

2021 Design and Construction Handbook Technical Changes

Chapter	Title	Specification	PDF Page No.	Change
3.05A	Mechanical Design Requirement		53	Section 1.2(B)(3)(a): Clarification on the requirement for providing permanent means of replacing equipment over 50 lbs. within the pump and fan rooms.
3.05A	Mechanical Design Requirement		53	Section 1.3(O)(6)(c): Provided requirement for HVAC reset schedule.
3.06A	Electrical Design Requirements		73	Section 1.2(B): Reduce requirements for application of FM200 systems. Only require FM 200 at Main electrical room & electrical rooms with automatic transfer equipment. Standard WET systems shall apply to other electrical rooms.
3.06A	Electrical Design Requirements		73-76	Sections 1.3(G); 1.4(B); 1.8(A): New terminal buildings shall have the permanent code-compliant infrastructure POC necessary to connect (1) 2MW trailer mounted mobile generator as a source of standby power. The POC shall interface with the building electrical system at the main switchgear. As a part of the design plans, proposed location of mobile generator shall be identified for LAWA Operations approval. The language shall additionally apply to switchgears that are significantly renovated or modified.
3.06A	Electrical Design Requirements		73-76	Sections 1.3(G); 1.4(B); 1.8(A): New terminal buildings shall have permanently installed generator systems interconnected with the normal power distribution. This configuration allows the backup power system to support additional operational loads, during a utility power outage, when there is sufficient generator capacity. The interconnection & operation of loads shall be based on assigned priority & controlled via a load management system.
3.07A	Plumbing Design Requirements		96	Section 1.3(G)(4)(a): Addition of description for single use occupancy restrooms.
3.08A	Fire Protection Design Requirements		107	Section 1.3: Clarification for electrical room requirements, refers to 3.06(A)
3.11	Public Restroom Design Requirements		127	Section 1.11: Addition of anti-graffiti film
4.01	General Requirements	01 78 00-Closeout Submittals	247	Replaced language in 1.3 Final Models with "Refer to LAWA BIM Standards"
4.09	Finishes	09 91 23 - Interior Painting	453	Section 2.1(A): Addition of new manufacturer
4.10	Specialties	10 28 00 - Toilet Accessories	470, 473	Section 2.1(H) and 2.2(P)(4): Addition of Anti-Graffiti film requirement for mirrors.
4.10	Specialties	10 28 00 - Toilet Accessories	470, 471	Section 2.2(A)(5) and 2.2(H): Addition of Gojo as manufacturer for basis of design.
4.14	Elevators, Escalators, and Moving Walkways	14 21 00 - Heavy Duty Transit Type Machine Room Less Elevators	549	2.12(E)(9): Additional clarification on bumpers. Added note to coordinate use of bumpers with FTSD management and Operations.
4.21	Fire Protection	21 05 00-Common Work Results for Fire Protection	638	Section 3.3(J): Removed the requirement for LAWA approval for penetrations through structural members, as only the SEOR is required.
4.22	Plumbing	22 11 17 -Recycled Water Distribution	751-761	Specification is new
4.22	Plumbing	22 40 00-Plumbing Fixtures	814	Section 2.7 and 2.8: Addition of sensor / touchless type fixtures. Removal of filter and refrigeration requirements.
4.23	Heating, Ventilation, Air-Conditioning (HVAC)	23 05 16-Expansion Fittings and Loops	846	Section 2.1:Revision to manufacturers.
4.23	Heating, Ventilation, Air-Conditioning	23 21 16 - Hydronic Piping Specialties	918	Section 2.3 (B) and (C): Replaced "red-appearing mercury" to "blue fill type" for Thermometers.
4.23	Heating, Ventilation, Air-Conditioning	23 31 13- HVAC Ducts and Casings	949	Section 2.2: Update in manufacturer
4.23	Heating, Ventilation, Air-Conditioning	23 36 00 - Air Terminal Units	980	Section 2.1(H): Added "min 2 row" to the minimum 2 pass hot water coil requirements for the air terminal units for further clarification.
4.23	Heating, Ventilation, Air-Conditioning	23 81 23-Computer Room Air Conditioners	1090	Section 2.1: Added clarification on the requirement for stainless steel pans.

