	ML2-10	TRANSPORT CONV	33.6	0	VFD	5.0	290
246	ML2-11	POWERTURN	9.0	90	VFD	3.0	290
247	ML2-12	TRANSPORT CONV	40.0	0	VFD	5.0	290
248	HSD-MS2	HSD	0.0	0	VFD	1.0	
249	ML2-13	TRANSPORT CONV	40.0	0	VFD	5.0	290
250	HSD-MS4	HSD	0.0	0	VFD	1.0	
251	ML2-14	TRANSPORT CONV	41.8	0	VFD	5.0	290
252	HSD-MS6	HSD	0.0	0	VFD	1.0	
253	ML2-15	QUEUE CONV	6.0	0	VFD	2.0	255
254	ML2-16	POWERTURN	4.5	45	VFD	2.0	230
255	ML2-17	LONG MERGE	6.0	0	VFD	3.0	180
256	MS1-01	TRANSPORT CONV	12.2	0	STD	2.0	290
	SECTION	TYPE	LENGTH	PT DEGREE	DRIVE	HP	SPEED
257	MS1-02	SHORT TRANSPORT	3.5	0	STD	2.0	200
258	MS1-03	SHORT TRANSPORT	3.5		STD	2.0	170
259	MS1-04	INCL/DECL CONV	17.4	0	STD	2.0	110
260	MU-01	MAKEUP DEVICE	0.0	0	STD	7.5	0
261	MS2-01	TRANSPORT CONV	12.2	0	STD	2.0	290
262	MS2-02	SHORT TRANSPORT	3.5	0	STD	2.0	200
263	MS2-03	SHORT TRANSPORT	3.5	0	STD	2.0	170
264	MS2-04	INCL/DECL CONV	18.7	0	STD	2.0	110
265	MU-02	MAKEUP DEVICE	0.0	0	STD	7.5	0
266	MS3-01	TRANSPORT CONV	12.2	0	STD	2.0	290
267	MS3-02	SHORT TRANSPORT	3.5	0	STD	2.0	200
268	MS3-03	SHORT TRANSPORT	3.5	0	STD	2.0	170
269	MS3-04	INCL/DECL CONV	18.7	0	STD	2.0	110

270	MU-03	MAKEUP DEVICE	0.0	0	STD	7.5	0
271	MS4-01	TRANSPORT CONV	12.2	0	STD	2.0	290
272	MS4-02	SHORT TRANSPORT	4.0	0	STD	2.0	200
273	MS4-03	SHORT TRANSPORT	4.0	0	STD	2.0	170
274	MS4-04	INCL/DECL CONV	18.7	0	STD	2.0	110
275	MU-04	MAKEUP DEVICE	0.0	0	STD	7.5	0
276	MS5-01	TRANSPORT CONV	12.2	0	STD	2.0	290
277	MS5-02	SHORT TRANSPORT	3.5	0	STD	2.0	200
278	MS5-03	SHORT TRANSPORT	3.5	0	STD	2.0	170
279	MS5-04	INCL/DECL CONV	18.7	0	STD	2.0	110
280	MU-05	MAKEUP DEVICE	0.0	0	STD	7.5	0
281	MS6-01	TRANSPORT CONV	12.2	0	STD	2.0	290
282	MS6-02	SHORT TRANSPORT	3.5	0	STD	2.0	200
283	MS6-03	SHORT TRANSPORT	3.5	0	STD	2.0	170
284	MS6-04	INCL/DECL CONV	18.7	0	STD	2.0	110
285	MU-06	MAKEUP DEVICE	0.0	0	STD	7.5	
286	OG1-01	BLANK					
287	OG-01	QUEUE CONV	5.3	0	VFD	2.0	250
288	OG-02	POWERTURN	4.5	45	VFD	2.0	200
289	OG-03	LONG MERGE	6.0	0	VFD	3.0	150
290	OS1-01	INCL/DECL CONV	33.8	0	BKM	3.0	120
291	OS1-02	INCL/DECL CONV	33.0	0	BKM	3.0	120
292	OS1-03	TRANSPORT CONV	26.9	0	BKM	2.0	120
293	OS1-04	INDEXING CONV	33.9	0	BKM	3.0	120
294	OS1A-01	INDEXING CONV	55.0	0	BKM	5.0	120
	SECTION	TYPE	LENGTH	PT DEGREE	DRIVE	HP	SPEED
295	OS2-01	INCL/DECL CONV	34.8	0	BKM	3.0	110
296	OS2-02	POWERTURN	9.0	90	BKM	2.0	135
297	OS2-03	INCL/DECL CONV	18.0	0	BKM	2.0	120
298	OS2-04	TRANSPORT CONV	45.0	0	STD	3.0	130
299	OS2-05	POWERTURN	3.0	30	STD	2.0	135
300	OS2-06	TRANSPORT CONV	13.0		STD	2.0	130
301	OS2-07	POWERTURN	3.0	30	STD	2.0	135
302	OS2-08	TRANSPORT CONV	36.0		STD	3.0	130
303	OS2-09	TRANSPORT CONV	36.0	0	STD	3.0	130
304	OS2-10	POWERTURN	9.0	90	STD	2.0	135
305	OS2-11	TRANSPORT CONV	28.2	0	STD	2.0	135
306	OS2-12	POWERTURN	9.0	90	STD	2.0	135
307	OS2-13	TRANSPORT CONV	51.6	0	STD	5.0	130

308	OS2-14	POWERTURN	9.0	90	STD	3.0	135
309	OS2-15	INCL/DECL CONV	14.3		BKM	2.0	130
310	OS2-16	INDEXING CONV	16.0		BKM	2.0	120
311	OS3-01	LOAD/UNLOAD CONV	49.7	0	STD	5.0	120
312	OS3-02	POWERTURN	4.5	45	STD	2.0	125
313	OS3-02/DF	DRAFT FLAP	0.0	0		N/A	0
314	OS3-02/SD	DOOR	0.0	0		N/A	0
315	OS3-03	INDEXING CONV	40.0	0	BKM	3.0	90
316	OS4-01	LOAD/UNLOAD CONV	45.0	0	STD	5.0	120
317	OS4-02	POWERTURN	9.0	90	STD	2.0	125
318	OS4-03	TRANSPORT CONV	18.7	0	BKM	2.0	120
319	OS4-03/SD	DOOR	0.0	0		N/A	0
320	OS4-04	INDEXING CONV	34.7	0	BKM	3.0	90
321	PI1-01	TRANSPORT CONV	42.4	0	STD	5.0	205
322	PI1-02	INCL/DECL CONV	9.8	0	BKM	2.0	200
323	PI1-03	QUEUE CONV	3.5	0	BKM	2.0	200
324	PI1-04	QUEUE CONV	3.5	0	BKM	2.0	200
325	PI1-05	POWERTURN	4.5	45	BKM	2.0	215
326	PI1-06	LONG MERGE	6.0	0	BKM	3.0	195
327	PI2-01	SHORT TRANSPORT	3.5	0	BKM	2.0	200
328	PI2-02	POWERTURN	9.0	90	BKM	3.0	215
329	PI2-03	POWERTURN	4.5	45	BKM	2.0	215
330	PI2-04	SHORT TRANSPORT	3.5	0	BKM	2.0	200
331	PI2-05	POWERTURN	4.5	45	BKM	2.0	215
332	PI2-06	INCL/DECL CONV	25.2	0	BKM	3.0	205
	SECTION	TYPE	LENGTH	PT DEGREE	DRIVE	HP	SPEED
333	PI2-07	TRANSPORT CONV	24.0	0	BKM	2.0	205
334	PI2-08	TRANSPORT CONV	50.0	0	BKM	5.0	205
335	PI2-09	POWERTURN	4.5	45	BKM	2.0	215
336	PI2-10	TRANSPORT CONV	13.0	0	BKM	2.0	180
337	PI2-11	QUEUE CONV	4.0	0	BKM	2.0	160
338	PI2-12	QUEUE CONV	4.0	0	BKM	2.0	160
339	PI2-13	LONG MERGE	6.0	0	BKM	3.0	155
340	RC1-01	POWERTURN	9.0	90	VFD	3.0	290
341	RC1-02	TRANSPORT CONV	28.4	0	VFD	5.0	290
342	RC1-03	TRANSPORT CONV	28.4	0	VFD	5.0	290
343	RC1-04	QUEUE CONV	3.5		VFD	2.0	200
344	RC1-05	QUEUE CONV	3.5		VFD	2.0	200
345	RC1-06	QUEUE CONV	3.5	0	VFD	2.0	200

