

- E. Six-Month Adjustment: Approximately six months after the date of Substantial Completion, the Installer accompanied by representatives of the manufacturers of latchsets and locksets and of door control devices, and of other major hardware suppliers, shall return to the Project to perform the following work:
1. Examine and re-adjust each item of door hardware as necessary to restore function of doors and hardware to comply with specified requirements.
 2. Consult with and instruct owner's personnel in recommended additions to the maintenance procedures.
 3. Replace hardware items that have deteriorated or failed due to faulty design, materials, or installation of hardware units.
 4. Prepare a written report of current and predictable problems (of substantial nature) in the performance of the hardware.

3.05 CLEANING

- A. Clean adjacent surfaces soiled by hardware installation. Clean finished hardware per manufacturer's instructions after final adjustments has been made. Replace items that cannot be cleaned to manufacturer's level of finish quality at no additional cost.

3.06 PROTECTION

- A. Protect finished Work under provisions of Section 01 7000.
B. Do not permit adjacent work to damage hardware or finish.

3.07 SCHEDULE - ATTACHED: COSA FIRE STATION #18 - HARDWARE SETS

END OF SECTION

COSA Fire Station #18 Hardware Sets

SET #01

Doors: 101C, 113B, 129

1 Continuous Hinge	A110HDC 83		AB
1 Exit Device	99EO	SP28, US28	VD
1 Cypher Trim	DL 1200ET	SP28, US28	AL
1 Mortise Cylinder	42 LA KEYWAY	32D	SA
1 Door Closer	SC71 DS SC70-18PA SC70-30 SC70-61 TBWMS	689	FL
1 Door Bottom	315 CN 36"		PE
1 Threshold	2005 AV 36"		PE

SET #02

Doors: 119

3 Hinge	BB1279 4 1/2 x 4 1/2 NRP	US26D	HA
1 Passage Set	T101S Q	626	FL
1 Door Closer	SC81 RW/PA TBWMS	689	FL
1 Wall Stop	236W	US32D	HA
3 Door Silencer	307D	GREY	HA

SET #03 - A

Doors: 102B, 102C, 103B, 103C, 105A, 106A, 107A, 108A

3 Hinge	BB1279 4 1/2 x 4 1/2 NRP	US26D	HA
1 Auto Door Bottom	4301 CPKL 36"		PE
1 Lockset	T521BD Q	626	FL
1 Interchangeable Core	C607	626	FL
1 Wall Stop	236W	US32D	HA
1 Weatherstrip	379 CR 1 x 36" 2 x 84"		PE

SET #03 - B

Doors: 115A, 116A, 117A, 118A, 122A, 123A, 124A, 125A, 141, 142

3 Hinge	BB1279 4 1/2 x 4 1/2 NRP	US26D	HA
1 Auto Door Bottom	4301 CPKL 36"		PE
1 Lockset	T301S Q	626	FL
1 Interchangeable Core	C607	626	FL
1 Wall Stop	236W	US32D	HA
1 Weatherstrip	379 CR 1 x 36" 2 x 84"		PE

SET #04

Doors: 101, 110, 111, 114, 120, 126, 144

3 Hinge	BB1279 4 1/2 x 4 1/2 NRP	US26D	HA
1 Privacy Set	T301S Q	626	FL
1 Door Closer	SC81 RW/PA TBWMS	689	FL
1 Wall Stop	236W	US32D	HA
3 Door Silencer	307D	GREY	HA

SET #05

COSA Fire Station #18

Doors: 113D, 121, 127A

3 Hinge	BB1279 4 1/2 x 4 1/2 NRP	US26D	HA
1 Passage Set	T101S Q	626	FL
1 Overhead Stop	4424	US32D	AB
3 Door Silencer	307D	GREY	HA

SET #06

NOTE: OWNER SHALL PROVIDE THEIR OWN PAD LOCKS FOR SET #06 DOOR HARDWARE

Doors: 105B, 105C, 105D, 106B, 106C, 106D, 107B, 107C, 107D, 108B, 108C, 108D, 115B, 115C, 115D, 116B, 116C, 116D, 117B, 117C, 117D, 118B, 118C, 118D, 122B, 122C, 122D, 123B, 123C, 123D, 124B, 124C, 124D, 125B, 125C, 125D, 127B, 127C, 127D, 143B, 143C, 143D, 143E, 143F, 143G, 143H, 143I, 143J, 143K, 143L, 143M

2 Hinge	BB1279 4 1/2 X 4 1/2	US26D	HA
1 Slide Bolt	1884A	US32D	AB

SET #07

Doors: 138B, 150, 151

3 Hinge	BB1191 4 1/2 X 4 1/2 NRP	US32D	HA
1 Lockset	T581BD Q	626	FL
1 Interchangeable Core	C607	626	FL
1 Door Closer	SC71 DS TBWMS	689	FL
1 Protection Plate	194S 10" x 34"	US32D	HA
1 Weatherstrip	303 AV 1 x 36" 2 x 84"		PE
1 Raindrip	346 C 40"		PE
1 Door Bottom	315 CN 36"		PE
1 Threshold	2005 AV 36"		PE

SET #08

Doors: 137, 149

6 Hinge	BB1191 4 1/2 X 4 1/2 NRP	US32D	HA
2 Flush Bolt	282D	US26D	HA
1 Lockset	T581BD Q	626	FL
1 Interchangeable Core	C607	626	FL
1 Door Closer	SC71 DS TBWMS	689	FL
1 Overhead Stop	4424	US32D	AB
2 Protection Plate	194S 10" x 34"	US32D	HA
1 Dust Proof Strike	280X	US26D	HA
1 Weatherstrip	303 AV 1 x 72" 2 x 84"		PE
1 Astragal	357 SP 84"		PE
2 Door Bottom	315 CN 36"		PE
1 Threshold	2005 AV 72"		PE

SET #09

Doors: 131.1E, 131.1F, 134, 146D, 146E, 146F, 146G

6 Hinge	BB1279 4 1/2 x 4 1/2 NRP	US26D	HA
2 Flush Bolt	282D	US26D	HA
1 Passage Set	T101S Q	626	FL
2 Overhead Stop	4424	US32D	AB
2 Protection Plate	194S 10" x 34"	US32D	HA

COSA Fire Station #18

1 Dust Proof Strike	280X	US26D	HA
1 Astragal	357 SP 84"		PE
2 Door Silencer	307D	GREY	HA

SET #10

Doors: 109, 112, 139, 140, 145

3 Hinge	BB1279 4 1/2 x 4 1/2 NRP	US26D	HA
1 Passage Set	T101S Q	626	FL
1 Door Closer	SC81 RW/PA TBWMS	689	FL
1 Protection Plate	194S 10" x 34"	US32D	HA
1 Wall Stop	236W	US32D	HA
3 Door Silencer	307D	GREY	HA

SET #11 - A

Doors: 131D, 131A, 146C

1 Continuous Hinge	A500 7'0"	US32D	AB
1 Exit Device	25-R-L-NL x 510L-NL DANE SEX BOLTS (4)	SP28, US28	FL
1 Interchangeable Core	C607	626	FL
1 Mortise Cylinder Housing	C987	626	FL
1 Door Closer	SC71 DS TBWMS	689	FL
1 Protection Plate	194S 10" x 34"	US32D	HA
1 Weatherstrip	303 AV 1 x 36" 2 x 84"		PE
1 Raindrip	346 C 40"		PE
1 Door Bottom	315 CN 36"		PE
1 Threshold	2005 AV 36"		PE

SET #11 - B

Doors: 146H

1 Continuous Hinge	A500 7'0"	US32D	AB
1 Exit Device	99 EO	SP28, US28	VD
1 Cypher Trim	DL 1200ET	SP28, US28	AL
1 Interchangeable Core	C607	626	FL
1 Mortise Cylinder	42 LA KEYWAY	32D	SA
1 Door Closer	SC71 DS TBWMS	689	FL
1 Protection Plate	194S 10" x 34"	US32D	HA
1 Weatherstrip	303 AV 1 x 36" 2 x 84"		PE
1 Raindrip	346 C 40"		PE
1 Door Bottom	315 CN 36"		PE
1 Threshold	2005 AV 36"		PE

SET #12

Doors: 113C

1 Continuous Hinge	A500 7'0"	US32D	AB
1 Passage Set	T101S Q	626	FL
1 Door Closer	SC71 DS TBWMS	689	FL
1 Protection Plate	194S 10" x 34"	US32D	HA
3 Door Silencer	307D	GREY	HA

SET #13

COSA Fire Station #18

Doors: 113A

2 Continuous Hinge	A500 7'0"	US32D	AB
1 Fire Exit Device	F-25-V-EO	US28	FL
1 Exit Device	25-V-L-NL x 510L-NL DANE SEX BOLTS (4)	SP28, US28	FL
1 Interchangeable Core	C607	626	FL
1 Mortise Cylinder Housing	C987	626	FL
2 Door Closer	SC71 SC70 304 9SS TBWMS	689	FL
2 Protection Plate	194S 10" x 34"	US32D	HA
2 Door Silencer	307D	GREY	HA

SET #14

Doors: *NOT USED*

SET #15

Doors: 138

1 Dust Proof Strike	280X	US26D	HA
1 Flush Bolt	282D	US26D	HA
1 Mortise Cylinder Housing	C987 #8 CAM	630	FL
1 Interchangeable Core	C607	626	FL
2 Door Pull	12J	US32D	HA
1 Threshold	2005 AV 108"		PE
1 Door Bottom	315 CN 72"		PE
1 Overhead Holder	9012 A	US32D	AB
1 Deadlock	MS1850S	628	AD
1 Flush Bolt	282D 24" TOP ROD	US26D	HA
2 Weatherstrip	18061 CNB 96"		PE
2 Continuous Hinge	A110HDC 95		AB
1 Overhead Holder	9014 A	US32D	AB
2 Door Bottom	315 CN 36"		PE
2 Door Closer	SC71-SC70 304 9SS TBWMS	689	FL

