ADDENDUM NO.1 TO CONTRACT NO. <u>C1540</u> For DURKIN ELEMENTARY SCHOOL Annex

8445 S. Kolin Avenue Chicago, IL 60631

DATE: January 10, 2012

NOTICE OF CHANGES IN CONTRACT DOCUMENTS

The following changes are hereby made in the Contract Documents.

CHANGES TO BID DOCUMENT DRAWINGS:

Change #4	Chast C1.1 Descripe Indon
Change #1	Sheet G1.1, Drawing Index; Under the plumbing heading, after PD1.0A, ADD sheet identification "PD1.1 Plumbing Demolition First Floor Plan".
Change #2	Sheet C2.0, plan view 1; DELETE 3 light poles and concrete bases located in the courtyard, ADD dimensions identifying the concrete scoring/banding to the courtyard pavement as shown on attached sketch CSK-01.
Change #3	Sheet C5.3, detail 1; ADD control joints as shown on attached sketch CSK-02.
Change #4	Sheet C5.3, detail 5; DELETE portion of note 3 "Minimum 1% of total cross section Refer to structural plans". ADD concrete reinforcement and notes for typical downspout steel pipe column (post), typical of 5, as shown on attached sketch CSK-03.
Change #5	Sheet AS.2, detail 1 + 1/A1.1A; ADD downspout support column (post) and foundation adjacent to north western most concrete rainwater harvesting cistern (north of column C-10). ADD detail reference tag "5/C5.3 and 5/A5.4", reference attached sketch ASK-4.
Change #6	 Sheet A1.1A, floor plan and 2/A8.1; A. ADD 1'-4" dimension from back of all corridor lockers to the leading edge of all wing-walls. B. ADD one brick expansion joint at interior corner near column 2-D. C. ADD control joint general notes to sheet: "General Control Joint Notes: 1. Coordinate fire-rated wall and associated control joint requirements with locations of fire-rated wall assemblies shown on G2.1. Where a wall with a lower fire-rating abuts a wall with a higher rating, control joint rating(s) shall match the higher rated assembly req'mts. 2. The Contractor shall coordinate control joint requirements between all related / affected trades and submit proposed (coordinated) joint locations with air-barrier, cold-formed framing, CMU reinforcement, and gypsum board assembly submittals. 3. Provide wall control joints at exterior perimeter cold-formed frame, gypsum board, and exterior sheathing walls at maximum 30'-0" on center; coordinate with details 2+4/A6.9. 4. Provide wall control joints at exterior perimeter CMU back-up walls at maximum 20'-0" on center, coordinate with details 3+4/A6.9.

Change #7 Change #8	 Provide wall control joints at interior gypsum board and metal frame walls where shown, and where not shown, at maximum 30'-0" on center, coordinate with typical details 8, 9 & 13/A9.2 for walls. Provide wall control joints at interior CMU walls where shown, and where not shown, at maximum 20'-0" on center, coordinate with typical details 4, 5, &6/A9.2. Provide control joints at interior ceiling suspended gypsum board ceiling and soffits where shown and, where not shown, at maximum 30'-0" on center, coordinate with typical detail 9/A6.5." Sheet A1.2, roof plan; At existing building, above existing kitchen toilet (to be demolished) ADD note: "Patch existing roof opening where existing toilet exhaust fan is removed". Sheet A1.2A, roof plan; Near column line G-8, DELETE note "Structural low-point T.O. steel elev. = +17'-2 ½"" and REPLACE with "Structural high-point T.O. steel elev. =+17'-2 ½"".
Change #9	Sheet A3.1, Elevation Keynote Legend;
Change #9	 A. At keynote 8; DELETE portion of note "Security Screams" and REPLACE with portion of note "Exterior Metal Window Guards (spec. section 08661)". B. At keynote 14; DELETE portion of note "Acoustic Mechanical Equipment Surround Panels" and REPLACE with portion of note "Sound Control Barrier (Specification section 13080)".
Change #10	 Sheet A3.1, details 3+5; A. ADD detail section reference tag at louvers located in brick veneer wall with CMU back-up (total of 2), key detail to 3/A6.11 as shown on attached sketch ASK-1. B. ADD detail section reference tags at louvers located in brick veneer walls with cold-formed metal frame back-up (total of 2); key detail to 4/A6.11 as shown on attached sketch ASK-2.
Change #11	Sheet A3.2, Glazing Legend; DELETE glazing descriptions in schedule and REPLACE with glazing type descriptions listed in specification section 08801(3.4) Glazing Schedule.
Change #12	 A3.4, wall mock-up detail; A. ADD note "Provide 4"H ground-faced CMU wall base at all 8" nominal CMU on the mock-up as per base type "BL" as identified for BASE/SILL on finish schedule, sheet A13.0; 4"H ground faced filled, Trendstone Plus "Shadow Gray" or Van Poppelen Bros. Satin Stone "Ventura"". B. ADD note "Ground-faced CMU vertical joints shall be flush struck with colored mortar to match as selected by architect from manufacturer's full range of colors". C. ADD note "Mock-up CMU shall be 8x8 scored type with 1" bull-nose profile outer corners".
Change #13	Sheet A5.3, detail 1; ADD graphic for 3 missing 24"H, 3" thick metal wall panels from base of wall to sill, installed over CMU and air-barrier on exterior wall face.
Change #14	Sheet A5.4, detail 4; At Vestibule 131, REVISE graphically the exterior CMU walls along gridlines E-7 and F-