346	RC1-07	QUEUE CONV	3.5	0	VFD	2.0	200
347	RC1-08	TRANSPORT CONV	28.5	0	VFD	5.0	200
348	RC1-09	POWERTURN	9.0	90	VFD	3.0	200
349	RC1-10	TRANSPORT CONV	39.8	0	VFD	5.0	200
350	RC1-11	TRANSPORT CONV	39.8	0	VFD	5.0	200
351	RC1-12	TRANSPORT CONV	39.8	0	VFD	5.0	200
352	SB1-01	TRANSPORT CONV	8.7	0	VFD	2.0	150
353	SB1-02	POWERTURN	9.0	90	VFD	3.0	150
354	SB1-03	TRANSPORT CONV	22.9	0	VFD	2.0	150
355	SB1-04	POWERTURN	9.0	90	VFD	3.0	150
356	SB1-05	TRANSPORT CONV	40.4	0	VFD	3.0	150
357	SB1-06	INCL/DECL CONV	25.3		VBM	3.0	150
358	SB1-07	QUEUE CONV	3.5	0	VFD	2.0	150
359	SB1-08	QUEUE CONV	3.5	0	VFD	2.0	150
360	SB1-09	QUEUE CONV	3.5	0	VFD	2.0	150
361	SB1-10	QUEUE CONV	3.5	0	VFD	2.0	150
362	VSU-SB1-A	VERTICAL SORTER	9.0	0	BKM	2.0	
363	SB2-01	INCL/DECL CONV	12.9	0	VFD	2.0	150
364	SB2-02	POWERTURN	9.0	90	VFD	3.0	150
365	SB2-03	TRANSPORT CONV	42.8	0	VFD	3.0	150
366	SB2-04	POWERTURN	4.5	45	VFD	2.0	150
367	SB2-05	TRANSPORT CONV	11.1	0	VFD	2.0	150
368	SB2-06	POWERTURN	4.5	45	VFD	2.0	150
369	SB2-07	TRANSPORT CONV	40.2	0	VFD	3.0	150
370	SB2-08	INCL/DECL CONV	25.2		VBM	3.0	150
	SECTION	TYPE	LENGTH	PT DEGREE	DRIVE	HP	SPEED
371	SB2-09	QUEUE CONV	3.5	0	VFD	2.0	150
372	SB2-10	QUEUE CONV	3.5	0	VFD	2.0	150
373	SB2-11	QUEUE CONV	3.5	0	VFD	2.0	150
374	SB2-12	QUEUE CONV	3.5	0	VFD	2.0	150
375	VSU-SB2-A	VERTICAL SORTER	9.0	0	BKM	2.0	
376	SB3-01	INCL/DECL CONV	13.5	0	VFD	2.0	150
377	SB3-02	QUEUE CONV	3.5	0	VFD	2.0	150
378	SB3-03	POWERTURN	4.5	45	VFD	2.0	150
379	SB3-04	LONG MERGE	6.3		VFD	3.0	150
380	SB4-01	INCL/DECL CONV	13.5	0	VFD	2.0	150
381	SB4-02	QUEUE CONV	4.0	0	VFD	2.0	150
382	SB4-03	POWERTURN	4.5	45	VFD	2.0	150
383	SB4-04	LONG MERGE	6.3	0	VFD	3.0	150

384	SB5-01	INCL/DECL CONV	13.9	0	VBM	2.0	180
385	SB5-02	TRANSPORT CONV	25.0	0	VFD	3.0	200
386	HSD-PI1	HSD	0.0	0	VFD	1.0	
387	SB5-03	QUEUE CONV	3.5	0	VFD	2.0	150
388	SB5-04	QUEUE CONV	3.5	0	VFD	2.0	120
389	SB5-05	QUEUE CONV	3.5	0	VFD	2.0	120
390	SB5-06	QUEUE CONV	3.5	0	VFD	2.0	120
391	SB5-07	QUEUE CONV	3.5	0	VFD	2.0	120
392	SB5-08	QUEUE CONV	3.5	0	VFD	2.0	120
393	SB5-09	QUEUE CONV	3.5	0	VFD	2.0	120
394	SB5-10	QUEUE CONV	3.5	0	VFD	2.0	120
395	SB6-01	INCL/DECL CONV	13.9	0	VBM	2.0	180
396	SB6-02	TRANSPORT CONV	24.1	0	VFD	3.0	200
397	HSD-PI2	HSD	0.0	0	VFD	1.0	
398	SB6-03	QUEUE CONV	3.5	0	VFD	2.0	150
399	SB6-04	QUEUE CONV	3.5	0	VFD	2.0	120
400	SB6-05	QUEUE CONV	3.5	0	VFD	2.0	120
401	SB6-06	QUEUE CONV	3.5	0	VFD	2.0	120
402	SB6-07	QUEUE CONV	3.5	0	VFD	2.0	120
403	SB6-08	QUEUE CONV	3.5	0	VFD	2.0	120
404	SB6-09	QUEUE CONV	3.5	0	VFD	2.0	120
405	SB6-10	QUEUE CONV	3.5	0	VFD	2.0	120
406	TC1-01	TICKET COUNTER CONV	44.4	0	BKM	3.0	95
407	TC1-02	TICKET COUNTER CONV	44.4	0	BKM	3.0	95
	SECTION	TYPE	LENGTH	PT DEGREE	DRIVE	HP	SPEED
408	TC1-03	POWERTURN	4.5	45	BKM	2.0	85
409	TC1-04	TICKET COUNTER CONV	34.9	0	BKM	3.0	95
410	TC1-05	POWERTURN	9.0	90	BKM	2.0	85
411	TC1-05/FD	DOOR	0.0	0		N/A	0
412	TC1-06	INCL/DECL CONV	41.9	0	BKM	5.0	180
413	TC1-07	TRANSPORT CONV	28.3	0	BKM	3.0	225
414	TC1-08	POWERTURN	9.0	90	BKM	3.0	250
415	TC1-09	TRANSPORT CONV	28.0	0	BKM	3.0	260
416	TC1-10	TRANSPORT CONV	31.8	0	BKM	5.0	260
417	TC1-11	POWERTURN	9.0	90	BKM	3.0	280
418	TC1-12	INCL/DECL CONV	21.3	0	BKM	5.0	260
419	TC1-13	TRANSPORT CONV	23.0	0	BKM	3.0	260