SET #16

Doors: 152

1 Continuous Hinge	A500 7'0"	US32D	AB
1 Keypad/iButton Lockset	ETERNITY IV	626	VH01
1 Interchangeable Core	C607	626	FL
1 Door Closer	SC71 DS TBWMS	689	FL
1 Protection Plate	194S 10" x 34"	US32D	HA
1 Weatherstrip	303 AV 1 x 36" 2 x 84"		PE
1 Raindrip	346 C 40"		PE
1 Door Bottom	315 CN 36"		PE
1 Threshold	2005 AV 36"		PE

SET #17

Doors: 100A

1 Exit Device	99EO	US28	VD
1 Continuous Hinge	A110HDC 83		AB

1/22/2016 1:18 PM

COSA Fire Station #18

1 Cypher Trim	DL 1200ET	626	LO
1 Mortise Cylinder	42 LA KEYWAY	626	FL
1 Door Closer	SC71 DS SC70-18PA SC70-30 SC70-61 TBWMS	689	FL
1 Door Bottom	315 CN 36"		PE
1 Threshold	2005 AV 36"		PE

SET #18

Doors: 100B, 102A, 103A

3 Hinge	BB1279 4 1/2 x 4 1/2 NRP	US26D	HA
1 Lockset	T521BD Q	626	FL
1 Interchangeable Core	C607	626	FL
1 Door Closer	SC81 RW/PA TBWMS	689	FL
1 Wall Stop	236W	US32D	HA
3 Door Silencer	307D	GREY	HA

Note: Overhead door hardware at Fire Apparatus Bays & EMS Bay provided by overhead door manufacturer.

**SECTION 10 5103
TURNOUT GEAR LOCKERS**

PART 1 GENERAL - MOBILE UNITS

1.01 SECTION INCLUDES

- A. Design, fabrication and installation of wall mounted turnout gear lockers as specified herein. Provide the work required to install wall mounted turnout gear lockers as specified herein and shown on the drawings.

1.02 RELATED SECTIONS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. SECTION 105104: FREE-STANDING TUBE WALL STRUCTURE FOR GEARGRID TURNOUT GEAR LOCKERS

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Submit manufacturer's proprietary product data / literature and installation instructions for all items specified for use in this Section, to include certificates of compliance.
- C. Shop Drawings: Submit manufacturer's shop drawings for each individual run of lockers. Include plans, elevations, sections, and details. Submit assembly drawings of components specified in this Section, with sufficient large-scale detailing to identify the work clearly and to show appropriate dimensioning, tolerances, blocking, structural supports, anchorages, finishes, schedules, and integration with other work. Also include:
 - 1. show locker trim and accessories.
 - 2. include locker identification system and numbering sequence.
- D. Samples: Submit manufacturer's standard color samples, and brochures illustrating for units with factory-applied color finishes.
- E. Owner's Manual: Provide maintenance manual at closeout.
- F. Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
- G. Warranty: Sample of manufacturer's special warranty.
- H. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
 - 1. See Section 01 6000 - Product Requirements, for additional provisions.
 - 2. Data for adjusting, repairing, and replacing any mechanisms.

1.04 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project and approved by manufacturer.
- B. Source Limitations: Obtain metal lockers and accessories from single source from single manufacturer.
- C. Regulatory Requirements: Where metal lockers are indicated to comply with accessibility requirements, comply with the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA) and Architectural Barriers Act 9 (ABA) Accessibility Guidelines for Buildings and Facilities and the latest edition of the Texas Department of Licensing & Regulations - Architectural Barriers (TDLR-AB):
- D. Pre-Installation Conference: Conduct conference at Project site.
- E. Manufacturer shall have a minimum of five years experience in the direct manufacture of lockers.
- F. Installer shall have experience in locker assembly & installation as specified.

1.05 DELIVERY, STORAGE AND HANDLING

- A. DELIVERY:
 - 1. Deliver materials to site in manufacturer's original, unopened containers with labels identifying product and manufacturer's name.
- B. STORAGE:
 - 1. Storage materials in a clean dry area.

1.06 HANDLING:

- A. Protect materials and finish during installation and handling to prevent damage.

1.07 PROJECT CONDITIONS

- A. Field Measurements: Verify actual dimensions for placement of lockers by field measurements prior to fabrication and submittal of shop drawings.

1.08 COORDINATION

- A. Defer installation of lockers until related adjacent finish work is substantially completed.

1.09 WARRANTY

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
- B. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of lockers that fail in materials or workmanship, within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Structural failures.
 - b. Faulty operation of hardware.

1.10 EXTRA MATERIALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Full-size units of the following locker hardware items equal to 10 percent of amount installed for each type and finish installed, but no fewer than five units:
 - a. identification plates
 - b. hooks
 - c. shelves

PART 2 PRODUCTS

2.01 MANUFACTURER

- A. Mid-Minnesota Wire (GearGrid Product Line), 670 SW 15th Street, Forest Lake, MN 55025. Toll-free 888-643-6694. Phone 651-464-4468. Fax 651-464-4780. Web site www.geargrid.com <<http://www.geargrid.com/>>. Email sales@geargrid.com <<mailto:sales@geargrid.com>>.

2.02 TURNOUT GEAR LOCKERS

- A. Model: GEARGRID Wall Mount Storage System - (Refer to Architectural A,E & F Plan for turnout gear locker layout).
- B. Locker Sizes:
 - 1. Standard 20" Opening: Overall dimension-79" high x 21.25" wide x 20" deep.
 - a. Clear opening width: 18.75"
- C. Construction: Units shall be welded at all applicable joints. Forming of metal shall be completed by standard cold-forming operations. Use of fasteners will only be required to allow for knock-down shipping, securing units to mounting surface and on applicable accessories.
- D. Vertical Dividers:
 - 1. Outer Frames: 1.25" O.D. x 16 gauge wall thickness ASTM A513 steel tubing.
 - 2. Inner Grid: .25" diameter ASTM 510 cold drawn steel wire resistance welded to a 3" square pattern.

- E. Back Panel:
 - 1. Grid: .25" diameter ASTM 510 cold drawn steel wire resistance welded to a 3" square pattern.
- F. Shelves:
 - 1. (1) Top, (1) Bottom
 - 2. .25" Diameter ASTM 510 cold drawn steel wire resistance welded and cold formed.
 - 3. Top shelf includes a 20 gauge steel bracket to accept a 2" X 16" name placard.
- G. Apparel Hooks:
 - 1. (3) per opening.
 - 2. .25" diameter ASTM 510 cold drawn steel wire resistance welded and cold formed.
- H. Base Assembly:
 - 1. Base frame shall be manufactured from 1.25" x 11 gauge wall thickness ASTM A513 square steel tubing.
- I. Side & Back Grids:
 - 1. High-strength 1/4" wire.
- J. Mounting Brackets:
 - 1. 11 GA. Steel
- K. Frame:
 - 1. Heavy Duty 1-1/4" tubing.

2.03 ACCESSORIES

- A. Horizontal Hang Bar:
 - 1. Tube: 1.25" O.D. x 16 gauge 304 stainless steel tubing.
 - 2. Brackets: Attach to side mesh, powder coated.
- B. Coat Drying Hanger:
 - 1. 1.25" diameter 304 stainless steel wire cold formed and resistance welded.
 - 2. Black vinyl coating on hook end.
- C. Glove Drying Hanger:
 - 1. 1.25" diameter 304 stainless steel wire cold formed and resistance welded.
 - 2. Black vinyl coating on hook end.

2.04 FINISH

- A. General: All system components excluding assembly and mounting hardware and stainless steel components are to receive the standard finish.
- B. Standard finish: Components to be cleaned using a phosphatized bath, clear water rinse and electro-statically coated with a durable TGIC powder coating.
- C. Color: to be selected by architect from manufacturer's standard range of color selections.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine areas to receive lockers. Notify architect if areas are not acceptable. Do not begin installation until unacceptable conditions have been corrected.

3.02 PREPARATION

- A. Complete all rough construction work and finish work involving messy or dusty preparation activities, before starting installation of lockers.

3.03 INSTALLATION

- A. Have vendor/installer comply with approved shop drawings and with manufacturer's instructions and recommendations.
- B. Assemble wall mounted and free-standing tube wall structure for GEARGRID Turnout Gear lockers in accordance with manufacturer's instructions.

- C. Use manufacturer's hardware for assembly.
- D. Provide necessary grounds, nailers, and anchorages for proper location and attachment.
- E. Securely anchor all wall mounted lockers to walls and all free-standing tube wall structure.

3.04 ADJUSTING

- A. Adjust hardware components after installation for proper operation.
 - 1. Remove and replace assemblies that are installed in a warped, bowed, or otherwise damaged condition, at no additional cost to Owner.

3.05 PROTECTION

- A. Cover or otherwise protect lockers after installation until the time of Final Cleaning at Substantial Completion.