4.26	Electrical	26 12 00 - (NEW) Medium Voltage Transformers	1299	Completely new section governing the use of medium voltage transformers when used by a project.
4.26	Electrical	26 22 00 - Transformer Efficiency	1322	Part 2: Change standard to require 80 deg temperature rated transformers in lieu of current 115 deg rated.
4.26	Electrical	26 25 00 - IP54 Busway rating	1387	Section 2.2(D): Add language requiring enclosed busways to be IP54 rated
4.26	Electrical	26 28 26 - ATS No-load break-type bypass switch	1415	Section 2.1: Change spec to require NO-LOAD-break type in lieu of LOAD-BREAK-type
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1759, 1770	Section 1.1(A) & 2.2(B): GE Picture Perfect to Lenel OnGuard (LOG)
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1759, 1770	Section 1.1(f): General Electric (GE, now a United Technologies Corporation) Micro/5 changed to Lenel OnGuard X series security control panel(SCP)
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1759, 1770	Section 1.1(f): GE Picture Perfect Version 4.5.1 changed to Lenel OnGuard 7.5
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1759, 1770	Section 1.1(f): Added Video Systems
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1759, 1770	Section 1.1(g): Added Qognify Critical Situator (Situator)
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1759, 1770	Section 1.1(g): Remove IMTG Office of Airport Technology & Business Systems(ATBS) add IT Security & Public Safety Systems (ITSPS) unit
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1759, 1770	Section 1.1(h): Add hardware power supplies shall be located in LAWA IT Rooms as indicated in the drawings.
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1759, 1770	Section 1.1(h): Change - The electrified locking hardware power supplies shall be located in LAWA IT Rooms, or at the location of the portals
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1760	Section 1.1(i): Remove PIV format
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1760	Add - and must include the Open Supervised Device Protocol (OSDP) feature
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1760	Section: 1.2(a)(6): Add - ASP LAWA Police Division Airport Security Plan
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1760	Section: 1.2(a)(11): Add - LAWA ITSPS LAWA IT Security and Public Safety Systems
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1760	Section: 1.2(a)(12): Add - LOGS Lenel OnGuard System
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1760	Section: 1.2(a)(19): Add - Situator Qognify Critical Situator
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1760	Section: 1.2(a)(20): Add - OSDP Open Supervised Device Protocol
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1761	Section 1.4(a)(2): Add - Include manufacturer proposed/scheduled date to discontinue and/or cease sale and/or supporting the equipment/device, if this available
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1762	Section 1.4(a) (6-a, 7-f): Add - alarm monitoring
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1762	Section 1.4(a)(7-h): Add - Connection/integration of new servers and devices with the existing Lenel On guard System (LOGS)
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1764	Section 1.5(A): The security System Contractor or approved subcontractor shall be Lenel OnGuard certified security systems installer for the specific type of ACAMS equipment being installed. The Security Systems Contractor shall offer proof of certification by submitting a copy of certification with the Bid
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1764	Section 1.6(B): Contractor submits to LAWA all evidence to support the claim that the item proposed for substitution is equal to preferred to, and/or better than the specified item
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1766	Section: 1.9(B)(2): Note that all programming and configuration of the Lenel OnGuard Software shall be done by LAWA. The Security System Contractor shall submit programming(and configuration) sheets to LAWA to indicate how the security devices and portals are to be configured.