420	TC1-14	POWERTURN	9.0	90	BKM	3.0	280
421	TC1-15	TRANSPORT CONV	45.9	0	BKM	5.0	260
422	TC1-16	TRANSPORT CONV	37.4	0	BKM	5.0	260
423	TC1-17	TRANSPORT CONV	19.6	0	BKM	3.0	290
424	TC1-18	POWERTURN	4.5	45	BKM	2.0	320
425	TC1-19	TRANSPORT CONV	8.1	0	BKM	2.0	290
426	TC1-20	POWERTURN	4.5	45	BKM	2.0	320
427	TC1-21	POWERTURN	9.0	90	BKM	3.0	320
428	TC1-22	SHORT TRANSPORT	3.5		BKM	2.0	300
429	TC1-23	POWERTURN	9.0	90	BKM	3.0	320
430	TC1-24	TRANSPORT CONV	13.7	0	BKM	2.0	290
431	HSD-XO1	HSD	0.0	0	VFD	1.0	
432	TC1-25	TRANSPORT CONV	38.1		BKM	5.0	300
433	TC1-26	TRANSPORT CONV	38.1	0	VFD	5.0	300
434	ATR/TC1-26	TAG READER	0.0	0		N/A	0
435	TC1-27	TRANSPORT CONV	19.7	0	VFD	3.0	280
436	TC1-28	POWERTURN	9.0	90	VFD	3.0	280
437	TC1-29	TRANSPORT CONV	11.9	0	VFD	2.0	280
438	TC1-30	QUEUE CONV	3.5		VFD	2.0	280
439	TC1-31	QUEUE CONV	3.5	0	VFD	2.0	280
440	TC1-32	TRANSPORT CONV	18.5		VFD	3.0	280
441	HSD-ED1	HSD	0.0	0	VFD	1.0	
442	TC1-33	TRANSPORT CONV	26.4		VFD	5.0	280
443	HSD-ED3	HSD	0.0	0	VFD	1.0	
444	TC2-01	TICKET COUNTER CONV	30.3	0	BKM	2.0	90
PT							
	SECTION	TYPE	LENGTH	DEGREE	DRIVE	HP	SPEED
445	TC2-02	TICKET COUNTER CONV	30.3	0	BKM	2.0	90
446	TC2-03	POWERTURN	4.5	45	BKM	2.0	85
447	TC2-04	TICKET COUNTER CONV	28.3	0	BKM	2.0	90
448	TC2-05	TICKET COUNTER CONV	28.3	0	BKM	2.0	90
449	TC2-06	POWERTURN	9.0	90	BKM	2.0	85
450	TC2-06/FD	DOOR	0.0	0		N/A	0
451	TC2-07	INCL/DECL CONV	25.2	0	BKM	3.0	130
452	TC2-08	TRANSPORT CONV	6.4	0	BKM	2.0	180
453	TC2-09	POWERTURN	9.0	90	BKM	3.0	250
454	TC2-10	TRANSPORT CONV	43.6	0	BKM	5.0	260

455	TC2-11	INCL/DECL CONV	28.7	0	BKM	3.0	260
456	TC2-12	TRANSPORT CONV	22.8	0	BKM	3.0	290
457	TC2-13	TRANSPORT CONV	19.1	0	BKM	3.0	300
458	HSD-XO2	HSD	0.0	0	VFD	1.0	
459	TC2-14	TRANSPORT CONV	16.0	0	BKM	2.0	280
460	TC2-15	QUEUE CONV	3.5	0	VFD	2.0	300
461	TC2-16	QUEUE CONV	3.5	0	VFD	2.0	300
462	ATR/TC2-16	TAG READER	0.0	0		N/A	0
463	TC2-17	TRANSPORT CONV	20.9	0	VFD	3.0	280
464	HSD-ED2	HSD	0.0	0	VFD	1.0	
465	TX1-01	LOAD/UNLOAD CONV	40.0	0	STD	5.0	120
466	TX1-02	LOAD/UNLOAD CONV	44.8	0	STD	5.0	120
467	TX1-03	POWERTURN	9.0	90	STD	2.0	150
468	TX1-04	TRANSPORT CONV	45.2	0	STD	5.0	175
469	TX1-05	POWERTURN	3.0	30	STD	2.0	205
470	TX1-06	TRANSPORT CONV	8.9	0	STD	2.0	225
471	TX1-07	POWERTURN	3.0	30	STD	2.0	250
472	TX1-08	TRANSPORT CONV	17.0	0	STD	2.0	225
473	TX1-09	TRANSPORT CONV	10.0	0	STD	2.0	225
474	TX1-10	TRANSPORT CONV	29.9	0	STD	3.0	225
475	TX1-11	POWERTURN	9.0	90	STD	3.0	250
476	TX1-12	INCL/DECL CONV	19.7	0	BKM	3.0	225
477	TX1-13	QUEUE CONV	3.5	0	BKM	2.0	220
478	TX1-14	QUEUE CONV	3.5	0	BKM	2.0	220
479	TX1-15	POWERTURN	9.0	90	BKM	3.0	250
480	TX1-16	POWERTURN	4.5	45	BKM	2.0	250
481	TX1-17	LONG MERGE	6.3	0	BKM	3.0	225
				PT			
	SECTION	TYPE	LENGTH	DEGREE	DRIVE	HP	SPEED
482	TX2-01	LOAD/UNLOAD CONV	38.4	0	STD	5.0	120
483	TX2-02	POWERTURN	3.0	30	STD	2.0	150
484	TX2-03	INCL/DECL CONV	27.5	0	BKM	5.0	175
485	TX2-04	TRANSPORT CONV	39.7	0	STD	5.0	205
486	TX2-05	TRANSPORT CONV	36.8	0	STD	5.0	205
487	TX2-06	TRANSPORT CONV	24.2	0	STD	3.0	225
488	TX2-07	POWERTURN	4.5	45	STD	2.0	215
489	TX2-08	INCL/DECL CONV	10.8	0	BKM	2.0	225
490	TX2-09	SHORT TRANSPORT	4.5	0	BKM	2.0	220
491	TX2-10	POWERTURN	4.5	45	BKM	2.0	215
492	TX2-11	QUEUE CONV	3.5	0	BKM	2.0	220