END OF SECTION

SECTION 10 5104

FREE-STANDING TUBE WALL STRUCTURE FOR GEARGRID TURNOUT GEAR LOCKERS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Design, fabrication and installation of free-standing tube wall structure as specified herein.
- B. NOTE: GEARGRID FREE-STANDING TUBE WALL STRUCTURES ARE DESIGNED FOR USE WITH GEARGRID WALL MOUNT LOCKERS ONLY. GEARGRID ASSUMES NO LIABILITY OR RESPONSIBILITY AND GIVES NO WARRANTY FOR USING FREE-STANDING TUBE WALL STRUCTURE WITH ANY OTHER LOCKER TYPES OR MANUFACTURER'S PRODUCT.

1.02 RELATED SECTIONS

- A. A. Section 10 5103: Turnout Gear Lockers

1.03 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions.
- B. Shop Drawings: Submit manufacturer's shop drawings for each individual free-standing unit of lockers.
- C. Samples: Submit manufacturer's standard color samples.
- D. Owner's Manual: Provide maintenance manual at closeout.
- E. Warranty: Submit manufacturer's standard warranty.

1.04 QUALITY ASSURANCE

- A. Manufacturer shall have a minimum of five years experience in the direct manufacture of lockers and wall mounting systems.
- B. Free-Standing Tube Wall Structure must be manufactured in United States of America.
- C. Installer shall have 5 years of experience in locker assembly & installation as specified.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Delivery: Deliver materials to site in manufacturer's original, unopened containers with labels identifying product and manufacturer's name.
- B. Storage: Store materials in a clean dry area.
- C. Handling: Protect materials and finish during installation and handling to prevent damage.

PART 2 PRODUCTS

2.01 2.1 MANUFACTURER

- A. GearGrid LLC 670 SW 15th Street, Forest Lake, MN 55025. Toll-free 888-643-6694. Phone 651-464-4468. Fax 651-464-4780. Web site www.geargrid.com <<http://www.geargrid.com>>. Email sales@geargrid.com <<mailto:sales@geargrid.com>>.
- B. NO SUBSTITUTIONS PERMITTED

2.02 2.2 FREE-STANDING TUBE WALL STRUCTURE

- A. Model: (FSTWS) Free-Standing Tube Wall Structure Units
- B. Free-Standing Tube Wall Structures are engineered specifically for each installation and are designed to ship in a knocked-down configuration for efficient shipping. Wall structure components are bolted together with hardware as supplied or identified.
- C. Construction: Units shall be welded at all applicable joints. Forming of metal shall be completed by standard cold-forming operations. Use of fasteners will only be required to allow for knock-down shipping, securing units to mounting surface and on applicable accessories.
 - 1. Vertical Posts: 4" x 4", .250" wall thickness ASTM A513 steel tube
 - 2. Floor Mounting Plates: 1/2" steel plate welded to Vertical Posts. 3/8" mounting holes as needed.

3. Mounting plate hole configurations subject to locker layout
4. Horizontal Frames: 4" x 4", .1875" wall thickness ASTM A513 steel tube. Frames mechanically fastened to Vertical Posts with supplied or identified hardware.
5. Note: If PowerBars (Electric Raceway) are used, top Horizontal Frame will be 6" high x 4" wide, .1875" wall thickness steel tube

2.03 FINISH

- A. General: All system components excluding assembly and mounting hardware and stainless steel components are to receive the standard finish.
- B. Standard Finish: Components to be cleaned using a phosphatized bath, clear water rinse and electro-statically coated with a durable TGIC powder coating.
- C. Color: Match color selection for SECTION 10 5103 Turnout Gear Lockers.

PART 3 EXECUTION

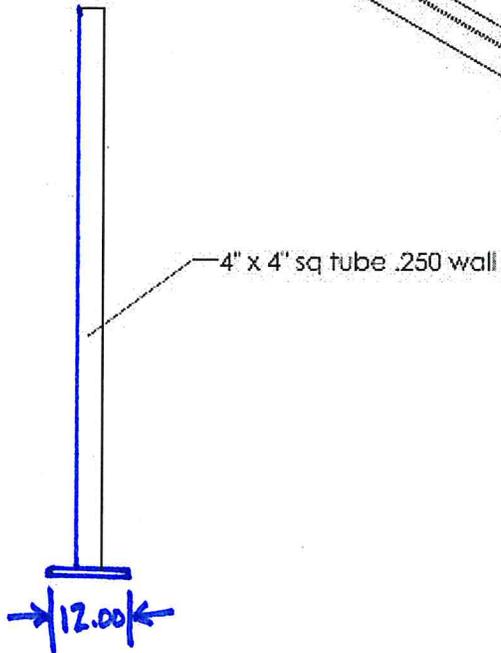
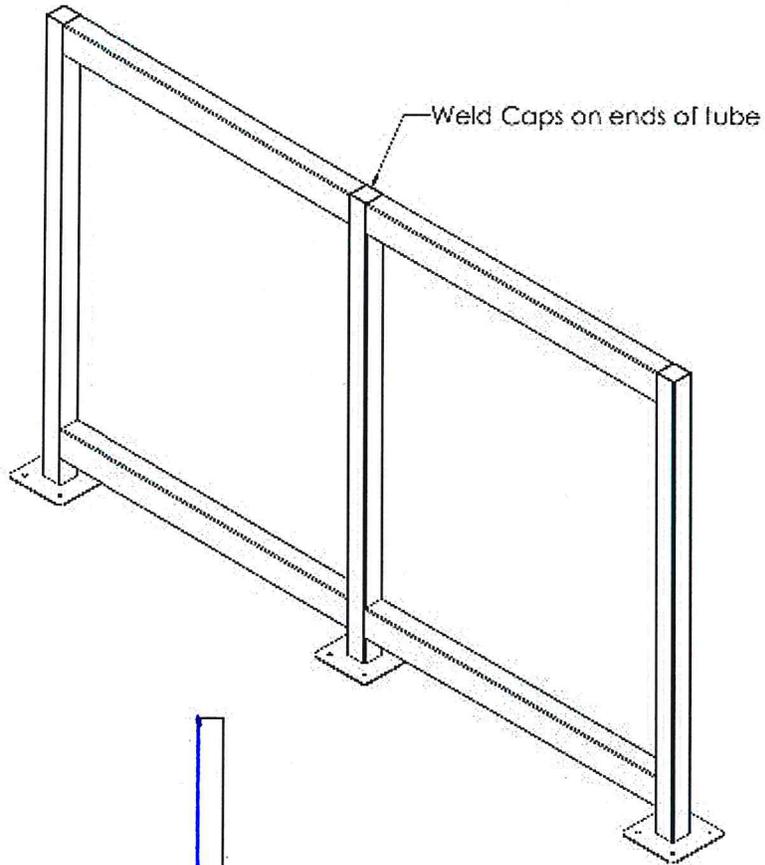
3.01 EXAMINATION

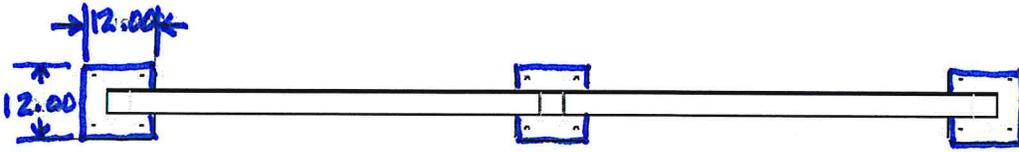
- A. Examine areas to receive free-standing wall structures. Notify Architect if areas are not acceptable. Do not begin installation until unacceptable conditions have been corrected.

3.02 INSTALLATION

- A. Assemble free-standing lockers in accordance with manufacturer's instructions.
- B. Use manufacturer's hardware for assembly.
- C. Refer to sample drawings below.
 1. Free-Standing Tube Wall Structure - Example Drawings
 - a. For Reference Only







END OF SECTION

SECTION 27 0000

BASIC REQUIREMENTS FOR COMMUNICATIONS INFRASTRUCTURE

PART 1 - GENERAL

1.01 SYSTEM DESCRIPTION

- A. The objective of this project is to provide a complete communications cabling infrastructure system installation including but not limited to: riser system, horizontal data and voice cabling with attendant terminations, mounting equipment, cable pathway and management systems, testing, fire station alerting system and other items/materials, as specified in drawings, these specifications, and contract documents.

1.02 CONTRACTOR QUALIFICATIONS

- A. Contractor and staff shall be a current authorized Panduit Certified Installers and certified by Panduit to provide and furnish a 20-year performance warranty for structured cabling and connectivity components.
- B. Contractor and staff shall possess relevant past-experience and references for a minimum of (5) projects of similar size and scope to that of the City of San Antonio.
- C. Contractor's Project Manager shall be a RCDD in good standing and shall provide Certificate.
- D. Contractor shall have a local office within a 75-mile radius of the project site.
- E. Sub-contractors to the primary structured cabling contractor shall meet the same requirements for the primary structured cabling contractor as identified above.