	4 to 8x8 scored CMU (block); all exposed CMU in this space shall be scored 8x8 (on floor plans adjust cross-hatch to match dense 8x8 pattern).
Change #15	Sheet A5.4, detail 5; ADD new detail for north scupper and atypically sized rainwater harvesting cistern as indicated on attached sketch ASK-4 (new detail 5/A5.4). Refer to Civil drawings for column footing details and reinforcement.
Change #16	 Sheet A5.5, detail 3; A. ADD horizontal dimension from building face of concrete rainwater cistern to end (base) of v-shaped downspout "1'-4" and angle "45-degrees". B. ADD note "downspout, support column and post – typ. at four locations, similar at fifth location".
Change #17	 Sheet A6.2; A. Detail 2, delete boxed note regarding 2-hour walls with glazing. B. Details 2+3, at note "window wall mfrs" beneath keynote "104-C" DELETE word "panning" and REPLACE with "trim". C. Detail 7, at note "friction fit mineral wool insul" (third note from top) correct spelling for "cavities". D. Detail 8, at note "piping for fire department" (second note from top on right) correct spelling for "connection".
Change #18	 Sheet A6.3; A. Details 2, 4, 5 at note "water based, acrylic infused" correct spelling of "silicone". B. Detail 4, extend new CMU infill at right-hand side to within ½" of existing construction, install mineral wool in void, backer rod and sealant at interior of existing building. C. Detail 5, DELETE note 1 and REPLACE with: "1. Saw-cut and selectively remove existing brick veneer from foundation to parapet (full height) where new annex link abuts existing building. Locate cut 2-inches outboard of new interior wall face and ½-inch outboard of exterior face of new rigid board insulation. Protect existing building sheathing and repair if damaged." D. Detail 5, at note 8, ADD note "Provide 45-degree vertical cut in insulation to accommodate thermal expansion and contraction north of building expansion joint, provide compressible filler full-height between the rigid board insulation and the existing building saw-cut for water-tight seal.". E. Detail 7, at note "return masonry" (top note), DELETE word "return" and REPLACE with "extend".
Change #19	Sheet A6.4; Detail 1, hold interior layers of gypsum wallboard off foundation ½-inch and ADD note and graphic "backer rod and sealant, typ.".
Change #20	 Sheet A6.5; A. Details 1, 2, 3, 6; DELETE note "5/8"x5/8" prefinished reveal trim @perimeter" and REPLACE with "manufacturers prefinished edge suspension trim". B. Details 5, 6; DELETE portion of note "corner bead" and REPLACE with "J-bead".