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1767	Section 1.9(B)(3): Add - Permission to re-use existing infrastructure must be obtained in writing. There is no guarantee that such a request will be approved by LAWA. The Security Systems Contractor must provide justification for all such requests and must indicate the cost savings to LAWA
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1767	Section 1.9 (B)(10): Security Systems Contractor shall immediately bring this to the attention of LAWA so the area can be appropriately noted and documented with photographs where necessary. The Security Systems Contractor shall only proceed to work in such areas when given written approval to do so

4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1768	Section 1.10(B)(1): The quantity of spare parts shall equal no less than 10% (or as approved by LAWA IMT ITSPS) of the items provided and installed under this contract
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1769	Section Part 2- 2.1(E): In addition to any acceptance testing requirements specified elsewhere, the ACAMS shall be fully tested and accepted, with test results recorded in individual test reports for LAWA review and acceptance. All ACAMS devices and equipment shall be tested. Test and acceptance reports shall include the following at a minimum
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1769	Section 2.1(E)(1-h): Add - Keypad-alarm reset
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1769	Section 2.1(E)(4): Add - CAD, and/or Situator
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1770	Section 2.2 (H): The installing Security Systems Contractor shall provide a Configuration Schedule (or Programming Sheet) detailing the parameters necessary to configure the devices. Security Contractor to work with LAWA ITSPS to define the format of the Configuration Schedule
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1771	Section 2.2(K)(1-d): Programming the elevator cab card reader to grant access to specific floor(s) via LOGS floor tracking
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1771	Section 2.2(K)(2-a): Add - The Contractor shall explore the LOGS features for a methodology to accomplish this in a simpler way via software configuration. The Contractor shall propose this methodology to LAWA for review and approval
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1771	Section 2.2 (L)(3): Remove - Duress Alarm Systems shall be provided for all CBP Outbound Interview Rooms. Each CBP Outbound Interview Room shall be provided with a duress button, audio/visual alarm, latching module and keyed reset/disable control. Each keyed reset/disable control shall include one(1) green LED wired to illuminate when the key is in the active (not reset/disable) position. Each duress system shall be connected to the ACAMS system for alarm monitoring. Each Duress Alarm System shall include a latching module so as to provide an alarm output to the ACAMS which shall remain active(in the alarm condition) until it is reset by the keyed reset disable control
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1771	Section 2.2(M): Remove - micro controller DI board Add - security control panel
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1771	Section 2.2(N)(1): An SJB shall be provided near the baggage portal on the airside to house the LNL-1320-01 reader board and necessary control relays. A Belden 9841 and Belden 5300FE cables shall be provided in conduit from the SJB to the IT Room. Refer to drawings
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1772	Section 2.3(A)(1): The "LAWA ACAMS Design Guideline Schematics for Lenel OnGUARD Access Control System" document presents the hardware design guidelines schematics for all new LAWA access control portal installations (excluding Access Posts). The Security System Contractor must request from LAWA ITSPS the latest copy (current version 2.0 12/04/20) of this document prior to making bid, cost, and/or installation decisions. Deviations from these Design Guidelines Schematics due to technological obsolescence may be proposed to LAWA ITSPS by the Security Systems Contractor with justification and are subject to LAWA ITSPS written approval. All recommendations, requests for clarification and/or requests for additional guideline(s) must be submitted in writing by the Security Systems Contractor to LAWA ITSPS through the Request for Information (RFI) process
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1772	Section 2.3(A)(3): The Contractor is responsible for procuring and furnishing to LAWA, Lenel OnGUARD card reader licenses for all new installations
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1772	Section 2.3(A)(4): Prior to submitting cost proposals for any project(s), the Contractor shall check with LAWA ITSPS to determine the number of, and specification for, Lenel OnGUARD system Communication Servers to be purchased and furnished to LAWA to support the required quantity of controller panels
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1772	Section 2.3(B): Change to Applications and Security Control Panel
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1773	Section 2.3 (B)(b): All parts above for 16-door configuration apply with the following increased quantities: All quantities in Items 2.3-B-1-a-(1) through 2.3-B-1-a-(4) shall each be doubled.
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1776	Section 2.3(B)(C): Remove Card Reader Interface Module specifications
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1776	Section 2.3 (D): Remove Input Interface Module specifications
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1776	Section 2.3(E): Deletes Wiegand Interface Unit and identifies SJB Location
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1776	Section 2.3(E)(3): Remove GE model WIU 4 (no Substitutions)
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1776	Section 2.3 (F)(1): Remove Wall Mount requirements
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1776	Section 2.3 (F)(2): Remove 12VDC Power requirements
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1776	Section 2.3 (E): Change Card Reader Compatibility requirement to - Card Readers and Card Readers with Keypads shall be compatible with LAX HID iClass issued identification and access control cards, and shall be compatible with HID 13.56 MHz Contactless Smart Card technologies, and must include the Open Supervised Device Protocol (OSDP) feature.
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1776	Section 2.3(F): Change card reader requirement to - *HID model R40 with Open Supervised Device Protocol (OSDP) feature included (no substitutions) *The firmware shall support both HID iClass and PIV card formats *Provide reader with terminal block terminations (not pigtail).