1.03 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Drawings and Specifications
 - 1. Division 27 specifications are written in imperative and streamlined format. This imperative language is directed to the Contractor. The word "shall be" shall be included by inference where a colon (:) is used within sentences and phrases.
- C. Codes, Permits and Standards
 - 1. Comply with the most recently revised versions of applicable laws, rules, regulations, and ordinances of federal, state, and local utilities and authorities. The following industry standards shall be adhered to unless specifically directed otherwise by the City of San Antonio Information technology Services Department. The list is not all-inclusive and does not alleviate compliance with the latest applicable standards, codes, and best practices:
 - a. TIA-568-C.0 Generic Telecommunications Cabling for Customer Premises
 - b. TIA-568-C.1 Commercial Building Telecommunication Cabling Standards – Part 1 General Requirements (2008)
 - c. TIA-568-C.2 Balanced Twisted-Pair Telecommunications Cabling and Components Standard (2009)
 - d. TIA-569-B Commercial Building Standard for Telecommunications Pathways and Spaces - (October 2004)
 - e. TIA/EIA-606-B Administration Standard for Commercial Telecommunications Infrastructure - (May 2012)

- f. ANSI J-STD-607-B Commercial Building Grounding and Bonding Requirements for Telecommunications - (October 2011)
 - g. TIA-758-A Customer-Owned Outside Plant Telecommunications Infrastructure Standard - (August 2004)
 - h. AIA
 - i. Local Building Code
 - j. NEC
 - k. ISO
 - l. ANSI
 - m. FCC
 - n. UL
 - o. OSHA
 - p. NFPA
 - q. NEMA
2. Obtain all applicable permits, licenses and inspections and pay all fees charged by above authorities.
 3. Work shall comply with the local city codes and ordinances, the regulations of state authorities having lawful jurisdiction and the codes, statues and reference standards identified within these Specifications. None of the terms or provisions of the Drawings or specification shall be construed as waiving any of the rules, regulations or requirements of these authorities. In the event of conflict between the Contract Documents and the local enforcing authority, the latter shall rule.
 4. Where alterations to and deviations from the Contract Documents are required to comply with interpretations of a Code Authority Having Jurisdiction (AHJ), report the requirements and secure approval before starting work. Contractor shall review any requested modifications with the Design Consultant and secure his approval before proceeding.
 5. Where Contract Document requirements are in excess of Code requirements and are permitted under the Code, the Contract Documents shall govern.

1.04 DEFINITIONS & ABBREVIATIONS

A. DEFINITIONS

1. Contract Documents - Drawings and the project manual, including Specifications.
2. Design Consultant – CNG Engineering, PLLC.
3. Install: to set in place in position for service.
4. Furnish: to supply.
5. Provide: to install and furnish.
6. City - When used in an otherwise non-specific reference anywhere in the Contract documents, City is defined to refer to the local municipal authority governing the project address (City of San Antonio).

B. ABBREVIATIONS

- | | |
|----------|---|
| 1. ANSI | American National Standards Institute. |
| 2. EIA | Electronic Industry Association. |
| 3. ETL | Electrical Testing Laboratory. |
| 4. ETJ | Extra-Territorial Jurisdiction |
| 5. FM | Factory Mutual |
| 6. IEEE | Institute of Electrical and Electronics Designers |
| 7. NEC | National Electric Code (NFPA-70) |
| 8. NESC | National Electric Safety Code |
| 9. NECA | National Electrical Contractors Association |
| 10. NEMA | National Electrical Manufacturers Association |

11. NETA	InterNational Electrical Testing Association
12. NRTL	Nationally Recognized Testing Laboratory
13. OSHA	Occupational Safety Health Administration (US Department of Labor)
14. UL	Underwriters Laboratories
15. EMI:	Electromagnetic Interference
16. FD:	Floor Distributor also referred as HC
17. GE:	Ground Equalizer
18. HC:	Horizontal Cross-Connect (IDF)
19. IC:	Intermediate Cross-Connect
20. IDC:	Insulation Displacement Connector
21. IDF:	Intermediate Distribution Frame
22. I/O:	Information Outlet or Work Area Information Outlet
23. LAN:	Local Area Network
24. MC:	Main Cross-Connect
25. MDF:	Main Distribution Frame also referred as BD
26. RCDD:	Registered Communications Distribution Designer
27. RFI:	Radio Frequency Interference
28. TBB:	Telecommunications Bonding Backbone
29. TBC:	Telecommunications Bonding Conductor
30. TGB:	Telecommunications Ground Bus Bar
31. TMBC:	Telecommunications Main Bonding Conductor
32. TMGB:	Telecommunications Main Grounding Bus Bar
33. TR:	Telecommunications Room
34. UTP:	Unshielded Twisted Pair
35. WA:	Work Area

1.05 SUMMARY ORGANIZATION

- A. PART 1 of This Section Includes:
 - 1. Communication Utilities and Service
 - 2. Communications equipment coordination and installation
 - 3. Submittal requirements

- B. PART 2 of This Section Includes:
 - 1. Substitution requirements

- C. PART 3 of This Section Includes:
 - 1. Common Requirements for communications Installation
 - 2. Quality Assurance requirements
 - 3. ***Fire Station Alerting System by USDD***

1.06 UTILITIES AND SERVICE

- A. Utilities: The Contract Documents reflect the general location and routing of utilities required for this project. Visit the site, and coordinate and confirm the exact requirements for telephone and communication services. Refer to Division 01.

1.07 COMMUNICATIONS EQUIPMENT COORDINATION AND INSTALLATION

- A. General: Refer to Division 1 for general coordination requirements applicable to the entire work. It is recognized that the Contract Documents are diagrammatic in showing certain physical relationships which must be established within the electrical work, and in its interface with other work including utilities and mechanical work and that such establishment is the exclusive

responsibility of the Contractor. The Drawings show diagrammatically the sizes and locations of the various conduit and raceway systems and equipment items and the sizes of the major interconnecting distribution, without showing exact details as to elevations, offsets, control lines, and installation details.

1. Arrange communications work in a neat, plumb and straight well organized and workmanlike manner with conduits running parallel with primary lines of the building construction and with a minimum of 7' overhead clearance where possible. Maintain 4" clearance of other systems and 12" above ceiling.
 2. The Contractor shall carefully lay out his work at the site to conform to the architectural and structural conditions, to avoid obstructions and to provide proper grading of lines. Exact locations of data outlets, apparatus and connections thereto shall be determined by reference to detail Drawings, equipment Drawings, roughing-in Drawings, etc., by measurements at the building and in cooperation with other Contractors and in all cases shall be subject to the approval of the Design Consultant. Relocations necessitated by the conditions at the site or directed by the Design Consultant shall be made without any additional cost to the Owner or Design Consultant.
 3. All conduit and boxes except those in the various equipment rooms, in unfinished spaces or where specifically designated herein or on the Drawings shall be run concealed in furrings, plenums and chases. Wherever conditions exist which would cause any of these items to be exposed in finished spaces, the Contractor whose work is involved shall immediately call the situation to the attention of the Design Consultant and shall stop work in those areas until the Owner's Representative or General Contractor directs the resumption of the work. Submit for approval a Shop Drawing for any change in equipment placement, etc.
 4. Equipment has been chosen to fit within the available space with all required Code and maintenance clearances and shall be installed as shown. Every effort has been made to also accommodate equipment of other approved manufacturers, however since equipment and access space requirements vary, the final responsibility for installation access and proper fit of substituted equipment rests with the Contractor with approval from Author by having jurisdiction.
- B. Pre-installation planning: Coordinate arrangement, mounting, and support of communications equipment as follows:
1. Allow maximum possible headroom unless specific mounting heights that reduce headroom are indicated.
 2. Provide access for working space for equipment with minimum interference to adjacent equipment.
 3. The equipment shall be arranged to facilitate service, maintenance, and repair or replacement of components and equipment.
 4. System interferences shall be handled by giving precedence to pipe lines which require a stated grade for proper operation. Where space requirements conflict, the following hierarchy of precedence shall, in general, be observed:
 - a. Building lines
 - b. Structural members
 - c. Piping and ductwork installed at required slope.
 - d. Supply Ductwork
 - e. Exhaust Ductwork
 - f. Cable Tray
 - g. Domestic water piping
 - h. Feeder conduit
 - i. Branch conduit
 - j. Communications conduit
 - k. Cabling not installed in raceway or cable trays

5. Coordination submittal requirements
 - a. Provide MDF room layouts, scaled to 1/4" = 1' - 0" for all rooms or spaces containing communications and electrical distribution equipment. These shall be provided with the associated communications equipment submittals. Include the exact dimensions and locations of MDF layout, wall elevations, equipment cabinet elevations, cable runways, cable tray, sleeves, backbone and horizontal cable pathways, workstation locations, and numbering and labeling scheme.
 - b. Shop drawings shall be prepared by the cabling contractor's Registered Communications Distribution Designer (RCDD) detailing layout of his equipment within the MDF room.
 - c. Floor plans shall show dimensioned layout and working clearances. Show equipment layout and relationships between components and adjacent structural and mechanical elements. Indicate field measurements.

1.08 DRAWINGS AND SPECIFICATIONS:

- A. General: The Drawings are schematic in nature and indicate approximate locations of the communications systems, equipment, fixtures and devices, except where specific locations are noted and dimensioned on the Drawings. All items are shown to approximate scale with intent to depict how these items shall be integrated into the building. Locate all items by field measurements and in accordance with the Contract Documents. Cooperate with other trades to ensure project completion as indicated.
- B. Location: Prior to locating devices and other items, obtain the Architect/ Design Consultant's approval as to exact location. Locations shall not be determined by scaling Drawings. Mount communication devices at the heights directed by the Architect/Design Consultant. Where there is a question concerning the required location for items of work, the Contractor shall submit a request for information to the Architect/Design Consultant requesting specific directions for locating the item. Contractor shall be responsible for costs of redoing work of trades necessitated by failure to comply with this requirement.
 1. All devices shall be referenced to coordinated, established data points and shall be located to present symmetrical arrangements with these points and to facilitate the proper arrangements of building construction details, acoustical tile panels and other building features with respect to the mechanical and electrical outlets and devices. Communication devices shall be referenced to such features as wall and ceiling furrings, balanced border widths, masonry joints, etc. Outlets in acoustical tile shall occur symmetrically in tile joints or in the centers of whole tiles and the exact location of each outlet and the arrangements to be followed shall be acceptable to the Architect/Design Consultant. Outlets in wall tile or masonry construction shall occur symmetrically in the centers of whole tiles, bricks, or blocks and the exact location of each outlet and the arrangement to be followed shall be acceptable to the Architect/Design Consultant.
 2. The Drawings show diagrammatic locations of the various outlets and apparatus. Exact locations of these outlets and apparatus shall be determined by reference to the Architectural Drawings and to all detail Drawings, equipment vendor Drawings, rough-in Drawings, etc., by measurements at the building, and in cooperation with the other trades. The Owner and Architect/Design Consultant reserve the right to make any reasonable change in location of any outlet or apparatus before installation, without additional cost to the Owner.
- C. Specifications: The specifications are intended to supplement the Drawings and it is not in the scope of the specifications to mention any part of the work which the Drawings are competent to fully explain. Conversely, any part of the work which the specifications are competent to fully explain, may not be mentioned on the Drawings.