Change #21	 Sheet A6.6; A. Detail 2, DELETE note "4" downspout to cistern" and REPLACE with "6-inch long, 6-inch diameter downspout extended to V-shaped downspout, coord. w/5/A5.4". B. Detail 6, ADD Manufacturer's adjustable extension and secure drain to deck with under deck clamp as specified/scheduled. C. Detail 7, ADD vertical dimension from top of roof surface to top of curb "12-inches
Change #22	 Sheet A6.8; A. Details 2, 3, 4, 7 & 10; ADD vertical dimension from top of roof surface to top of roof curb "8-inch minimum, typ.". B. Detail 6; ADD vertical dimension from top of roof surface to underside of thru-wall
Change #23	flashing "8-inch minimum, typ.". Sheet A6.10, detail 5; ADD fire-stopping and smoke-seal in metal deck flutes where shaftwall system abuts underside of metal deck.
Change #24	 Sheet A6.11; A. ADD new detail 3/A6.11 for typical section detail through louver at brick veneer and CMU wall as indicated on attached sketch ASK-1. B. ADD new detail 4/A6.11 for typical section detail through louver at brick veneer and cold-formed framing wall as indicated on attached sketch ASK-2. This head detail shall be similar for all exterior hollow-metal door openings with loose lintels.
Change #25	Sheet A7.1, detail 2; ADD graphic for VAV 1-1.1 and SA 1-1.1 to left of alternating tread stair and note "Locate mechanical ductwork and associated elements tight to south wall as far as practicable from alternating tread stair, locate stair as far north as practicable to avoid conflict with other equipment, ductwork, etc. in room. Contractor shall coordinate as required"
Change #26	 Sheet A8.1; A. Detail 1; REVISE all new CMU wall hatch that will be visible from Vestibule 131 to be 8"x8" scored block (CMU); this includes visible portions of exterior walls, and west return wall adjacent tto doors D131A and D131B. B. Detail 2; ADD 1'-4" dimension from back of locker to leading edge of locker wingwalls on either side of MDF room door.
Change #27	 Sheet A8.2 details 3+5; A. Details 3 &5; ADD a 12'-8" vertical dimension from finished floor to the centerline of the horizontal duct running parallel to the exterior glazing. Add a 1'-0" horizontal dimension line from the soffit along the exterior wall to the centerline of the horizontal duct. B. Details 2, 3, 4 &5; ADD a 9'-0" vertical dimension from finished floor to the underside of the suspended lighting.
Change #28	Sheet A8.3 details 3 & 5; ADD a 12'-8" vertical dimension from finished floor to the centerline of the horizontal duct running parallel to the exterior glazing. Add a 1'-0" horizontal dimension line from the soffit along the exterior wall to the centerline of the horizontal duct.

Change #29	Sheet A8.4.1; ADD dimension for glazed lite in office 123; 4'-0"W frame, locate 6'-0" north of warming oven wall opening.
Change #30	 Sheet A8.4.2; A. Details 1, 2, 3, &4; ADD a 12'-4" vertical dimension line from finished floor to the centerline of the ducts running along gridline 7 and 9. Add a 3'-11 ½" horizontal dimension line from gridline 7 and 9 to the centerline of the respective duct as it penetrates the wall along gridline D. Add a 1'-3 ½" horizontal dimension line from gridline 7 and 9 to the centerline of the respective duct as it runs along the exterior wall. B. Details 1, 2, 3 &4; ADD a 11'-4" vertical dimension line from finished floor to the underside of the suspended lighting in this room. C. Detail 5; at note "Surface mounted light" DELETE "Surface mounted" and REPLACE with "recessed".
Change #31	 Sheet A8.5; A. At detail 1, ADD demolition of existing wall mounted TV arm. B. At detail 1, ADD: "abatement and demolition of existing floor tile in Existing Vestibule E114D shall be included in work scope". C. At detail 1, at note regarding removing existing broken glass panel, REVISE note to "panels" (plural). D. At detail 2, at replacement of existing broken glass panel, ADD: "Verify size and location of broken panels in field prior to work". E. At detail 3, add general ceiling note "Refer to A2.1A for additional information, keynotes, symbols, etc." F. At detail 3, add existing reverse soffit approximately 12" north of exterior glazing, add note "Re-paint existing reverse soffit components (vertical and horizontal) paint color PT-1". G. At detail 3, at suspended ceiling grid elevation tag ADD note beneath 9'-0" AFF: "match existing". H. At detail 3, at new suspended gypsum board ceiling tag, DELETE note "8'-8" and revise to "match existing ceiling height".
Change #32	 Sheet A12.1 A. In Door Schedule, REVISE Glazing Type "G5-L" for vestibule interior window wall assemblies Doors D103B, D103C, D111A, D111B, D116A, and D116B to type "G2: 1/4" thick clear tempered glass (Safety Rated)". B. For aluminum window wall Frame Types 5, 6, 7 + 8, REVISE the bottom of the sidelites to be comprised of two (2) horizontal mullions with infill consisting of insulated metal panel at exterior + prefinished aluminum closure at interior (finishes to match window wall); ref A3.2 and A4.3. C. For Door Type 3, REVISE lower vision panel to be 2'-3"AFF, middle vision panel to be 4'-0"AFF, and top vision panel to be 5'-9"AFF. Final locations to be coordinated with height of lockset and panic hardware.
Change #33	Sheet A13.0; DELETE finish note 2 and REPLACE with "Provide 8x8 face-scored CMU in all areas as scheduled on floor plans and as noted on exterior wall sections and interior elevations".