493	TX2-12	QUEUE CONV	4.7	0	BKM	2.0	220
494	TX2-13	LONG MERGE	6.0	0	BKM	3.0	225
495	XO1-01	TRANSPORT CONV	15.2	0	BKM	2.0	290
496	XO1-02	QUEUE CONV	3.5	0	BKM	2.0	220
497	XO1-03	QUEUE CONV	3.5	0	BKM	2.0	220
498	XO1-04	POWERTURN	4.5	45	BKM	2.0	250
499	XO1-05	LONG MERGE	6.3	0	BKM	3.0	225
500	XO2-01	TRANSPORT CONV	12.0	0	BKM	2.0	210
501	XO2-02	QUEUE CONV	3.5	0	BKM	2.0	255
502	XO2-03	QUEUE CONV	3.5	0	BKM	2.0	230
503	XO2-04	POWERTURN	4.5	45	BKM	2.0	250
504	XO2-05	LONG MERGE	6.3	0	BKM	3.0	225
505	XO3-01	TRANSPORT CONV	14.0	0	VFD	2.0	290
506	XO3-02	QUEUE CONV	4.0	0	VFD	2.0	260
507	XO3-03	QUEUE CONV	4.0	0	VFD	2.0	230
508	XO3-04	QUEUE CONV	4.0	0	VFD	2.0	220
509	XO3-05	POWERTURN	4.5	45	VFD	2.0	220
510	XO3-06	LONG MERGE	6.0	0	VFD	3.0	220
511	XO4-01	TRANSPORT CONV	12.4	0	VFD	2.0	290
512	XO4-02	QUEUE CONV	3.5	0	VFD	2.0	260
513	XO4-03	QUEUE CONV	3.5	0	VFD	2.0	230
514	XO4-04	POWERTURN	4.5	45	VFD	2.0	230
515	XO4-05	QUEUE CONV	4.0	0	VFD	2.0	220
516	XO4-06	QUEUE CONV	4.0	0	VFD	2.0	220
517	XO4-07	LONG MERGE	6.0	0	VFD	3.0	220
518	CN2DN-01	CN2DN PANEL					
519	CN2DN-02	CN2DN PANEL					
	SECTION	TYPE	LENGTH	PT DEGREE	DRIVE	HP	SPEED
520	CN2DN-03	CN2DN PANEL					
521	CN2DN-04	CN2DN PANEL					
522	CN2DN-05	CN2DN PANEL					
523	CN2DN-06	CN2DN PANEL					
524	CN2DN-07	CN2DN PANEL					
525	CN2DN-08	CN2DN PANEL					
526	CN2DN-09	CN2DN PANEL					
527	CN2DN-10	CN2DN PANEL					
528	CN2DN-11	CN2DN PANEL					
529	CN2DN-12	CN2DN PANEL					
530	CN2DN-13	CN2DN PANEL					

531	CN2DN-14	CN2DN PANEL					
532	CN2DN-15	CN2DN PANEL					
533	CN2DN-16	CN2DN PANEL					
534	CN2DN-17	CN2DN PANEL					
535	CN2DN-18	CN2DN PANEL					
536	CN2DN-19	CN2DN PANEL					
537	CN2DN-20	CN2DN PANEL					
538	CN2DN-21	CN2DN PANEL					
539	CN2DN-22	CN2DN PANEL					
540	CN2DN-23	CN2DN PANEL					
541	CN2DN-24	CN2DN PANEL					
542	CN2DN-25	CN2DN PANEL					
543	CN2DN-26	CN2DN PANEL					
543	CP-01	CONTROL PANEL					
543	CP-02	CONTROL PANEL					
543	CP-03	CONTROL PANEL					
543	CP-04	CONTROL PANEL					
543	CP-05	CONTROL PANEL					
543	CP-06	CONTROL PANEL					
544	MCP-01	MAIN CONTROL PANEL					
545	MCP-02	MAIN CONTROL PANEL					
546	MCP-03	MAIN CONTROL PANEL					
547	MCP-04	MAIN CONTROL PANEL					
548	MCP-05	MAIN CONTROL PANEL					

	SECTION	TYPE	LENGTH	PT DEGREE	DRIVE	HP	SPEED
549	MCP-06	MAIN CONTROL PANEL					
550	MCP-07	MAIN CONTROL PANEL					
551	MCP-08	MAIN CONTROL PANEL					
552	MCP-09	MAIN CONTROL PANEL					
553	MCP-10	MAIN CONTROL PANEL					
554	MCP-11	MAIN CONTROL PANEL					

555	MCP-12	MAIN CONTROL PANEL					
556	MCP-13	MAIN CONTROL PANEL					
557	MCP-16	MAIN CONTROL PANEL					
558	MCP-17	MAIN CONTROL PANEL					
559	MCP-18	MAIN CONTROL PANEL					
560	MCP-19	MAIN CONTROL PANEL					
561	MPLC-01	MAIN PLC PANEL					
562	MPLC-02	MAIN PLC PANEL					
563	BDS-TC1-26	BAGGAGE DIMENSIONER					
		List End					

ATTACHMENT 4 – PASSENGER BOARDING BRIDGES

1. Preventive maintenance and inspections in accordance with the OEM’s manuals are required under this Agreement. This attachment provides an overview of required checklists and inspections and sample checklists. The sample checklists may be used if OEM checklists for certain PBB are unavailable, or, they may be used in conjunction with OEM provided checklists. The sample checklists provide minimum requirements. If differences exist with OEM provided checklists, the OEM checklist requirements shall be applied.
2. Checklists are to be completed as inspection items are accomplished. Completed checklists are to be retained and available for review by SFO for the specified duration specified by SFO. Completed checklists may be entered into the automated Maintenance Management System. 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. 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.
4. Daily Operator Checklist
 - 4.1 The PBB operator must complete the Daily Checklist every day before replacing the PBB in service for the day. The PBB operator, unless also trained and qualified to perform maintenance on the PBB, shall not perform any maintenance or repair. All discrepancies are to be noted on the form for maintenance attention. The PBB shall be removed from service for repair or maintenance inspection

immediately if any defect or condition affecting safe operation is found or suspected. Where multiple airlines use the PBB during the day, the operator must complete this checklist whenever the use of the PBB transfers between airlines (airline taking over the PBB accomplishes the checklist) unless a written agreement to accept the condition of the PBB “as is” from the preceding user airline is in place. 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 PBB as required.

4.2 Completed Daily Operator Checklists shall be retained for a rolling one-year period.

5. Weekly Preventive Maintenance Checklist

5.1. Trained maintenance personnel must complete the Weekly Checklist. All discrepancies are to be noted on the form. Discrepancies not corrected on the spot must be scheduled for further maintenance attention. The PBB shall be removed from service for repair and/or further maintenance inspection immediately if any defect or condition affecting safe operation is found or suspected.

5.2. Completed Weekly Preventive Maintenance Checklists shall be retained for a rolling one year period.

6. Monthly Preventive Maintenance Checklist

6.1. Trained maintenance personnel must complete the Monthly Checklist. All discrepancies are to be noted on the checklist. Discrepancies not corrected on the spot must be scheduled for further maintenance attention. The PBB shall be removed from service for repair and/or further maintenance inspection immediately if any defect or condition affecting safe operation is found or suspected.

6.2. Completed Monthly Preventive Maintenance Checklists shall be retained for a rolling two-year period and provided to the Airport quarterly.

7. Quarterly Preventive Maintenance Checklist

7.1. Trained maintenance personnel must complete the Quarterly Checklist. Discrepancies not corrected on the spot must be scheduled for further maintenance attention. The PBB shall be removed from service for repair and/or further maintenance inspection immediately if any defect or condition affecting safe operation is found or suspected.

7.2. Completed Quarterly Preventive Maintenance Checklists shall be retained for a rolling two-year period and provided to the Airport quarterly.

8. Semi Annual Preventive Maintenance Checklist

- 8.1. Trained maintenance personnel must complete the Semi-Annual Checklist. All discrepancies are to be noted on the form. Discrepancies not corrected on the spot must be scheduled for further maintenance attention. The PBB shall be removed from service for repair and/or further maintenance inspection immediately if any defect or condition affecting safe operation is found or suspected. Completed Semi-Annual Preventive Maintenance Checklists shall be retained for a rolling two-year period and shall be provided to the Airport at a request.