- D. Disagreement: Disagreement between the Drawings or specifications or within the Drawings or specifications shall be estimated using the better quality or greater quantity of material or installation, and a request for information shall be made to the Design Consultant.

1.09 Discrepancies

- A. Clarification: Clarification shall be obtained before submitting a proposal for the Work under this Division as to discrepancies or omissions from the Contract Documents or questions as to the intent thereof.
- B. Detailed Instructions: Should it appear that the work hereby intended to be done or any of the materials relative thereto, is not sufficiently detailed or explained in the Drawings or Specifications, then the Contractor shall submit a request for information to the Design Consultant for such further Drawings or explanations as may be necessary before proceeding, allowing a reasonable time for the Design Consultant to respond. The Contractor shall conform to this additional information as a part of the Contract without additional cost to the Owner or Design Consultant.
- C. Interpretations: Should any doubt or question arise respecting the true meaning of Drawings or Specifications, reference shall be made to the Design Consultant, whose written decision shall be final and conclusive. No alleged statement by the Design Consultant will be accepted as an excuse for inferior work.
- D. Contractor Agreement: Consideration will not be granted for misunderstanding of the amount of work to be performed. Submission of a bid conveys full Contractor agreement of the items and conditions specified, shown, scheduled, or required for completion of the project.

1.10 Submittal Requirements

- A. Provide all Division 27 submittals at the same time.
- B. Submittals shall be provided in binders and arranged in sequence by Specification section number. Provide submittals only for specification sections that list this requirement.
 - 1. Provide tabs for each section, labeled to match the associated specification. The page after each tab section shall contain a typed list of any exceptions that the Contractor is proposing.
 - 2. Each page of the submittal shall be a clear copy or scan, indicating items and options proposed for use in the project with a graphical arrow. Items included on a submittal page that are not proposed for use shall be deleted with strike-through or other acceptable method that clearly distinguishes the proposed from non-relevant information.
- C. Subject to the requirements in Division 1, at the Contractor's option, submittals may be provided in PDF form.
 - 1. All format and informational requirements for submittals in binders apply to PDF submittals.
 - 2. Multiple files may be submitted, however, these must be organized into a consistent format.
 - 3. PDF submittal shall include a table of contents with page numbers listed for the beginning of each section.
 - 4. Additionally, the PDF shall be formatted to include tab or chapter shortcuts, labeled with the associated specification section. These shortcuts shall allow the reader to jump to a tab or chapter associated with beginning of each specification section with a single action.
 - 5. At Design Consultant's request, the contractor shall submit hard copy version in accordance with requirements outlined above.

PART 2 - PRODUCTS

2.01 GENERAL MATERIALS AND EQUIPMENT REQUIREMENTS

- A. Materials and equipment shall be new, of best grade and quality, and meet all requirements of the Contract Documents. Materials and equipment shall conform to National Electrical Code requirements and shall be listed by Underwriters Laboratories, Inc. (UL). UL listing will be accepted as evidence that the material or equipment conform to the standards of that agency. In lieu of this listing, submit a statement from a nationally recognized testing agency, indicating that products have been tested in accordance with UL criteria and that the materials and equipment comply with Contract requirements.
- B. Materials and equipment shall be standard catalog products of manufacturers regularly engaged in the manufacture of products conforming to these Specifications. Custom fabricated items shall be fully described using Drawings and technical data sufficient to demonstrate compliance with the Contract Documents.

2.02 SUBSTITUTIONS

- A. Basis of Design - For products specified in part 2.1 of the associated specification section, as "Basis of Design", that term is herein defined as the standard level of product that is required for the project.
 - 1. The use of term Basis of Design in these specifications is intended to allow the Contractor to propose use of non-specified manufacturer's products, provided that the proposed substitute is of equal or greater construction material, workmanship, quality, performance, and manufacturer support. If the product's proposed location is not concealed, aesthetic considerations are also considered as a significant factor.
 - 2. During the bid process, the Design Consultant will not evaluate products and provide approval prior to the bid date on proposed substitute products. If the Contractor wishes to propose substitutions, the Design Consultant will evaluate the successful Contractor's proposed alternates during the submittal review process. The Design Consultant will take no exception to the use of individual products determined to be equal. That decision may be the result of consultation and input from other members of the design team and the Owner. If a product is not determined to be equal, it will be rejected and another product that is equal to the basis of design shall be re-submitted by the Contractor. The Design Consultant will not evaluate more than two substitution attempts before the Contractor is required to submit the specified product.
 - 3. If the Contractor proposes product substitutions that may not be equal to the specified product, and cost savings are associated with the use of the proposed substitute, then the Contractor should propose these as part of a VE (Value Engineering) process, with line item cost savings identified for each product substitution proposed. With information on line item costs, the design team may determine if the proposed substitutes, though not equal, represent a better value and these *may* be recommended for use.
- B. Substitutions are generally not allowed for products specified in the associated specification section when listed as "Provide products by one of the following". If there is a concern about delivery schedules from the manufacturers listed or other factors, these special case substitutions will be considered individually during the submittal phase.

PART 3 - EXECUTION

3.01 COMMON REQUIREMENTS FOR COMMUNICATIONS INFRASTRUCTURE INSTALLATION

- A. Workmanship: Work shall be executed and materials installed in accordance with the best practice of the trades in a thorough, substantial, workmanlike manner by competent workmen, presenting a neat appearance when completed, straight and plumb.
- B. Manufacturer's Recommendations: With exceptions as specified or indicated on the Drawings or in the Specifications, apply, install, connect, erect, use, clean, and condition manufactured articles, materials, and equipment per manufacturer's current printed recommendations. Copies of such printed recommendations shall be kept at the job site and made available as required.
- C. Labeling:
 - 1. Coordination with and approval by the City of San Antonio Information Technology Services Department is required on the specific site labeling schema.
 - 2. All labels shall be typed (not handwritten)
 - 3. Verify room numbers and confirm the final room numbering scheme prior to generating labels.
 - 4. Horizontal Cables shall be labeled within 12 inches from the termination point inside the MDF.
 - 5. Horizontal Cables shall be labeled within 6 inches from the termination point at the workstation end.
 - 6. Backbone Copper Cables shall be labeled within 12 inches of the visible end of the jacket.
 - 7. Cables shall be labeled identically at both ends.
 - 8. MDF Room shall be labeled (signage) with the permanent room designations that match the final building signage for cable labeling.
 - 9. Equipment cabinets or racks in MDF shall be labeled in sequential numeric order. Labels shall be centered on the top front of the equipment rack.
 - 10. Copper backbone cables labels shall contain the cable origin room number, the cable destination room number, and cable pairs (i.e. MDFA150-IDFC126/001-025).
 - 11. Horizontal cables shall be labeled identically at each end with the destination end and origin room number, patch panel number, and port number. (i.e. IDFC126-C115-B5).
 - 12. Patch panels in each closet shall be uniquely alphabetically labeled sequentially starting with the first Patch Panel in the top of the first equipment rack (i.e. A, B, C, D, E, etc.). Each MDF or IDF starts with A and shall not repeat a letter.
 - 13. Workstation Faceplates shall be labeled denoting origin MDF/IDF Room Number, patch panel, and port number (i.e. IDFC126-B5).

3.02 SPACE REQUIREMENTS:

- A. General: Determine in advance of purchase that the equipment and materials proposed for installation will fit into the confines indicated, leaving adequate code clearances for adjustments, repair, or replacement and comply with code.
- B. Clearance: Allow adequate space for clearance in accordance with requirements of the Code and local inspection department.

- C. **Scheduled Equipment:** The design shown on the Drawings is based on the equipment scheduled.
- D. **Responsibility:** Space requirements and equipment arrangement may vary for each manufacturer, the responsibility for ensuring initial access and suitability rests with the Contractor.
- E. **Review:** Final arrangements of equipment to be installed shall be subject to the Architect's review.