Change #34 Sheet A13.2. detail 3: A. At note "Paint steel interior window frame + door frame to match existing color". **DELETE** "existing color" and **REPLACE** with: "Color PT-1 (white)". B. At Existing Vestibule E114D ADD CMU PT-1 (wall paint), carpet "CP-1", and wall base "VC1" in Existing Vestibule E114D, including door and transom frames (interior exposure only". C. ADD CMU PT-1 for library room side of exposed CMU Walls that will not receive gypsum board. D. ADD note "Remove, clean, and paint existing mechanical wall louver adjacent to E Mech. E114C" Sheets A14.0, A14.1A, A14.1B; Change #35 A. ADD and install a wall-mounted 18"x18" sign in Boiler Room 112 (similar to type ES-1 shown on sheet A14.0, red capital letters on white background) which states: "In case of boiler failure, heating redundancy is available at rooftop units (RTU), RTU discharge air temperature shall be reset manually by trained maintenance personnel only". B. **ADD** and install self-adhered no-smoking sign type "NSM-1" at all exterior entrances of new and existing building total of seven (7) locations. Signs shall be reverse-printed and adhered to inside face of exterior door or side-lite glazing and visible to exterior. One each at Main Entry E131, Annex Vestibule 103, Annex Vestibule 101 (courtyard), Annex Vestibule 111, Annex Vestibule 116, Annex Vestibule 131 (east doors), Annex Vestibule 131 (courtyard doors). Clean substrate prior to application for proper adhesion. Refer to attached sketch ASK-3. C. **ADD** mechanically fastened painted metal no-smoking sign type "NSM-2" secured to masonry adjacent to all exterior entrances where adhesive signs cannot be mounted to glazing, total of eight (8) locations. One each at Kitchen Hallway 125, Vestibule C (E208C, east doors), Vestibule C (E208C), west doors), Vestibule NE (E140), Vestibule SE (E138), Receiving (E134), Vestibule (E112C), Vestibule (E114D). Refer to attached sketch ASK-3. Change #36 Sheet S1.1, partial foundation plan; A. At exterior retaining wall note near column A-10, **REVISE** detail drawing reference in note to 15/S2.1 as indicated on attached sketch SSK-06. B. At west exterior stair note near column A-7, **REVISE** detail drawing reference in note to 15/S2.1 as indicated on attached sketch SSK-07. Sheet S1.2, roof framing plan; Sheet S6.1, masonry elevations; Change #37 A. S1.2 & 3/S6.1; **ADD** three (3) lintel type "L1" at the east annex wall as shown on attached sketches SSK-01 and SSK-04. Each lintel shall be provided with throughwall flashing as identified on ASK-1 and ASK-2 in brick veneer with CMU or coldformed framing back-up (respectively). B. S1.2; **ADD** one (1) lintel type "L2" at the east annex wall as shown on attached sketch SSK-01 to match elevation 3/S6.1. C. S1.2 & 5/S6.1; **ADD** one (1) lintel type "L1" at the MDF room louver as shown on attached sketches SSK-02 and SSK-05. All lintels shall be provided with through-wall flashing as identified on ASK-1 and ASK-2 in brick veneer with CMU or cold-formed framing back-up (respectively). D. S1.2; **ADD** one (1) lintel type "L2" at the east entrance of vestibule 101 as shown on attached sketch SSK-02 to agree with elevation 5/S6.1.