4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1776	Section 2.3(F): Change Card Reader with Keypad requirement to - Protocol (OSDP) feature included (no substitutions)(no substitutions) *HID model RK40 with Open Supervised Device *The firmware shall support both HID iClass and PIV card formats *Provide reader with terminal block terminations (not pigtail).
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1776	Section 2.3(G)(3): Flush Mount - Nascom N1178CB/ST, N78B/ST, and/or N1178W/ST GE 1078/1076 Series, or approved equal
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1776	Section 2.3(G)(4): Surface Mount - 1.Surface mounted Door Position Switches shall be high security triple-biased devices. 2.Nascom N505AU/STSD GE 2700 Series, or approved equal
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1777	Section 2.3 (H)(2)(a): Change requirement to - Alarm Horns shall be connected to the output interface module provided in the door's associated LNL-X3300 access control panel
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1777	Section 2.3 (H)(3): Add - Alarm Horns may require Indoor/Outdoor Back box: Cooper Wheelock, 10B-W
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1777	Section 2.3 (H)(4): Change requirement to - System Sensor, MHW Mini Horn, MHW; or Sensor Systems, Model P2W-P; or approved equal
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1777	Section 2.3 (H)(4): Change requirement to - Cooper Wheelock, MIN-T series, 25-9357-A or approved equal
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1777	Section 2.3 (L)(1-5): Remove requirement
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1777	Section 2.3(M)(1-3): Remove requirement
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1777	Section 2.3 (N)(4): Provide tamper switch to trigger on opening of SJ8 cabinet wired to appropriate connection board and program as an individual alarm point
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1777	Section 2.3(O)(5): Remove requirement
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1777	Section 2.3(K)(1): Provide and install ACAMS workstations, including but not limited to; computers, monitors, printers, operating system, and software licenses for fully functional LOGS workstations
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1777	Section 2.3(K)(2-b): Intel® Wireless-AC 9560, Dual-band 2x2 802.11ac Wi-Fi with MU-MIMO
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1778	Section 2.3(K)(3): Displays for operator workstations shall Dell 27 Monitor, P2419H or approved equal.
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1778	Section 2.3 (Q)(1): Remove requirement
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1783	Section 3.4 (C): Add requirement - Cloth labels are preferred over vinyl
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1784	Section 3.6(A)(2)(b)(1)(viii): Add requirement for Keypad-alarm reset, etc.
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1785	Section 3.6 (A)(2)(b)(4): Add ACAMs integration with CCTV cameras CAD, and/or Situator
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1786	Section 3.8: Information regarding all equipment including model, nomenclature, serial number, function, location, recommended preventative maintenance schedule and other pertinent data will be stored in the CMMS database. Security Systems Contractor shall include in their Bid the cost for collecting and inputting this data for all systems and equipment provided by this Contract into this database. Prior to gathering information for the CMMS document, the Security System Contractor shall request from LAWA the latest fields to be populated in the CMMS
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1787	Section 3.9: Add the following requirement - Final Acceptance cannot occur until after all documentation is received, reviewed, updated and approved.
4.28	IT Electronic and Security Systems (Low Voltage)	28.13.00 - ACCESS CONTROL AND ALARM MONITORING SYSTEM (ACAMS)	1787	Section 3.9: Add the following requirement - The Project shall withhold 15% of all invoices until 30 days after all documentation has been received, reviewed, revised/updated, and approved
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1816	Section 1.1(C): Add "Internal storage network switches" to the list of systems included in the "CCTV System".
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1816	Section 1.1(E): Add "VMS and VSS systems" and "at no additional cost to LAWA" to the last sentence of the paragraph.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1816	Section 1.1(G) (1): Add Cisco Catalyst 9500 series to the list of communication equipment.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1817	Section 1.1(H): Add "design" to the list of responsibilities of Security Systems Contractor and add the following sentence at the end of the paragraph: "...The installing Security Systems Contractor shall procure the services of LAWA IT CCTV O&M Contractor for assembly, installation, integration, and configuration, of VMS/VSS hardware and new camera licenses in the existing LAWA VMS/VSS environment, at no additional cost to LAWA."