3.03 DELIVERY, STORAGE AND HANDLING OF MATERIALS:

- A. **General:** Protect all materials and equipment to be installed under this Division from physical and weather damage.
- B. **Scope:** Work under this Division shall include, but not limited to:
 - 1. Shipping from point of manufacture to job site.
 - 2. Unloading, moving, and storage on site with proper safeguards as required to properly protect equipment from corrosion, drip, humidity, dust, and physical damage.
 - 3. Hoisting and scaffolding of materials and equipment included in this Division.
 - 4. Ensuring safety of employees, materials, and equipment using such hoisting equipment and scaffolding.
- C. **Coordination:** All large pieces of equipment which are to be installed in the building and which are too large to permit access through doorways, stairways or shafts shall be brought to the job by the Contractor and shall be placed in the spaces before enclosing partitions and structure are completed. Contractor shall support equipment above floor slab and provide suitable, protective covering.
- D. Install in accordance with approved, equipment submittal layouts.
- E. Coordinate installation of required supporting devices and set sleeves in cast-in-place concrete, masonry walls, and other structural components as they are constructed.
- F. Coordinate location of access panels and doors for electrical and communications items that are behind finished surfaces or otherwise concealed. Access doors and panels are specified in Division 08 Section "Access Doors and Frames." Coordinate location of access panels and doors with Architect prior to the associated equipment rough-in.
- G. Coordinate sleeve selection and application with selection and application of firestopping specified in Division 07 Section "Penetration Firestopping."
- H. Apply firestopping to penetrations of fire-rated floor and wall assemblies for communication installations to restore original fire-resistance rating of assembly. Firestopping materials and installation requirements are specified in Division 07 Section "Penetration Firestopping."

3.04 VIBRATION ISOLATION

- A. **General:** Warrant the communication systems, and their component parts to operate without objectionable noise or vibration. Noise from systems or equipment which results in noise within occupied spaces above the recommended NC curves (refer to ASHRAE Standard) shall be considered objectionable. Vibration shall not be apparent to the senses in occupied areas of the building. Objectionable noise, vibration, or transmission thereof to the building shall be corrected.

- B. Provide vibration isolation means for equipment and materials to prevent the transmission of perceptible vibration, structure borne or air borne noise. Items requiring vibration isolation include:
 - 1. Communications Conduit: Isolate from rotating and reciprocating machinery using flexible conduit, 18" minimum length or 12" of flexible conduit per 1" of conduit diameter with maximum of 36".

3.05 QUALITY ASSURANCE TESTING

A. DESCRIPTION OF WORK

- 1. General: Provide testing of work installed under Divisions 27, as specified herein.

B. PERSONNEL

- 1. Personnel: Submit evidence to show that the personnel who will actually test the systems are qualified and state certified.
- 2. The Design Consultant/Owner reserves the right to require that the originally approved personnel be replaced with other qualified personnel if, in his opinion, the original personnel are not qualified or are not properly conducting the system testing.

C. SUBMITTALS

- 1. Testing Procedures: Submit four copies of all proposed testing procedures to the Design Consultant for review at least 30 days prior to conducting any testing.
- 2. Reporting Forms: Submit four copies of proposed forms to be used in recording testing data and results to the Design Consultant for review at least 30 days prior to conducting any testing on the project.
- 3. Test Data and Results: Submit four copies of complete data and certified test results for each test performed, including, but not limited to:
 - a. Test performed.
 - b. Test procedure.
 - c. System and area tested.
 - d. Date(s) and time(s) of test.
 - e. Weather conditions.
 - f. Test criteria.
 - g. Test results.
 - h. Additional pertinent information.
- 4. Operational Certification: Submit four certified copies of an operational certification which documents that all equipment and systems have been fully tested to verify proper operation in accordance with the design shown in the Construction Documents and manufacturer's recommendations.
- 5. Certification: Certifications stating that submitted test data and results are true and correct shall be provided for all submittals under this Section. Certification shall be executed by an authorized officer if the Contractor is a corporation, by a partner if the Contractor is a partnership, by the Owner if the Contractor is a sole proprietorship or by the authorized representative if the Contractor is a joint venture.

D. NOTICE

- 1. General: Notify the Design Consultant and the Owner's Representative in writing two weeks prior all scheduled testing to allow time for scheduling witness of testing, where elected by the Design Consultant and Owner's Representative.

E. TESTING

1. All test results shall be submitted to the owner along with all other final documentation. Test results shall be submitted in both PDF format and the Native Tester format along with the software needed to read the Native Tester Format.
2. Terminated backbone copper cable links shall be tested in accordance with applicable industry standards and manufacturer certification requirements for attenuation, continuity, and pin-mapping with approved field tester(s) that are within their calibration period.
3. Terminated Category 6 UTP cable links shall be tested in accordance with applicable industry standards and manufacturer certification requirements for Category 6 compliance with approved field tester(s) that are within their calibration period.

F. RESULTS AND DEFICIENCY CORRECTIONS:

1. Correct malfunctions on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.
2. Any resultant delay as a result of such necessary retest does not relieve the Contractor of his responsibility under this contract.
3. Equipment will be considered defective if it does not pass tests and inspections. Tested products, cables, and terminations which fail to provide acceptable test results shall be repaired or replaced with suitable materials as required to obtain acceptable test results.

3.06 AS-BUILT DOCUMENTATION

- A. Produce drawings depicting the condition of the Structured Cabling System as installed produced in AutoCAD 2010 or higher and provided in hardcopy, electronically in .DWG and .PDF format. Include the exact dimensions and locations of MDF and IDF layouts, wall elevations, equipment cabinet elevations, cable runways, cable tray, sleeves, backbone and horizontal cable pathways, workstation locations, and numbering and labeling scheme.
- B. A half-size hard copy of the as-built drawings for the applicable region served by the MDF and/or IDFs shall be provided in MDF and each IDF for reference.
- C. Produce cable records for the Structured Cabling System as installed to include a list of all horizontal and backbone cables produced in an Excel format and provided in hardcopy and electronic format indicating cable number, unique cable label, cable type, origin and destination, length, termination method, and pass/fail result.
- D. Produce (3) hard copies of all test results for each cable, to include technician's name and date stamp, a list of tested cables, and the individual results for each cable tested. Test results shall be furnished on CD ROM to include native file format and .PDF format.

3.07 CONTRACTOR WARRANTIES AND GUARANTEES:

- A. General: Contractor shall guarantee all material and equipment installed by him against defects in workmanship and material for a period of 12 months after final acceptance of the work by the Owner and he shall repair or replace any materials or equipment developing such defects within that time, promptly on due notice given him by the Owner and at Contractor's sole cost and expense.
- B. The contractor shall furnish a 20-year performance warranty from Panduit for the structured cabling and connectivity components.

- C. Equipment: All equipment bearing a manufacturer's guarantee in excess of the time requirement above, such as electrical equipment, devices, components, and similar items, shall be considered to have that guarantee extended directly to the Owner by the manufacturer. Any such equipment that proves defective in materials or workmanship within the guarantee period is to be corrected by the Contractor in accordance with the manufacturer's guarantee.
- D. Defects in material or workmanship appearing within this period of time, shall be promptly repaired without cost to the City of San Antonio.
- E. Start-up: The Electrical Contractor shall provide instructions and equipment starting service on new equipment for two complete years after date of final acceptance of the work by the Owner, at Contractor's sole cost and expense.

3.08 FIRE STATION ALERTING SYSTEM

- A. ***Fire Station Alerting System is contractor furnished, contractor installed.***
- B. ***Fire Station Alerting System (Phoenix System) is designed by US Digital Design (USDD). Complete Phoenix system equipment is contractor provided contractor installed. Installation of system equipment and wiring shall be performed by USDD approved installer only. Contact Erick Hanson at 877-551-8733 for vendor coordination.***
- C. ***Conduit, raceways, support, junction boxes, and back-boxes required for the Fire Station Alerting System are to be provided and installed by the General Contractor under this contract.***
- D. ***Fire Station Alerting System equipment, wiring and USDD approved vendor installation shall be covered under Allowance No. 1 as described under Specification Section 012100 Allowances.***
- E. ***USDD approved vendor does not install conduit, raceways, support, junction boxes and back-boxes and these costs are not to be included in Allowance No. 1.***
- F. ***General Contractor to comply with USDD contract requisites. Refer to Exhibit A for Contractor's Purchase Agreement and Exhibit B for End User Agreement.***
- G. ***USDD to provide final design shop drawings for owner review. USDD cost quote is based on initial coordination with engineer and owner. Refer to Exhibit C for quote from USDD.***

Attachments:

US Digital Exhibits

US Digital Designs



FIRE STATION ALERTING SYSTEM PURCHASE CONTRACT (Non-Governmental)

This Fire Station Alerting System Purchase Contract (“Contract”) is made in by and between US Digital Designs, Inc. (“USDD”), with its principal place of business at 1835 East Sixth Street, Suite 27, Tempe, Arizona 85281 and the following entity (“Customer”):

[customer]
[division or department]
[Contact person]
[address]
[address]
[phone numbers]
[email address]

1. **Recitals.** The Customer requires USDD to provide certain goods, products and services related to the fire station alerting system described in **USDD Quote SAT015 for the City of San Antonio Fire Station 18**. USDD has agreed to provide such goods and services to the Customer pursuant to the terms, conditions, and limitations of this Contract. In consideration of the forgoing, and for other good and valuable consideration, the parties hereby agree to the terms set forth in this Contract.