Change #38	Sheet S4.1; At detail 2, ADD axial load in columns for the design of moment frame connections as shown on attached sketch SSK-03.
Change #39	 Sheet M1.1A; A. ADD hydronic differential pressure sensor in Janitor room 127 as indicated on attached sketch MSK-1. B. ADD balancing valves in N. Corridor 110 as shown on attached sketch MSK-2. C. In Pump room 113 RELOCATE two gas cocks upstream of gas regulators to each gas-fired water heater.
Change #40	 Sheet M2.1A; A. DELETE three (3) fire dampers at ductwork in walls separating the Kitchen from the Servery as shown on attached sketch MSK-3. B. REVISE duct silencers 1-1.4A, 1-1.4B at Kitchen Servery, and 2-11B at Office 145 from Tee duct silencer into (2) straight 3-ft. silencers each as shown on attached sketch MSK-4 and as updated on schedule (ref. MSK-6). C. DELETE three (3) fire dampers at ductwork in perimeter walls of Storage 120. These are one-hour rated walls. D. DELETE one (1) fire damper in ductwork in the perimeter wall of Storage 119. This is a one-hour rated wall. E. ADD one (1) fire damper at 26x10 duct at east side of Boiler Room 112. F. At Storage Room 120 ADD note "Locate ductwork, VAV, and SA as far south in room as possible, coordinate placement of equipment, supports, connections, and associated elements to avoid conflict with adjacent roof access stair." G. At Dining room, add note: "18-inch diameter round supply ductwork passing through Dining Room 121 shall be round, insulated double-wall construction where exposed and insulated where concealed." H. ADD general note: "General Note: provide volume dampers for all S1 and S6 type diffusers." I. In Electrical Room 126, REVISE transfer air grilles from 360 CFM to 500 CFM. J. RELOCATE / RECONFIGURE transfer grilles and ductwork in Pump Room 113 and Boiler Room 112 as shown on attached sketch MSK-5.
Change #41	Sheet M2.2A; ADD General Notes: "2. All outdoor air ductwork shall be aluminum or stainless steel." And "3. Outdoor air intakes shall terminate with 45-degree cut."
Change #42	 Sheet M5.1; A. DELETE duct silencer schedule and notes, REPLACE with updated schedule and notes as shown on attached sketch MSK-6. B. At Gas Fired Rooftop Unit Schedule, DELETE note 2, and REPLACE with: "2. Provide minimum of two independent refrigerant circuits." C. At Fan Schedule, ADD remark #14 to EF-4, ADD note: "14. Provide two thermostats, see controls drawing." D. At Fan Schedule, at EF-2, in remarks column DELETE note 8; there is no direct drive controller required for EF-2. E. At VAV Schedule, ADD note: "6. Titus Alpha Stand-Alone Controller provided by box manufacturer with programmable digital sensor. Sensor shall be installed with locking tamper-resistant cover."