9. Annual Preventive Maintenance Checklist

- 9.1. Trained maintenance personnel must complete the Annual Checklist. All discrepancies are to be noted on the form. Discrepancies not corrected on the spot must be scheduled for further maintenance attention. The PBB shall be removed from service for repair and/or further maintenance inspection immediately if any defect or condition affecting safe operation is found or suspected.
- 9.2. Completed Annual Preventive Maintenance Checklists shall be retained for the duration of this Agreement and shall be provided to the Airport at the end of the contract term.

DAILY PBB OPERATOR CHECKLIST	GATE/PBB	DATE/TIME	
COMPLETED BY			
This checklist is to be completed at the beginning of each shift and/or prior to first use by a different airline.			
	<i>Page 1 of 1</i>		
ITEM	DESCRIPTION	OK	REPAIR REQUIRED
1	Check operation of terminal entrance door and lock.		
2	Visually check ceiling panels, flooring in rotunda, tunnels and cab for cleanliness and damage.		
3	Verify that all interior lighting is operational and fixtures are intact.		
4	Visually check gutters and drain(s) for standing water or obstructions.		
5	Visually inspect tunnel ramps for tripping hazards or obstructions.		
6	Check windows for damage.		
7	Check that the cabin safety chain, if provided, is properly installed.		
8	Check the operation and condition of the cab weather door.		
9	Visually check the ramp area (outside of the PBB) for any obstacles that would affect movement of the PBB.		
10	Check operation of the exterior floodlights.		
11	Operate and check controls and indicators at control panel. Operate all test features to verify that all indicators and warning systems are functioning properly. Verify operation and field of view of CCTV camera system if installed.		
12	Partially extend and retract PBB. Listen for abnormal noise(s) that could indicate improper tunnel roller alignment or other issues.		
13	Briefly operate and check canopy curtains, drive systems (up and down/forward and back) and cab rotation system for proper operation.		
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED DO NOT OPERATE PBB IN UNSAFE CONDITION – CONTACT MAINTENANCE IMMEDIATELY			

WEEKLY PREVENTIVE MAINTENANCE CHECKLIST		GATE/PBB	DATE/TIME
COMPLETED BY			
	<i>Page 1 of 2</i>		
ITEM	DESCRIPTION	OK	REPAIR REQUIRED
1	Check seals and flashing at connection of rotunda and terminal building and/or walkway.		
2	Inspect auto level wheel switch.		
3	Check rotunda and rotating cab curtain tension. Apply force from inside PBB approximately 1 meter from the base of the curtain. Curtain should not displace out of guide rail.		
4	Check electrical cables and equipment.		
5	Inspect lift cylinders for leakage.		
6	Inspect hydraulic system, including all connections and fittings, for leaks. Check fluid level in hydraulic reservoir.		
7	Check operation of emergency lighting system.		
8	Check all lights and replace as necessary.		
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED			

WEEKLY PREVENTIVE MAINTENANCE CHECKLIST		GATE/PBB	DATE/TIME
COMPLETED BY			
	<i>Page 2 of 2</i>		
ITEM	DESCRIPTION	OK	REPAIR REQUIRED
9	Check torque of wheel bolts using torque wrench and ensure torque to OEM specifications.		
10	Accomplish complete operational check. Raise, lower, extend and retract, rotate cab to limit switch setting and check operation of all visual and audible alarms.		
11	<i>Not applicable for solid or foam-filled tires.</i> Check tire pressure and ensure pressure to OEM specifications.		
12	<i>Not applicable for solid or foam-filled tires.</i> Inspect tires for damage. Remove tire from service if weather checking, cracking, cuts and snags extend down to the casing ply in the sidewall or bead areas. Cuts and cracks deeper than one ply require the tire to be scrapped.		
13	<i>Not applicable for solid or foam-filled tires.</i> Inspect tires for bulges. Remove tire from service if bulges in any part of the tire tread, sidewall, or bead area are present as they indicate a separation or tire damage.		
14	<i>Not applicable for solid or foam-filled tires.</i> Inspect tires for fabric fraying or groove cracking. Remove tires from service if groove cracking exposes fabric or if cracking undercuts tread ribs.		
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED			

MONTHLY PREVENTIVE MAINTENANCE CHECKLIST		GATE/PBB	DATE/TIME
COMPLETED BY			
	Page 1 of 1		
ITEM	DESCRIPTION	OK	REPAIR REQUIRED
1	Perform daily and weekly checklists.		
2	Not applicable for 2-tunnel PBBs. Inspect both equalizer cables for cracks and excessive wear. Adjust cable tension as required.		
3	Check lubrication levels in all gearboxes and add proper seasonal lubricant as required.		
4	Check all carpets and rubber mats for damage and/or wear.		
5	Inspect the condition of interior and exterior paint (including powder coat or other coatings). Clean off loose scale, rust, etc. and repair (re-coat) as necessary. Check all glass and glass fasteners.		
6	Inspect tension of rotunda and cab curtain chains.		
7	Inspect cab rotation drive motor sprocket and chain.		
8	Inspect canopy retract straps for wear and fraying.		
9	Inspect wheel drive sprocket and chain.		
10	Inspect control console and panels for loose connections and operation of switches.		
11	Replace water filters.		
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED			

QUARTERLY PREVENTIVE MAINTENANCE CHECKLIST		GATE/PBB	DATE/TIME
COMPLETED BY			
	<i>Page 1 of 1</i>		
ITEM	DESCRIPTION	OK	REPAIR REQUIRED
1	Perform daily, weekly and monthly checklists.		
2	Inspect auto level assembly components for signs of wear, missing parts, and security of mounting.		
3	Inspect rotunda to tunnel seals, hinge pins, and floor alignment.		
4	Inspect the height indicator encoder for security of mounting, cleanliness, or damage.		
5	Check connections to hydraulic reservoir for leaks.		
6	Observe and check mechanical connections. Tighten loose bolts as necessary.		
7	Lubricate service door hinges.		
8	Check operation of service door lock mechanism.		
9	Lubricate external tunnel roller rails.		
10	Lubricate cab support rollers.		
11	Lubricate lift column guides.		
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED			

SEMI-ANNUAL PREVENTIVE MAINTENANCE CHECKLIST		GATE/PBB	DATE/TIME	
COMPLETED BY				
	<i>Page 2 of 2</i>			
ITEM	DESCRIPTION	OK	REPAIR REQUIRED	
11	Inspect tunnel and cab rollers, tracks, and stops.			
12	<i>Not applicable for 2-tunnel PBBs.</i> Lubricate sheave pins on the cable equalizing system.			
13	Replace return line hydraulic filter. See OEM maintenance manual for specific replacement intervals.			
14	Inspect all hydraulic hoses and fittings for leaks or damage.			
15	Check hydraulic pump for leaks and proper operation.			
16	Lubricate hydraulic drive motor.			
17	Lubricate cab rotate gear motor.			
18	Check all hydraulic cylinders for leaks, damage, and proper operation.			
19	Lubricate upper and lower cabin bearings.			
20	Lubricate wheel hub gear boxes.			
21	Check all electrical control and power cables for clearance from obstruction, freedom of movement, and secure mating of connector plugs.			
22	Check electrical motor for hydraulic pump for unusual noise, plugged drain holes, loose electrical connection, or damage.			
DESCRIBE ALL ITEMS REQUIRING REPAIR OR OTHER DISCREPANCIES OBSERVED				