2. **Definitions.** For purposes of this Contract, the following terms shall have the following meanings:

- a. “Additional Services” means any and all services performed by USDD at the instruction or request of Customer through its authorized personnel that are not specifically included in the Scope of Work.
- b. “Communications Gateway” means the pair of redundant servers used as the master communications hub for the System as set forth in the Quote.
- c. “End User” means the following fire department: **City of San Antonio Fire Department.**
- d. “Engineering Services” means engineering or project management services performed by USDD’s employees, agents or contractors directly related to planning and documenting the layout, design, project schedule, installation, and functionality of the System as a whole and at each individual installation sight.
- e. “GaRI Audio Interface” means the proprietary USDD VoiceAlert Radio Hardware component integrated into the Communications Gateway.
- f. “Hardware” means a physically tangible electro-mechanical system or sub-system and associated documentation provided to Customer or End User by USDD, provided however, that Hardware shall not include any televisions or monitors manufactured by third parties.
- g. “Intellectual Property” means any and all rights of USDD related to USDD’s Products and business existing from time to time under patent law, copyright law, trade secret law, trademark law, unfair competition law, and any and all other proprietary rights, and any and all derivative works, work product, applications, renewals, extensions and restorations thereof, now or hereafter in force and effect worldwide.
- h. “Prime Contract” means the written contract or agreement between Customer and End User for the Project.
- i. “Products” means the Hardware, Software and other tangible goods, equipment, supplies and components included in the Quote.
- j. “Project” means the **Fire Station Alerting System for Station 18 as described in the Quote.**
- k. “Quote” means the document at Exhibit A, excluding the section titled “terms and conditions,” if any.
- l. “Scope of Work” means the document attached at Exhibit B (Scope of Work excludes any goods or services to be provided directly to End User under the Service Agreement previously entered into between USDD and the City of San Antonio.

- m. "Software" means software programs, including embedded software, firmware, executable code, linkable object code, and source code, including any updates, modifications, revisions, copies, documentation, and design data that are licensed to End User by USDD.
- n. "System" means all Hardware and Software purchased by Customer for resale to End User as part of the Project and that is used exclusively by End User as part of its fire station alerting system, provided however, that the term "System" specifically excludes any components, hardware, or software provided by third parties, including without limitation Customer's or End User's computers, lap tops, computer peripherals, monitors, televisions, routers, switches, operating systems, computer programs, applications, internet and network connections, and any other parts or items not provided directly by USDD.
- o. "Station Controller" means the CPU and related computer components (whether USDD's ATX or ATU model) to be installed at each fire station as described in the Quote.
- p. "VoiceAlert Radio" means the Software that controls the GaSi Audio Interface and functionality of the optional radio alert system.
- q. "Warranty" means the Product Warranty attached at Exhibit C.
- r. Undefined technical terms, specifications and acronyms used throughout this Contract shall have the meanings generally attributed to them in the fire station alerting industry.

3. **Products and Services.** USDD agrees to provide the Products and perform the services set forth in the Scope of Work at the prices set forth in the Quote. Prices are subject to correction for error. Unless otherwise specifically waived in the quote, Customer shall bear all costs of shipping the Products. Risk of loss or damage in transit shall be borne by USDD. Upon delivery to Customer's site, Customer shall bear all risk of loss or damage to any Products occurring thereafter.

4. **Engineering Services and Additional Services.** Except as otherwise set forth in the Quote, all Engineering Services and Additional Services provided by USDD to Customer shall be charged at \$250.00 per man-hour.

5. **Invoices and Payment.** USDD shall invoice Customer for all Products delivered to Customer and all services provided to Customer on a monthly basis. All invoices shall be due and payable upon receipt in United States currency, free of exchange, or any other charges, or as otherwise agreed upon and set forth in writing by USDD. Invoices unpaid for 30 days are subject to interest at 18% per annum.

6. **Training.** USDD shall provide training as set forth in the Scope of Work for the price stated in the Quote. Except as otherwise set forth in the Quote, all training provided by USDD related to the System shall be charged at \$250.00 per man-hour, plus reasonable costs and expenses incurred by USDD related to the training. Reasonable costs and expenses shall include air fare, lodging, meals, ground transportation, shipping, document reproduction, and other reasonably necessary costs and expenses related to the training.

7. **Acceptance of Station Installation.** Upon substantial completion of installation at Station 30, Customer shall prepare and deliver to End User a written request in a form acceptable to USDD for End User's acceptance of the installation ("Request for Acceptance"). Upon presentation of the Request for Acceptance, Customer shall provide End User with a reasonable time frame to inspect the station installation and (i) accept the installation as presented, or (ii) accept the installation subject to completion of specified tasks necessary for the installation to comply with the Scope of Work ("Punch List"). The Punch List shall specifically identify each task or item that is not in compliance with the Scope of Work and propose reasonable dates for completion, but not less than 14 days. Thereafter, Customer shall address all Punch List items in a timely and reasonable fashion and the installation shall be deemed complete and accepted.

8. **System Acceptance Testing.** Reserved.

9. **Taxes.** The amount of any sales, use, occupancy, excise, or other tax, federal, state, or local which USDD shall be obligated legally to pay, either on its own, on behalf of the Customer or otherwise, with respect to the Products and services to be provided under this Contract, shall be paid by Customer in addition to all other sums due hereunder.

10. **Warranty.** USDD warrants and guarantees its Products subject to the terms and limitations set forth in the Warranty. The Customer's rights and remedies with respect to Products found to be defective in material or workmanship shall be limited exclusively to the rights and remedies set forth in the Warranty. For purposes of determining the commencement date of the Warranty Period, the date of this Contract shall be the date that the Prime Contract is executed between Customer and End User or the date this contract is executed between the parties, which is later.

11. **Intellectual Property.** Customer hereby agrees and acknowledges that USDD owns all rights, title, and interest in and to the Intellectual Property. Customer agrees to not remove, obscure, or alter USDD's or any third party's copyright notice, trademarks, or other proprietary rights notices affixed to or contained within or accessed in conjunction with or through USDD's Products. Nothing herein shall be deemed to give, transfer, or convey to Customer any rights in the Intellectual Property other than the license to use the Software, as set forth below.

12. **License.** At all times that Customer is in compliance with the terms of this Contract and all other agreements between the parties, Customer shall have a non-exclusive, non-transferable, fully paid license to use the Software in conjunction with the System.

13. **Insurance.** If required, USDD and its contractors will provide to Customer copies of current insurance certificates for general liability insurance and workers' compensation insurance

(“Proof of Insurance”). Notwithstanding the foregoing, if after submission of the Proof of Insurance Customer authorizes USDD or its contractors to proceed with the performance of this Agreement, it shall be conclusively presumed and determined that the insurance is in full compliance with Customer’s requirements, and such requirements shall be deemed revised and amended to require only the coverages provided in the Proof of Insurance. These terms are effective and shall be controlling whether the Proof of Insurance is provided before or after the date of this Contract.

14. **Contingencies.** This Contract and the parties’ rights and duties hereunder are contingent on the following occurrences (“Contingencies”) or USDD’s written waiver thereof:

- a. The execution of the Prime Contract by the Customer and End User; and
- b. The End User’s written agreement, in a form acceptable to USDD in its sole discretion, to the Warranty, the terms of this Contract relating to the Intellectual Property, and the terms of the Software license granted hereunder.

15. **Customer Obligations.** Customer shall take and perform all reasonable action necessary to facilitate USDD’s performance of the Scope of Work hereunder. Without limiting the foregoing, Customer shall be responsible for or ensure that End User is responsible for the following:

- a. The procurement and/or provision of all computers, peripherals, and consumables (collectively “Customer Equipment”), including printer paper, toner and ink necessary for the installation, testing and functionality of the of the System;
- b. At each ATX Station Controller installation site, Customer shall:
 - i. Provide mounting location for Station Controller;
 - ii. Provide one 15A/120V AC outlet within 4' of the Station Controller location preferably on a Generator circuit;
 - iii. Provide mounting location for Station Controller UPS, if necessary;
 - iv. Provide one 10/100baseT LAN connection within 6' of the Station Controller from station LAN with 2-way TCP/IP and UDP/IP connectivity to Communications Gateway network (dispatch center or computer equipment location);
 - v. Provide one IP address, subnet mask, and default gateway for each station location;
 - vi. Provide external VPN access to the IP addresses assigned to the Station Controllers, which must provide access for SSH (22), and HTTPS (443);

- vii. Provide connection to existing 70 volt speaker system if existing amplifier and/or speaker system is to be used;
 - viii. Provide dispatch radio for audio source for dispatch alerting, if necessary. Provide make and model of radio to be used, as well as any connector pinouts if USDD is responsible for connection per the Contract. Note, Customer is responsible for connection to Customer's radios unless otherwise specified in the Contract;
 - ix. Provide connections from telephone intercom, secondary dispatch radio, or other existing audio sources to the Station Controller, if necessary. Provide technical documentation on any interfaces that USDD is responsible for per the Contract. Note, Customer is responsible for connection to Customer Equipment unless otherwise specified in the Contract; and
 - x. Provide technical documentation of all existing equipment to which the Station Controller or Peripherals are to be interfaced. Note, Customer is responsible for connection to Customer Equipment unless otherwise specified in the Contract.
- c. Any configuration and regular maintenance that is normally undertaken by the user or operator as described in any operating manuals for the Customer Equipment, including the replacement of UPS batteries as necessary;
 - d. Providing all reasonable security and bearing all risk of loss or damage to any Products delivered to, stored at, or installed on Customer's property;
 - e. Providing a stable means of data transmission between the Communications Gateway and each Station Controller serviced by the System necessary for the installation, testing and functionality of the of the System; such means of data transmission may include, but is not limited to, TCP/IP, data modems, leased lines, radios, etc;
 - f. The correct use of the Products and System in accordance with the manufacturer and USDD's operating instructions; and
 - g. The security, accessibility, and integrity of the System, Customer Equipment, and installation site.

16. Termination

- a. **By Customer.** If this Contract is terminated by Customer for any reason other than USDD's breach, Customer shall immediately pay USDD for all work in progress, services rendered, all inventoried or ordered Products, and all other costs incurred by USDD related to this Contract.