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1817	Section 1.1(I): Remove from the requirements : "4. VMS Folders, Profiles, Camera Groups, Pages and Map Layout Design Parameters"
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1817	Section 1.1(J) (1) - Add second sentence in the paragraph as following: "... Retention period for total recording shall be for 30-days and event recordings for 12-months. ..."
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1818	Section 1.1(J) (4,5): Add the following items to the list of requirements: ".... 4. Security Systems Contractor shall provide outage free transition and/or integration of the new VMS/VSS components to the existing LAWA systems and network. This transition should involve zero interruption to CCTV user operations. 5. Support Direct Streaming from security cameras to CCTV workstations and SSM Multicast protocol as the main Video Streaming protocol within LAWA MPLS network.

4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1818	Section 1.1(J) (6): Change ability to interface with to "LAWA's Active Directory " instead of " LAWA's Identity Management".
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1818	Section 1.1(J) (10): Add the following requirement: Security Systems Contractor shall... Provide exact locations of the new security devices such as cameras and ACAMS doors on the map layouts to be imported into the VMS. Security Contractor is required to provide the exact GIS coordinates of every all installed security devices.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1822	Section 1.2(B) (4): Add the following requirement: "4. The Security Systems Contractor or approved subcontractor shall be Genetec Security Center VMS and Dell Isilon VSS certified on the specific type of equipment being proposed for installation"
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1823	Section 1.3(B) (9) (b,c,d): Addition of following items to the requirement: "..... b. Detailed calculation of the VMS servers and VSS storage sizing, capacity and performance. c. Detailed report to include diagrams describing the proposed hardware and software's compliance to LAWA requirements d. Detailed calculations to demonstrate the proposed solution's performance to sustain 99.999% video storage and video replay capabilities.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1825	Section 1.3(D) (6): Add the following requirement: "6. Security Systems Contractor shall submit a complete set of configuration data and engineering schedules that include but are not limited to rack layouts, server names, storage partitions, IP addresses, configuration data, shared folders, VMS/VSS configurations, and security and application hardening configurations. This information shall be complete in form to allow LAWA to rebuild the VMS/VSS systems (if needed if the as built work is not complete, the Security Systems Contractor will be so advised and shall complete the work as required."
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1825	Section 1.4 and 1.5: Remove role of "Design Engineer" from all the items in this section.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1826	Section 1.6(A)(3): Change existing LAWA VMS/VSS to " LAWA Genetec Security Center and Dell Isilon storage" in the first sentence, and replace "LAWA designated CCTV maintenance contractor" to IT CCTV O&M contractor"
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1826	Section 1.6(A)(5): Revise the requirement to the following: 5. The Security Systems Contractor shall obtain the approval of LAWA IT for the final approval of the design, Bill of Materials, and layout of the Video System equipment to be installed prior to the procurement and installation of any materials or equipment. Shop drawings showing proposed interconnections as well as room / rack layouts shall be submitted as part of the initial design for approval prior to commencing installation.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1828	Section 1.7(D-F): EQUIPMENT CERTIFICATION requirements revised as follows: D. Major items of equipment that serve the same function must be the same make and model. Exact make and model is expected when provided by LAWA. E. The proposed VMS/VSS equipment and its integration shall be fully certified by Genetec and Dell EMC. The Contractor shall provide turnkey system warranty through Genetec for the delivered VMS and VSS. F. Equipment and materials installed shall be compatible in all respects with other items being furnished and with the existing LAWA Genetec Security Center VMS and VSS so that a complete and fully operational system will result. LAWA will not accept a standalone or incompatible VMS/VSS solution.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1828	Section 1.8(B): Warranty requirements removed and revised as follows: D.B. Materials shall be covered by each equipment/software manufacturer's warranty.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1829	Section 2.1(A): Add the following to the beginning of the paragraph: Currently LAWA is in the process of selecting a new VMS/VSS solution. In the interim, the Security Systems Contractor is expected to provide a solution compatible with LAWA's existing Genetec Security Center VMS and Dell Isilon VSS to integrate into as an expansion. Revise manufacturers to the following: 1. Video Management System – Genetec, Montreal, Canada. 2. Video Storage System – Dell EMC, Hopkinton, MA/Video Cameras and Encoders –Axis Communications Inc., Lund, Sweden. 3. Audio/Video Encoders –Axis Communications 4. Audio Encoders – Siqura Audio Decoders – TKH Security Group, Germantown, MD
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1829	Section 2.1(C) (1): Add the following items to the list of Security System Contractor: "1. Agrees to submit details of the design, schedule and cost of their initial proposal to substantiate their justification for the credits they are providing towards the proposed substitution. The information provided as part of this request for substitution shall be deemed reasonably acceptable by LAWA."