ATTACHMENT 5– PBB Equipment List (Common-Use and On-Call)**A. PBB Equipment List – Summary**

PBBs	
Terminal 1, Boarding Area B: B2, B4, B5, B6, B7, B8, B9, B10, B11, B11-S, B12, B13, B14, B15, B16, B17, B18, B19, B20, B21, B22, B23, B24, B25, B26, B27	26
Terminal 2, Boarding Area C: C3, C4, C5, C6, C7, C8, C9, C10 and C11	9
Terminal 2, Boarding Area D: D11, D12, D14, D15, D16	5

A. PBB Equipment List – Detailed

TERMINAL/ BOARDING AREA	GATES	MFG	SERIAL #	MODEL #	INSTAL DATE	PC AIR	REELS	HOSES	400Hz CABL ES	# of Cables	COMMON USE	ON CALL
1/BAB	B2	JBT	34082	A3 64/131- 125R	5/21	Yes	1	2	Yes	1	X	
1/BAB	B4	JBT	33671	A3 64/131- 125R	5/21	Yes	1	2	Yes	1	X	
1/BAB	B5	JBT	33670	A3 64/131- 125R	5/21	Yes	1	2	Yes	1	X	
1/BAB	B6	JBT	33619	A3 64/131- 125R	5/19	Yes	1	2	Yes	1	X	
1/BAB	B7	JBT	33622	A3 64/131- 125R	5/19	Yes	1	2	Yes	1	X	
1/BAB	B8	JBT	33620	A3 64/131- 125R	5/19	Yes	1	2	Yes	1	X	
1/BAB	B9	JBT	33623	A3 64/131- 125R	5/21	Yes	1	2	Yes	1	X	
1/BAB	B10	JBT	33665	A3 64/131- 125R	5/21	Yes	1	2	Yes	1	X	
1/BAB	B11	JBT	34587	A3 64/131- 125R	5/21	Yes	1	2	Yes	1	X	
1/BAB	B11-S	JBT	33666	A3 64/131- 125R	5/21	Yes	1	2	Yes	1	X	
1/BAB	B12	JBT	33624	A3 64/131- 125R	5/19	Yes	1	2	Yes	1	X	
1/BAB	B13	JBT	33625	A3 64/131- 125R	5/19	Yes	1	2	Yes	1	X	
1/BAB	B14	JBT	33626	A3 64/131- 125R	5/19	Yes	1	2	Yes	1	X	
1/BAB	B15	JBT	32957	A3 64/131- 125R	5/21	Yes	1	2	Yes	1	X	
1/BAB	B16	JBT	32956	A3 64/131- 125R	5/21	Yes	1	2	Yes	1	X	

1/BAB	B17	JBT	33627	A3 64/131-125R	5/19	Yes	1	2	Yes	1	X	
1/BAB	B18	JBT	33621	A3 60/119-125R	5/19	Yes	1	2	Yes	1	X	
1/BAB	B19	JBT	32995	A3 64/131-125R	6/20	Yes	1	2	Yes	2	X	
1/BAB	B20	JBT	32959	A3 64/131-125R	6/20	Yes	1	2	Yes	2	X	
1/BAB	B21	JBT	33639	A3 64/131-125R	6/20	Yes	1	2	Yes	1	X	
1/BAB	B22	JBT	33640	A3 64/131-125R	6/20	Yes	1	2	Yes	1	X	
1/BAB	B23	JBT	33641	A3 64/131-125R	6/20	Yes	1	2	Yes	1	X	
1/BAB	B24	JBT	34083	A3 64/131-125R	6/20	Yes	1	2	Yes	1	X	
1/BAB	B25	JBT	32956	A3 64/131-125R	6/20	Yes	1	2	Yes	1	X	
1/BAB	B26	JBT	32958	A3 64/131-125R	6/20	Yes	1	2	Yes	1	X	
1/BAB	B27	JBT	32954	A3 64/131-125R	6/20	Yes	1	2	Yes	1	X	
2/BAC	C3	Jetway	36077	A3-58/110	1988	Yes	1	2	Yes	1	X	
2/BAC	C4	Jetway	36077	A3-58/110	1988	Yes	1	2	Yes	1	X	
2/BAC	C5	Jetway	35306	A3-58/110	1988	Yes	1	2	Yes	1	X	
2/BAC	C6	Jetway	34602	A3-58/110	1988	Yes	1	2	Yes	1	X	
2/BAC	C7	Jetway	35308	A3 53/104	Unknown	Yes	1	2	Yes	1	X	
2/BAC	C8	Jetway	34603	A3 68/141-125R	1988	Yes	1	2	Yes	1	X	
2/BAC	C9	Jetway	35308	A3 60/119	Unknown	Yes	2	2	Yes	1	X	
2/BAC	C10	Jetway	34604	A3 53/104-125R	Unknown	Yes	1	2	Yes	1	X	
2/BAC	C11	Jetway	35309	A3 64/131	Unknown	Yes	1	1	Yes	1	X	
2/BAD	D12	Jetway	31401	A3 60/119-125R		Yes	1	1	Yes	1	X	
2/BAD	D14	Jetway	31397	A3 5/110-125R		Yes	1	1	Yes	1	X	
2/BAD	D15	Jetway	31400	A3/60119-125R	2013	Yes	1	1	Yes	1	X	
2/BAD	D10	Jetway	31406	A364/131 125R	2010	Yes	1	1	Yes	1	X	
2/BAD	D11	Jetway	31399	A3 60/119-125R	2011	Yes	1	1	Yes	1	X	
2/BAD	D1-D9, D16	Jetway	Various	A364/131 125R	2010	Yes			Yes			X
3/BAE	E1-E13	Jetway	Various	A358/116; A361/127	2013	Yes			Yes			X

NOTE: COMMON USE AND ON CALL PBBS ARE SUBJECT TO CHANGE FROM TIME TO TIME

B. PBB ACCESSORIES

NO.	DESCRIPTION	QUANTITY
1	Baggage Lift	3
2	Potable Water Cabinet (PWC) – existing	12
3	PWC – March 2020	9
4	PWC – May 2021	9
5	Aircraft Docking System	4

C. SPARE PARTS LIST

NO.	DESCRIPTION	QUANTITY
1	Starter hose	1
2	5-6 foot sections of PC Air hose	8
3	Door locks for new bridges	4
4	Door locks for old bridges	4
5	Door Battery	3

Appendix B Calculation of Charges

Contractor's Monthly Invoice shall itemize expenses and deductions using the categories below. Compensation paid to the Contractor shall not exceed the amounts indicated in the "Not to Exceed (NTE) or Flat Fee Amount" column below.

Item No.	Charge Type	Not to Exceed (NTE) or Flat Fee Amount
1	Labor - Wages and Benefits	Calculated as indicated in Section 2.1 below
2	SFO Requested Overtime	Calculated as indicated in Section 7 below
3	Management Fee	\$39,360 per month - Flat Fee
4	Other Direct Costs	NTE \$176,500/year
5	Use of Tools, Equipment and Radios	NTE \$115,000/year
6	Parts and Materials	NTE \$200,000/year
7	As-Needed Services	NTE \$105,382/year during the contract term
8	System Availability Standard Adjustments	Calculated as indicated in Section 8 below
9	Mobilization Charges	NTE \$50,000, made in one lump sum payment. See section 11 below.