Chana : #40	Chart ME 2.
Change #43	 Sheet M5.2; A. At Boiler Schedule, ADD note applicable to all sections: "7. Provide step down gas regulator and gas train." B. On Boiler Schedule, at B-1, REVISE flow rate to 45gpm, REVISE efficiency to 89%.
	6970.
Change #44	Sheet M6.1;
change #44	At Detail 5, REVISE detail reference to detail 6/M6.5 (detail reflected on attached sketch MSK-7).
Change #45	Sheet M6.5; ADD detail 6 as shown on attached sketch MSK-7.
Change #46	 Sheet M7.4; A. ADD primary air temperature sensor to details 1&2. B. REVISE Drawing Note 3 to read "The space temperature sensors for each VAV box controller shall have digital display of space temperature, digital setpoint adjustment buttons, and programmable schedules. Provide locking covers for all space temperature sensors." C. REVISE space temperature sensor description in details 1 and 2 to read "Programmable Temperature Sensor with Locking Cover."
Change #47	Sheet M7.5; At Drawing Notes, DELETE reference to "Electrical Room". Retain balance of note; shall apply to exhaust fans as noted.
Change #48	Sheet M8.1 REVISE Gas pipe routing to Boiler (B-1) revised to maintain straight diameter requirements downstream of gas flow meter as shown in MSK-8
Change #49	Sheet FP.01; DELETE note 27 regarding sidewall sprinklers in elevator shaft.
Change #50	 Sheet FP1.1A; A. In North Corridor 110 and South Corridor 105 two sprinkler mains are shown within the perimeter soffits, RE-ALIGN note arrows to point to mains located in corridor, not in classrooms. B. At Dining Room 121 ALIGN sprinkler supply line west of column line "D" co-planar with sprinkler lines within Dining room, delete piping offset within dining room. If offsets are required they shall occur in areas concealed to view. C. Delete duplicate note near B-8 to increase legibility; note reads "Provide sprinklers rated at greater than 200-degrees Fahrenheit in electrical closet."
Change #51	Sheet ES1.1; ADD note and leader at handhole nearest the existing building main entrance: "Handhole and associated conduit for future AIPHONE, future AIPHONE and pedestal by others".
Change #52	Sheet E1.1A; A. At each classroom, at the center of each teaching wall (total of ten locations), DELETE one (1) Quad IG receptacle and REPLACE with one (1) duplex IG

	receptacle. B. ADD missing graphic information related to existing 6-classroom annex and vestibule as indicated on attached sketch ESK-1.
Change #53	Sheet E1.1B; ADD a speaker / push button in Boiler Room 112 and Pump Room 113 near the door to each room.
Change #54	Sheet E2.1A; ADD missing graphic information related to existing 6-classroom annex and vestibule as indicated on attached sketch ESK-1.
Change #55	Sheet E6.8; At details 6, 7, 9, 10 DELETE baluns, CCTP patch cord, and CCTV-UTP RJ-45 jack and plug termination. Extend sufficient cable from CRE for termination at camera.
Change #56	 Sheet E7.1; A. DELETE detail 3 Library Power and Lighting Demolition Plan, and replace with REVISED detail 3 as shown on attached sketch ESK-3. B. DELETE detail 4 Library Power and Lighting Enlarged Plan, and replace with REVISED detail 4 as shown on attached sketch ESK-4.

CHANGES TO SPECIFICATIONS

CHANGES TO BOOK 3 TECHNICAL SPECIFICATIONS:

Change #57	Schedule of Drawings;
	 A. Under the plumbing heading, after PD1.0A, ADD sheet identification "PD1.1 Plumbing Demolition First Floor Plan". B. ADD section 16782A Digital Video Surveillance Infrastructure and Backbone System C. ADD section 16782B Digital Video Surveillance System Components
Change #58	 Specification Section 01352 LEED Requirements; D. ADD to Item 1.3,E,1 the following: "Provide date stamped photos, inspection logs and reports, and descriptions of corrective action." E. ADD to Item 1.3,F,10 the requirement to provide chain-of-custody certificates for the forest, transport (if required due to change in ownership of the material or product), supplier/manufacturer, and vendor. F. ADD to Item 1.3,F,13 the following: "c. Monitor and record dates, occupancy, outdoor air delivery rates, internal temperature, and humidity during flush-out period." G. REVISE Item 3.3,B,1,a + Item 3.3,B,2,a to read: "a. Coordinate operating requirements with project schedule and seasonal conditions to determine the length of time required for flush-out prior to occupancy." H. ADD Item 3.3,B,2,b as follows: "b. Maintain an internal temperature of at least 60 deg F (16 deg C) and a relative humidity no higher than 60 percent."
Change #59	Specification Section 04200; Under Part 2 Products, 2.1(A)(4) DELETE "1900psi; per ASTM C90" and REPLACE with "3500 psi; per ASTM C-216".