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1829	Section 2.1(C) (4): Add the following sentence to the end of the paragraph: "...The Security System Contractor is additionally liable to cover the redesign costs , if LAWA determines that the design as submitted has any deficiencies. "
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1830	Section 2.2(A): Addition and revisions to the following items in this section: "..... 10. The VMS application shall support Direct Streaming of the video from cameras to the CCTV operator workstations and simultaneously to the VMS servers 11. The VMS Application Suite shall allow the user to monitor and playback video on a full screen, a map, or a layout page displaying at minimum of 25 simultaneous video streams. 12. The user shall have the ability to monitor and playback video on a full screen, or on a camera layout page displaying a map. CCTV operator shall be able to open multiple video streams on the map. 14. The VMS shall allow user the ability to define private and/or public groups of tasks or camera layouts independent of the system administrator and have the ability to share those tasks with those who perform similar functions in his/her organization. 20. The VMS application shall provide extensive health monitoring capabilities for monitoring health of the cameras, VMS servers and VSS status. 21. The VMS equipment shall be modular and scalable to at least 10,000+ cameras. 22. The VMS application shall support all storage technologies including but not limited to NAS, SAN, DAS and Cloud.

4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1832	Section 2.2(A) (23): Performance requirement revisions as follows: ".... H. Remove "or 4CIF" in the first sentence. J. Change "2.5Mbps" to "3.5Mbps" o. Add the following sentence at the end of this item: "The VMS maps shall be Geo-referenced prior to addition of the new cameras." p. Add revise the items under this requirements as follows: (5) Capability to switch from Multicast streaming to Unicast streaming entirely or individual segments of network as needed. (8) Have the capability to restrict the uses to predefined replay period. q. Revised to the following: " VMS shall include Video Management through the Directory Server and its associated roles. It shall run on Microsoft Operating Server using Microsoft SQL Server." r. Change in the last sentence "20 days" to "30 days" for minimum recording requirements. s. Change "NVRs" to "VMS Servers" in every item in this session.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1834	Section 2.2(A) (23) (5): Remove the following requirements under this item: " The system shall support recovery from network disconnections, by transferring buffered video from the source VMS NVR to the VSS, once the network had been recovered." "The VMS shall support video streaming from the NVR or that directly from the cameras or encoding devices."
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1835	Section 2.2(A) (23) (5) (13): Add "cameras and encoder devices" in the first sentence.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1835	Section 2.2(A) (23) (5) (15): Add as a second sentence the following: "...This redundancy shall be implemented for all components of the VMS including but not limited to Directory servers, video archivers, and redirectors."
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1835	Section 2.2(A) (23) (5) (16): Add the following : "The VMS redundancy shall consist of a minimum one (1) failover video archiver for every four (4) primary video archivers."
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1835	Section 2.2(B): Add requirements for VMS hardware: "VMS hardware shall be Genetec StreamVault SV-4000 or SV-7000 series servers. Contractor shall provide Genetec manufacturer's turn-key hardware warranty for a minimum of 5 years. The Security Systems Contractor shall submit for LAWA's approval the itemized equipment list to include network switches and their usage in their deployment of the VMS hardware.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1835	Section 2.2(C): Add VMS Software requirements: "The new VMS software shall be Genetec Security Center 5.9 or better. Contractor is required to submit the software version to LAWA's approval prior to procurement."