1. Invoicing – General

- 1.1. Unless approved otherwise by the Airport Project Manager, the Contractor shall submit to the Airport Project Manager, within fifteen (15) working days of the last day of each calendar month, an invoice for the services performed under this Agreement for the previous calendar month. As used herein, the term "Monthly Invoice" shall include the Contractor's bill or written request for payment under this Agreement for services performed.
- 1.2. All invoices shall be made in writing and in a form prescribed by the Airport's Project Manager and in accordance to Section 3.3 Compensation of this contract.
- 1.3. The Contractor must also supply SFO with all certified payrolls and CMD forms through the invoice period.
- 1.4. A monthly Performance Report per Appendix A - Scope of Work, for the invoice period must accompany the invoice.

2. Invoice Detail

Contractor's monthly invoice shall include:

- 2.1 **Labor Costs.** The actual labor hours expended during the prior month for each employee job classification, as supported by timesheets, along with the Hourly Labor Cost (Wages, benefits, and payroll tax). as set forth in Section 2.4 Labor Cost per Employee. However, as required in Section 3.6 of the Agreement, job classifications which must be paid at the prevailing wage rate shall be paid at that hourly wage rate instead of the hourly wage rate specified in Section 2.4, to

the extent the two differ. Contractor shall adjust the Hourly Labor Cost accordingly, and provide documentation of the current prevailing wage rate.

The actual labor hours expended shall approximate as closely as possible to the hours required to meet the staffing levels identified in Appendix C – Weekly Staffing Schedule, as it is amended from time to time by any Service Level Adjustment orders, as described in section 10 below.

- 2.2 **Overtime.** Overtime hours must be clearly documented on the weekly time sheets accompanying the invoice and identified separately on the monthly billing. The invoice shall include a calculation to show how the overtime charges were determined for each class of employee, as well as the reason for the use of overtime. See section 7 of this Appendix for further information on calculation of overtime and when overtime work is authorized.
- 2.3 **Management Fee.** See section 3 below.
- 2.4 **Other Expenses and Deductions.** See sections 4-6, 8, 9 and 11 below.

2.4. Labor Cost per Employee

Table 1: Fixed Hourly Labor Cost during the contract term

Supervisor Staff					*Note costs per hour <u>OR</u> per month based on what will actually be paid on an employee's behalf														
Position Title	No. of Full-Time Positions	Hourly Wage (paid to employee)	Number of Paid Days Off	Health Plan Type (Select Plan Type)	Hourly Health	Monthly Health	Hourly Dental	Monthly Dental	Hourly Vision	Monthly Vision	Hourly Retirement	Monthly Retirement	Monthly Workers Compensation	Monthly Payroll Tax Costs	Monthly Life Insurance	Monthly Disability	Other costs Paid (itemized)	Total Hourly Labor Cost	
Site Manager				EE Only															
				EE + 1															
	1	\$71.41	17	EE + 2	\$7.51		\$0.48		\$0.08		\$2.02		\$147.00	\$1,872.00	\$0.11			\$93.26	
Office Site Administrator				EE Only															
				EE + 1															
	1	\$27.50	17	EE + 2	\$7.51		\$0.48		\$0.08		\$0.75		\$54.00	\$738.00	\$0.04			\$40.93	
Control Room Operator				EE Only															
				EE + 1															
	3.5	\$27.50	17	EE + 2	\$7.51		\$0.48		\$0.08		\$0.75		\$54.00	\$738.00	\$0.04			\$40.93	

Table 2: Initial Hourly Labor Cost for Positions Subject to Prevailing Wage

Front Line Staff					*Note costs per hour <u>OR</u> per month based on what will actually be paid on an employee's behalf														
Position Title	No. of Full-Time Positions	Hourly Wage (paid to employee)	Number of Paid Days Off	Health Plan Type (Select Plan Type)	Hourly Health	Monthly Health	Hourly Dental	Monthly Dental	Hourly Vision	Monthly Vision	Hourly Retirement	Monthly Retirement	Monthly Workers Compensation	Monthly Payroll Tax Costs	Monthly Life Insurance	Monthly Disability	Other costs Paid (itemized)	Total Hourly Labor Cost	
Head Maintenance Technician				EE Only															
				EE + 1															
	3	\$60.45	25	EE + 2	\$11.85						\$10.95		\$884.00	\$1,740.00			\$5.33	\$103.72	
Maintenance Technician				EE Only															
				EE + 1															
	9	\$54.95	25	EE + 2	\$11.85						\$10.95		\$803.00	\$1,624.00			\$5.33	\$97.08	
Laborer/Jammer/Encoder				EE Only															
				EE + 1															
	3.5	\$33.80	25	EE + 2	\$9.30						\$13.36		\$494.00	\$998.00			\$0.78	\$65.85	

3. **Management Fee** –The Management Fee is the fixed monthly fee that Contractor quoted to the City, in its proposal to provide services under this Agreement, and is intended to cover Contractor’s profit and all other costs not addressed elsewhere in this Appendix B.

Monthly Flat Fee	\$39,360	
	Annual Fee	\$472,320.24

4. **Other Direct Costs** **Not to exceed \$176,500/year**
 The City shall not pay for any cost, direct or otherwise, not included in this Section. All reimbursable costs must be supported with receipts, and the commodities and services purchased must be used solely for the purpose of providing services under this Agreement.

Contractor shall obtain pre-approval from appropriate SFO staff before making large expenditures and must keep a record of such expenditures and pre-approvals throughout the contract term in a format that is easily audited. For purposes of this requirement, “large expenditures” means items priced in excess of \$5,000 per unit. For purchases above \$10,000, the Airport requires three quotes to be provided.

Reimbursable costs include the amounts paid for:

- Employee Security Badges
- Employee Parking
- Uniforms
- Cell Phone, landlines, data, fax
- Fuel and Consumables
- Service Vehicle Maintenance
- Office Supplies
- Training
- Licenses and Permits associated with performing the services and work required under this agreement, including CMMS licenses
- Travel (transportation, food, and lodging)
- Shipping and Handling of Spare Parts
- Corporate Insurance coverage purchased pursuant to Article 5 of the Agreement.

Non-Reimbursable costs include but are not limited to:

- Food and beverages that are not a part of an Airport-approved training program
- Computer software programs
- Stationary and/or business cards
- Postage charges for routine certified, first-class and priority mail letters emanating from an office outside the Airport
- Express, next-day, or two-day shipments (e.g., DHL, Fedex, UPS, etc.) unless it is part of an authorized purchase of equipment or other materials and supplies
- Payroll services
- Lost or stolen keys and badge issued by the Airports Security Access Office
- Gifts of any kind
- Airport may add to this list as necessary with prior written notice to the Contractor

5. **Use of Tools, Equipment and Radios** **Not to exceed \$115,000/year**
Following the mobilization period, the Airport and Contractor shall agree upon the monthly fee, Contractor may receive for the use of its tools, equipment, and radios.

6. **Parts and Materials** **Not to exceed \$200,000/year**
For purchases of parts and materials for which Contractor seeks reimbursement, the monthly invoice shall attach documentation of the amount paid by Contractor, including the original invoices from the OEM/supplier.

- 6.1. For purchases exceeding a net cost of \$250 per unit, including taxes and other fees (except shipping and handling), and/or \$250 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.
- 6.2. All costs for materials invoiced to the City shall be the best (lowest) prices available to the Contractor.
- 6.3. The Contractor shall assume responsibility for tracking the warranties available from the vendors on all purchased parts, and exercise those warranties when required.
- 6.4. All quotes shall be included with the invoice along with documentation of the approval to purchase.
- 6.5. In no case shall the Contractor's invoice include costs which the Airport Project Manager has disallowed or otherwise indicated will not be reimbursed.