Change #60	Specification Section 06101 Carpentry; ADD to Item 1.2,C,1 the requirement to provide chain-of-custody certificates for the transport (if required due to change in ownership of the material or product), supplier/manufacturer, and vendor.
Change #61	Specification Section 06400 Architectural Woodwork; ADD to Item 1.2,D,6 the requirement to provide chain-of-custody certificates for the transport (if required due to change in ownership of the material or product), supplier/manufacturer, and vendor.
Change #62	Specification Section 06401 Modular Casework; ADD to Item 1.2,D,4 the requirement to provide chain-of-custody certificates for the transport (if required due to change in ownership of the material or product), supplier/manufacturer, and vendor.
Change #63	Specification Section 16781 CCTV System and Components; DELETE section 16781 as issued and REPLACE with 16781 CCTV System and Components, 1-page, attached.
Change #64	 Specification Section 16782A + 16782B; A. ADD section 16782A Digital Video Surveillance Infrastructure and Backbone System, 12-pages attached. B. ADD section 16782B Digital Video Surveillance System Components, 17 pages attached.
Change #65	Specification Section 15074; Under sub-part 2.4(B), last sentence, DELETE mounting type "SLR" and REPLACE with type "SLRS".
Change #66	Specification Section 15815 Metal Ducts; A. Specification 15815 Metal Ducts revised to include double-wall round and flat-oval ducts and fittings. After Section 2.5 ADD: "2.6 DOUBLE WALL ROUND AND FLAT-OVAL DUCTS AND FITTINGS A. Manufacturers: applicable to factory-fabricated duct and fittings. Subject to compliance with requirements, provide products by one of the following manufacturers: 1. Lindab Inc. 2. McGill AirFlow LLC. 3. SEMCO Incorporated 4. Sheet Metal Connectors, Inc. B. Flat-Oval Ducts: Indicated dimensions are the duct width (major dimension) and diameter of the round sides connecting the flat portions of the duct (minor dimension) of the inner duct. C. Outer Duct: 340 stainless steel (outdoor application) / G90 galvanized steel (indoor application) complying with SMACNA's "HVAC Duct Construction Standards – Metal and Flexible", Chapter 3, "Round, Oval, and Flexible Duct, "based on static-pressure class unless otherwise indicated. 1. Transverse Joints: Select joint types and fabricate according to SMACNA's "HVAC Duct Construction Standards – Metal and Flexible" Figure 3-1, "Round Duct Transverse Joints" for static-pressure class, applicable sealing

requirements, materials involved, duct-support intervals, and other provisions in SMACNA's "HVAC Duct Construction Standards – Metal and Flexible".

- a. Transverse Joints in Ducts Larger than 60 inches in Diameter: Flanged.
- 2. Longitudinal seams: Select seam types and fabricate according to SMACNA's "HVAC Duct Construction Standards Metal and Flexible" Figure 3-2, "Round Duct Longitudinal Seams" for static-pressure class, applicable sealing requirements, materials involved, duct-support intervals, and other provisions in SMACNA's "HVAC Duct Construction Standards Metal and Flexible".
 - a. Fabricate round ducts larger than 90 inches in diameter with butt-welded longitudinal seams.
 - b. Fabricate flat-oval ducts larger than 72 inches in width (major dimension) with butt-welded longitudinal seams.
- 3. Tees and Laterals: Select types and fabricate according to SMACNA's "HVAC Duct Construction Standards Metal and Flexible" Figure 3-5, "90 Degree Tees and Laterals" and Figure 3-6, "Conical Tees" for static pressure class, applicable sealing requirements, materials involved, duct support intervals, and other provisions in SMACNA's "HVAC Duct Construction Standards Metal and Flexible".
- D. Inner Duct: Minimum 0.028-inch solid sheet steel.
- E. Interstitial Insulation: Fibrous-glass liner complying with ASTM C 1071, NFPA 90A, or NFPA 90B; and with NAIMA AH124, "Fibrous Glass Duct Liner Standard."
 - 1. Maximum "R" Value: R=5.0 for interior ducts, R=8.0 for exterior ducts.
 - 2. Install spacers that position the inner duct at uniform distance from outer duct without compressing insulation.
 - 3. Coat insulation with antimicrobial coating."
- B. Under section 3.1(B) **ADD**:
 - "5. DOUBLE WALL DUCTWORK:
 - A. Double wall ductwork type 304 SS outer, solid sheet steel inner with fibrous glass insulation."