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1835	Section 2.2(D): Add VMS Configuration: Security Systems Contractor shall identify all of Genetec Security Center 5.9 server roles, itemize and map the proposed server roles for each proposed hardware, and describe their usage to support the overall proposed VMS configuration. The description shall include but not be limited to explicit number of cameras per server, storage partitions per server, primary and failover archiver configurations, and video streaming configuration.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1886	Section 2.3(F): Change minimum requirements to the VMS Viewing Workstations model HP Z240 to Dell Precision 3640 Tower and specifications in the items (a-j) as following: a. Processor: Intel Core i7-10700 8 core Processor, (2.9 GHz up to 4.8 GHz with Turbo Boost, 16MB Cache, b. Hard drive: 256GB PCIe NVMe Class 40 M.2 SSD c. Memory storage: DDR4-2933 8GB UDIMM Nin-ECC Memory. 32 GB recommended. d. Video card: Nvidia Quadro P620, 2GB, 4 mDP to DP adaptor. e. 9.5 mm Slim DVD-Writer Optical Disc Drive f. Dual monitors supporting at least 1920x1080 resolution with VGA, HDMI and display port options. LAWA standard is currently NEC MultiSync E241 N-BK-LED 24" monitor. For locations with 4K monitor requirement, provide dual monitor with support for 3840x2160 resolution to meet LAWA standards. g. Operating systems: Latest operating system supported by LAWA within 6 months of installation. Currently LAWA standard for workstations is Windows 10. h. Standard keyboard and mouse i. Standard PC speakers j. Axis Model T8311joystick for PTZ camera control (optional)
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1836	Section 2.4(C): Add requirement for VSS hardware: The Video Storage System hardware shall be Genetec StreamVault SVS-7010-E NAS EMC Isilon. Security Systems Contractor shall provide a fully operational VSS with minimum 3 years warranty. The proposed VSS system shall be compatible with the existing LAWA Genetec SVS-7010-E NAS EMC Isilon VSS. Security Systems Contractor shall submit for LAWA's approval the itemized storage equipment list to include internal and external storage switches and their usage in deployment of the storage system.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1836	Section 2.4(D) and (E): Add requirement for VSS Internal and external switches. D. VSS Internal Switch: The Video Storage System internal switches shall be Dell Z9100 or better. Security Systems Contractor shall submit a Request for Information to LAWA to obtain the latest compatible model prior to purchase. E. VSS External Switch: The Video Storage System external switches shall be Cisco Catalyst 9500 or better. Security Systems Contractor shall submit a Request for Information to LAWA to obtain the latest compatible model prior to purchase.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1837	Section 2.4(F): Add requirement for VSS software: Shall include but not be limited to . Dell OneFS 8.2.2, SmartQuota, and SmartConnect . Security Systems Contractor must submit for LAWA's approval all storage system software versions prior to procurement.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1837	Section (2.4) (G): Add requirement for VSS Configuration: Security Systems Contractor shall itemize the storage components and provide drawing(s) that describe the interconnections between the proposed components of the storage system. The description shall include fault tolerant configuration showing explicit amounts of raw and usable storage, partition sizes, and configurations of SmartConnect and SmartQuota.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1837	Section 2.4(H): Remove the following requirement for VSS. Support both Red Hat Linux and Windows operating systems.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1837	Section 2.4(H) (7): Change to the following requirement for VSS. Storage technology shall be compatible and consistent with the current LAWA IT supported NAS video storage system.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1837	Section 2.4(H) (10): Change to the following requirement for VSS. Disk drives shall have the highest density with no less than 10 Terabytes (TB) per disk and a minimum rotational speed of 7200 RPM. SSD drives or higher speeds are preferable as required by LAWA
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1837	Section 2.4(H) (12): Change to the following requirement for VSS. Solution must have the ability to mix and match on premise and cloud technology and manage all data as one system.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1838	Section 2.4(H) (15): Change to the following requirement for VSS. Include redundant power supplies

4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1838	Section 2.4(H) (17): Change to the following requirement for VSS Leverage both software-based and hardware-based RAID with RAID 6 double parity and hot spares.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1838	Section 2.4(H) (29): Change to the following requirement for VSS Include the Windows Active Directory integration for integration with LAWA Domain to enhance the security of the storage media.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1838	Section 2.5 (C): Add the following requirement for Encoders. Currently LAWA only accepts the AXIS Q74 series video encoders and Siqua A-80 Audio encoders. The specific composition and chassis model of the device depends on the number of required ports.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1839	Section 2.5(G): Remove table with old Encoder models
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1839	Section 2.6(B): Add requirement for Video Decoders: The Video Decoder shall be Genetec Security Center 5.9 compatible
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1841	Section 2.6(F) - Add requirement for the Network Switches For internal Dell Isilon communications, the Security Systems Contractor shall provide Dell Z9100 switches along with all supporting SFP modules and cables as part of the NAS storage configuration.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1841	Section 2.6(G): Add requirement for the Network Switches For external communication between the 4 different segments outlined in line item A above, the contractor shall propose appropriate layer 2 switches from the LAWA approved list. Non-Cisco switches will not be accepted for the external communication switches.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1841	Section 2.6(H): Add requirement for the Network Switches LAWA will perform Layer3 switch configuration .