7. **Overtime**

With the exception of the Site Manager classification the Parties agree that employees with jobs in all job classifications are eligible to receive overtime pay

The Contractor must obtain prior approval from the Airport before permitting or requiring employees to work hours in excess of their regular shift that would result in the receipt of additional overtime pay. The hourly rate of pay for overtime shall be calculated and paid in accordance with applicable law, including but not limited to the Fair Labor Standards Act (FLSA) and the California Wage and Hour Laws.

As the services required under this contract must be provided 24/7/365 days a year, hours worked on Saturdays and Sundays as part of the Weekly Staffing Schedule shall be staffed by employees working their regular shift, and not by employees working overtime shifts, except in extenuating circumstances and with prior approval from the Airport.

The parties agree that the City will reimburse Contractor at the following hour rates for approved overtime:

	Position Title	Overtime Rate	Double Time Rate
1	Site Manager	\$0.00	\$0.00
2	Office Site Administrator	\$58.73	\$75.70
3	Head Maintenance Technician	\$150.09	\$190.17
4	Maintenance Technician	\$139.46	\$175.86
5	Laborer/Jammer/Encoder	\$92.27	\$114.69
6	Control Room Operator	\$58.73	\$75.70

8. System Availability Standard Adjustments

- 8.1. For any calendar month of this Agreement that the Contractor fails to meet or exceed the minimum Performance Requirements as specified in **Appendix A Scope of Work – 3.3 Availability Standard**, a disincentive penalty of 10% shall be deducted from the total amount of the Contractor's monthly invoice.
- 8.2. Availability below **97%** will, at the Airport's discretion, constitute a failure to perform under 8.2.1 (b) of this Agreement.
- 8.3. The Contractor shall calculate operational availability on a monthly basis and any applicable disincentives shall be included in that month's invoice. Backup data shall be provided in an excel spreadsheet to allow for validation of invoice.

9. As-Needed Services

Not to Exceed \$105,382/year

The monthly invoice shall include that month's charges for as-needed services pursuant to any currently active task order(s). Under Subsection 4.1.2 of the Agreement, as-needed services shall be requested by the City through the issuance of a written task order signed by the City and Contractor. The parties agree that any additional workers added on for as needed services will be reimbursed by the City at the same total hourly labor cost rate as the existing employees.

10. Service Level Adjustments

As described in subsection 4.1.1 of the Agreement, a written order may be used to change the quantity of services being provided by Contractor under this Agreement, e.g., by increasing or decreasing the number of labor hours required by the Weekly Staffing Schedule, by adding or deleting BHSs or PBBs for which the Contractor is to provide services, etc. All written orders shall include a description of the adjustment of the services, schedule, duration and cost impact.

11. Mobilization Expenses

- 11.1. The Contractor may be paid for mobilization related expenses up to **\$50,000** and as defined in Appendix A, Section 2.1 ("Mobilization").
- 11.2. Mobilization expenses are payable in a single lump sum amount upon completion of the mobilization period. Mobilization expenses shall include all Proposer's costs prior to the start of full-service Operations, Maintenance and Repair. Mobilization does not include cost for purchasing, renting, or leasing of tools and equipment, which will be at the contractor's sole expense
- 11.3. The Contractor shall submit their request for payment of the lump sum for mobilization expenses as part of their regular monthly invoice.
- 11.4. Contractor shall not be paid for mobilization expenses until the Airport has confirmed that the tasks to be performed under Appendix A, Section 2.1 ("Mobilization") have been completed.

Appendix C – Weekly Staffing Schedule

Staffing Plan Summary			
Position	Quantity	Weekly Hours	Annual Hours
Manager	1	40	2080
Office Site Administrator	1	40	2080
Control Room Operator	3.5	140	7280
Head Technicians/Supervisors	3	120	6240
Maintenance Tech	9	360	18720
Jammer/Encoders	3.5	140	7280
Total Hours	21.0	840	43680

O&M Manager		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Hrs
Daily Head Count		1	1	1	1	1	0	0	
1	Manager	TBD	TBD	TBD	TBD	TBD	OFF	OFF	40
O&M Manager Total									40
		1	1	1	1	1	1	1	
1	Administrator	0700-1530	0700-1530	0700-1530	0700-1530	0700-1530	OFF	OFF	40
O&M Admin Total									40
Control Room		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Daily Head Count		1	1	1	1	1	1	1	
1	Operator	OFF	OFF	0400-1430	0400-1430	0400-1430	0400-1430	OFF	40
2	Operator	0400-1430	0400-1430	OFF	OFF	OFF	OFF	0400-1430	30
3	Operator	OFF	OFF	1400-0030	1400-0030	1400-0030	1400-0030	OFF	40
4	Operator	1400-0030	1400-0030	OFF	OFF	OFF	OFF	1400-0030	30
Operator Total									140
Maintenance 1st Shift		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Daily Head Count		3	2	2	3	3	3	4	
1	Head Technician	0400-1230	0400-1230	0400-1230	0400-1230	OFF	OFF	0400-1230	40
2	Maintenance Tech	0400-1230	0400-1230	OFF	OFF	0400-1230	0400-1230	0400-1230	40
3	Maintenance Tech	OFF	OFF	0400-1230	0400-1230	0400-1230	0400-1230	0400-1230	40
4	Maintenance Tech	0400-1230	OFF	OFF	0400-1230	0400-1230	0400-1230	0400-1230	40
Maintenance 2nd Shift		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Daily Head Count		3	2	2	3	3	3	4	
5	Head Technician	1200-2030	1200-2030	1200-2030	1200-2030	OFF	OFF	1200-2030	40
6	Maintenance Tech	1200-2030	1200-2030	OFF	OFF	1200-2030	1200-2030	1200-2030	40
7	Maintenance Tech	OFF	OFF	1200-2030	1200-2030	1200-2030	1200-2030	1200-2030	40
8	Maintenance Tech	1200-2030	OFF	OFF	1200-2030	1200-2030	1200-2030	1200-2030	40
Maintenance 3rd Shift		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Daily Head Count		3	2	2	3	3	3	4	
9	Head Technician	2000-0430	2000-0430	2000-0430	2000-0430	OFF	OFF	2000-0430	40
10	Maintenance Tech	2000-0430	2000-0430	OFF	OFF	2000-0430	2000-0430	2000-0430	40
11	Maintenance Tech	OFF	OFF	2000-0430	2000-0430	2000-0430	2000-0430	2000-0430	40
12	Maintenance Tech	2000-0430	OFF	OFF	2000-0430	2000-0430	2000-0430	2000-0430	40
Maint. Tech Total									480
Encoder		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Daily Head Count		1	1	1	1	1	1	1	
1	Jammer/Encoders	OFF	OFF	0400-1430	0400-1430	0400-1430	0400-1430	OFF	40
2	Jammer/Encoders	0400-1430	0400-1430	OFF	OFF	OFF	OFF	0400-1430	30
3	Jammer/Encoders	OFF	OFF	1400-0030	1400-0030	1400-0030	1400-0030	OFF	40
4	Jammer/Encoders	1400-0030	1400-0030	OFF	OFF	OFF	OFF	1400-0030	30
Encoder Total									140