Change #67

Specification Section 15840 Air Terminal Units;

Under 2.3 CONTROLS, **DELETE** paragraph "A" and **REPLACE** with: "A. Fan-Powered Boxes are controlled by the Temperature Control System under Division 15. The velocity sensor and 24v secondary transformer shall be furnished by the manufacturer and coordinated with Division 15. The controller and actuator shall be furnished under Division 15 and installed under this section. Temperature sensors and control wiring shall be furnished and installed by the temperature controls contractor. Provide controls to meet Titus Alpha BACnet Controller which is basis of design."

Change #68

Specification Section 15958 Sequence of Operation;

Specification 15958 Sequence of Operation revised to reflect heating plant redundancy controls between hot water boiler and rooftop units;

A. Section 3.2(H) Gas Heating Control, after sub-part "1" **ADD**: "2. The RTU gas heater is sized to provide heating redundancy in the instance where the hot water plant is offline / unavailable when there is a call for heating. The discharge air temperature at each RTU shall be reset manually up to 85°F by authorized maintenance personnel only. The heating LAT setpoint shall be monitored and adjusted as needed to maintain occupant comfort in as many zones as possible."

B. Section 3.3 VAV Box With Hot Water Reheat Control, ADD: "L. Changeover Mode (Non-Hydronic Heating): If the hot water plant is offline during heating season, the LAT from the RTU shall be reset manually by authorized maintenance personnel. The VAV controller shall sense the increased supply air temperature from the RTU via the temperature sensor integral to the VAV box controller and switch the Supply Air Temperature Changeover mode from COOL to HEAT. When in HEAT mode and the space temperature is above setpoint the damper shall close. When in HEAT mode and the space temperature is below setpoint the damper shall open. The minimum volume setpoint shall be as scheduled on the drawings during the occupied period and shall be set to zero otherwise. This changeover sequence is based on Titus BACnet Alpha controller as basis of design."
C. Section 3.4 Hot Water Plant (B-1, HWP-1), ADD: "I. If the hot water plant is offline and unavailable when there is a call for heating, additional heating shall be provided

by each RTU. The LAT at each RTU shall be reset manually by authorized

ATTACHMENTS:

personnel up to 85°F."

ATTACHIVIENT	
1	CSK-01, 1-page (courtyard detailed dimensions)
2	CSK-02, 1-page (ADA grate in courtyard)
3	CSK-03, 1-page (downspout support foundation)
4	ASK-1, 1-page (section detail louver opening in brick veneer wall w/CMU back-up)
5	ASK-2, 1-page (section detail louver opening in brick veneer wall w/cold-formed framing
	back-up)
6	ASK-3, 1-page (no smoking sign)
7	ASK-4, 1-page (Section at north scupper)
8	SSK-01, 1-page (partial plan, lintels at east wall)
9	SSK-02, 1-page (partial plan, lintels at south link)
10	SSK-03, 1-page (moment frame elevations)
11	SSK-04, 1-page (partial elevation, lintels at east wall)
12	SSK-05, 1-page (partial elevation, lintels at courtyard)
13	SSK-06, 1-page (partial foundation plan at north)
14	SSK-07, 1-page (partial foundation plan at west)
15	MSK-1, 1-page (partial mechanical piping first floor plan annex)
16	MSK-2, 1-page (partial mechanical piping first floor plan annex)
17	MSK-3, 1-page (partial mechanical HVAC first floor plan annex)
18	MSK-4, 1-page (partial mechanical HVAC first floor plan annex)
19	MSK-5, 1-page (partial mechanical HVAC first floor plan annex)
20	MSK-6, 1-page (duct silencer schedule)
21	MSK-7, 1-page (single pipe roof penetration detail)
22	MSK-8, 1-page (partial enlarged mechanical piping plan)
23	ESK-1, 1-page (partial electrical power first floor plan annex)
24	ESK-2, 1-page (partial electrical lighting first floor plan annex)
25	ESK-3, 1-page (library power and lighting enlarged plan)
26	ESK-4, 1-page (library power and lighting demolition plan)
27	Specification Section 16781, 1-page (CCTV System Components)
28	Specification Section 16782A, 12-pgs. (DVS System Infrastructure & Backbone System)
29	Specification Section 16782B, 17-pgs. (DVS System Components)

END OF ADDENDUM NO.1