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1841	Section 2.7(H): Add requirement for the Wire & Cable LAWA has specific requirements for the cables used in their datacenter. Contractor is required to coordinate with LAWA IMTG to obtain the exact size and color of cables required for the VMS/VSS deployment.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1841	Section 2.8(G): Add requirement for the System Security All components of the VMS and VSS shall be integrated with LAWA infrastructure which include but are not limited to Active Directory, Anti-Virus applications, and various security monitoring tools as directed by LAWA.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1843	Section 3.2(C): Remove the following requirement: " During the deployment phase the Security Systems Contractor shall provide Warranty and Operations and Maintenance support. Upon system acceptance by LAWA, the Security Systems Contractor shall ensure LAWA CCTV Maintenance Provider will maintain the new devices and software for a minimum of two (2) years from date of acceptance at no additional cost to LAWA ."
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1843	Section 3.2(L): Add the following sentences at the end of this requirement: "...The installation and configuration of all Layer 2 switches are the responsibility of the Security Systems Contractor. The configuration shall be performed by a Cisco certified engineer after approval of the proposed configuration templates by LAWA.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1844	Section 3.2(O): Add list of requirements on how the Security Systems Contractor shall submit a complete design package
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1844	Section 3.2(P): Add the following requirement for design package. LAWA shall review and examine all of the above submittals
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1844	Section 3.2(Q): Add the following requirement for design package. Security System Contractor may only proceed with the procurement and installation of the VMS/VSS equipment upon LAWA approval of the above mentioned submittals.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1844	Section 3.2(S): Add the following requirement: The new VMS/VSS shall be fully configured and tested based on the detailed design and implementation plan initially approved by LAWA.
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1845	Section 3.2(T): Add the following requirement: Once the initial configuration and testing is completed and prior to any integration with existing LAWA systems, LAWA representatives will examine the configured systems and provide necessary approval for the integration with LAWA
4.28	IT Electronic and Security Systems (Low Voltage)	SECTION 28 23 13 - VIDEO SURVEILLANCE, STORAGE, RECORDING AND MANAGEMENT SYSTEMS	1845	Section 3.2(X): Add the following requirement: Upon approval from LAWA, the Security System Contractor shall procure services of the existing LAWA CCTV O&M Contractor to install and integrate the new VMS/VSS with the existing LAWA VMS/VSS at no additional cost to LAWA.
9.02	DCH Milestones matrix		7 of 18	Clarify electrical design milestone information required at each percentage of project delivery (PDB, 5%, 30%, 60%, 90%, 100%, deferred submittals)
9.03	LAWA Construction Safety Program Requirements		21 of 88	Revised contact information
9.11	LAWA Survey Standards			Existing Information, relocated to its own section.
9.15	LAX Tenant Signage Standards			Deleted
10.01 (A)	How to Use the BIM Standards			Deleted
10.01 (B)	VOL 1 LAWA Survey Standards			Rename 'LAWA Survey Standards' Move to DCH Sec 9 Removed unnecessary language
10.01 (B)	VOL 2 LAWA BIM Requirements			Rename 'LAWA BIM Standards' Removed unnecessary language Improved language based on lessons learned
10.01 (B)	VOL 3 LAWA BPXP Template			Rename 'LAWA BPXP Template' Move to LAWA BIM Library
10.01 (C)	LAX Survey Control Network			Moved to DCH Sec 9
10.01 (E)	VNY Survey Control Network			Moved to DCH Sec 9