- b. **By USDD.** If Customer refuses or fails to perform any of its obligations in accordance with this Contract, including, without limitation, to remit all payments in a timely manner, USDD shall provide written notice thereof to Customer (“Default Notice”). The Default notice shall specifically describe the nature of the alleged failure and demand that Customer cure such failure within a specified reasonable time period, which in the event of a failure to make timely payment shall be five days, and in all other events shall not be less than 30 days (“Cure Period”). If Customer fails to cure the failure within the Cure Period, such failure shall be deemed a default under this Contract. In such event, USDD shall have the right to terminate this Contract by written notice to Customer, and Customer shall immediately pay USDD for all work in progress, services rendered, all inventoried or ordered Products, and all other costs incurred by USDD related to this Contract.
- c. **For Failure of Contingencies.** USDD may terminate this Contract upon written notice at any if it determines, in its sole discretion, that any of the Contingencies have failed or are unlikely to occur.

17. **Arbitration.** If the parties are unable to informally resolve any dispute arising out of this Contract either during or after its Term, including the question as to whether any particular matter is subject to arbitration, the parties agree to submit the matter to binding arbitration. In the event the parties have not agreed upon an arbitrator within 20 days after either party has demanded arbitration in writing, either party may file a demand for arbitration with the Phoenix regional office of the American Arbitration Association ("AAA") and a single arbitrator shall be appointed in accordance with the then existing Commercial Arbitration Rules of the AAA. Discovery may be conducted either upon mutual consent of the parties, or by order of the arbitrator upon good cause being shown. In ruling on motions pertaining to discovery, the arbitrator shall consider that the purpose of arbitration is to provide for the efficient and inexpensive resolution of disputes, and the arbitrator shall limit discovery whenever appropriate to ensure that this purpose is preserved. The dispute between the parties shall be submitted for determination within 60 days after the arbitrator has been selected. The decision of the arbitrator shall be rendered within 30 days after the conclusion of the arbitration hearing. The decision of the arbitrator shall be in writing and shall specify the factual and legal basis for the decision. Upon stipulation of the parties, or upon a showing of good cause by either party, the arbitrator may lengthen or shorten the time periods set forth herein for conducting the hearing or for rendering a decision. The decision of the arbitrator shall be final and binding upon the parties. Judgment to enforce the decision of the arbitrator, whether for legal or equitable relief, may be entered in any court having jurisdiction thereof, and the parties hereto expressly and irrevocably consent to the jurisdiction of the Maricopa County Superior Court of Arizona for such purpose. The arbitrator shall conduct all proceedings pursuant to the then existing Commercial Arbitration Rules of the AAA, to the extent such rules are not inconsistent with the provisions of this Section. In the event a dispute is submitted to arbitration pursuant to this Section, the prevailing party shall be entitled to the payment of its reasonable attorneys' fees and costs, as determined by the arbitrator. Each of the parties shall keep all disputes and arbitration proceedings strictly confidential, except for disclosures of information required by applicable law or regulation.

18. **Assignment.** The parties shall not assign in whole or in part the Contract without the prior written consent of the other party, which consent may not be unreasonably withheld. Notwithstanding the foregoing, USDD may freely transfer its rights under this Contract in the event of a sale of all or substantially all of this assets or stock. Each party binds itself, its successors, assigns, executors, administrators or other representatives to the other party hereto and to successors, assigns, executors, administrators or other representatives of such other party in connection with all terms and conditions of this Contract.

19. **Force Majeure.** Except for Customer’s duty to pay sums due hereunder, neither party will be liable for any act, omission, or failure to fulfill its obligations under this Contract if such act, omission or failure arises from any cause beyond its control including acts of nature, strikes, lockouts, riots, acts of war, acts of terrorism, epidemics, governmental action after the date of this Contract, fire communication line failures, power failures, earthquakes or other disasters. The party unable to fulfill its obligations due to Force Majeure will immediately:

- a. Notify the other in writing of the reasons for its failure to fulfill its obligations and the effect of such failure; and
- b. Use all responsible endeavors to avoid or remove the cause and perform its obligations.

20. **Images and Testimonials.** During the term of this agreement and, Customer agrees that USDD may take, make or obtain images, pictures, photographs, commentary, and video and audio recordings of the System and installation sites and reproductions of the same in whole or in part, either digitally or in any other medium now known or later discovered (collectively “Images”). In addition, USDD may request Customer to provide testimonials, endorsements, feedback or other written or oral comments concerning Customer’s experience with the System (collectively “Testimonials”). Customer consents to USDD’s use of such Images and Testimonials for verification, training, and promotional purposes in USDD’s sole discretion and agrees that all such Images and Testimonials shall remain the property of USDD and may be used and exploited in any media format.

21. **Notices.** Whenever any provision of this Contract requires the giving of written notice, it shall be deemed to have been validly given if delivered (i) in person, (ii) by registered mail, postage pre-paid, (iii) by a nationally recognized overnight courier service, or (iv) electronically via facsimile copy or email, provided that the sender obtains confirmation of transmission, to the following:

For the Customer:

Name: _____

Title: _____

Address: _____

Fax: _____

Email: _____

For USDD:
US Digital Designs, Inc.
Attention: Dominic Magnoni
1835 East 6th Street, Suite 27
Tempe, Arizona 85281
Fax: 480-290-7892
Email: dmagnoni@usdd.com

22. **Headings and Usage.** The headings, captions, and section numbers contained herein are provided for convenience only and are not part of the terms of this Contract. When the context of the words used in this Contract indicate that such is the intent, words in the singular shall include the plural, and vice versa, and the references to the masculine, feminine or neuter shall be construed as the gender of the person, persons, entity or entities actually referred to require.
23. **Waiver.** No failure or delay, in any one or more instances, to enforce or require strict compliance with any term of this Contract shall be deemed to be a waiver of such term nor shall such failure or delay be deemed a waiver of any other breach of any other term contained in this Contract.
24. **Governing Law.** This Contract will be governed by and construed according to the laws of the State of Arizona without regard to conflicts of law principles.
25. **Execution in Counterparts.** This Contract may be executed in counterparts, all of which taken together shall be deemed one original. The date of this Contract shall be the latest date on which any party executes this Contract.
26. **Entire Agreement.** This Contract contains the entire understanding between the parties, and supersedes any prior understandings and agreements between or among them with respect to the subject matter hereof. This Contract supersedes and replaces the “terms and conditions” section set forth in the Quote, if any. This Contract may not be amended, altered, or changed except by the express written agreement of the parties. No part or term of the Prime Contract shall be deemed to amend or supplement this Contract except upon the express written agreement of the parties.
27. **Joint Effort.** This Contract has been drafted through the joint efforts of the parties and shall not be construed against any party on the basis that such party is the drafter of this Contract or any term thereof.
28. **Savings Clause.** In the event any part, provision, or term of this Contract is deemed to be illegal or unenforceable, this Contract shall be construed as if such unenforceable part, provision, or term had not been included herein. Such illegal or unenforceable part, provision, or term shall be deemed revised to the extent necessary to cure its defect and such revision and the remainder of the Contract shall be and remain in full force and effect.

29. **Customer Representative.** The undersigned representative of Customer hereby represents and warrants that s/he has the authority to bind Customer and that the execution, delivery and performance by Customer under this Contract will not violate the provisions of any law, rule, regulation or policy, and will not conflict with or result in the breach or termination or constitute a default under any agreement or instrument to which Customer is a party.

30. **Incorporation of all Exhibits.** All exhibits, addenda, schedules and other documents referenced herein and attached hereto are hereby fully incorporated and made a part hereof by this reference as if the terms and content thereof had been fully set forth in the body of this Contract.

[Customer Name]:

US Digital Designs, Inc.:

By: _____

By _____

Name: _____

DOMINIC MAGNONI, Vice President

Its: _____

Date: _____

Date: _____

US Digital Designs



END USER'S ACKNOWLEDGMENT AND AGREEMENT

CITY OF SAN ANTONIO FIRE DEPARTMENT (“End User”) and [Customer/Prime Contractor] (“Prime Contractor”) entered into the **contract for Station 18 [include additional info such as Contract #, etc.]**(“Prime Contract”) on or about _____, 20____, for the acquisition and installation of a fire station alerting system (“System,” as more specifically defined below) designed and manufactured by US DIGITAL DESIGNS, INC. (“USDD”). USDD and Prime Contractor entered into a Fire Station Alerting System Purchase Contract on or about _____, 20____ (“USDD Contract”), for the provision of the System and certain related services. The USDD Contract and USDD’s obligation to perform thereunder, is contingent, in part, on USDD’s receipt of End User’s written agreement, in a form acceptable to USDD in its sole discretion, to the terms of the Warranty set forth in the USDD Contract, the terms of the USDD Contract relating to USDD’s “Intellectual Property” (as defined below), and the terms of the software license granted under the USDD Contract (collectively, the “Contingencies”).

In order to satisfy the Contingencies, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, End User agrees as follows:

1. Definitions.

- a. **“Hardware”** means a physically tangible electro-mechanical system or sub-system and associated documentation provided to Prime Contractor or End User by USDD; provided, however, that Hardware shall not include any televisions or monitors manufactured by third parties.
- b. **“Intellectual Property”** means any and all rights of USDD related to Hardware, Software, and other products and business existing from time to

time under patent law, copyright law, trade secret law, trademark law, unfair competition law, and any and all other proprietary rights, and any and all derivative works, work product, applications, renewals, extensions and restorations thereof, now or hereafter in force and effect worldwide.

- c. **“Software”** means software programs, including embedded software, firmware, executable code, linkable object code, and source code, including any updates, modifications, revisions, copies, documentation, and design data provided to End User by USDD as part of the System.
 - d. **“System”** means all hardware and software purchased by Prime Contractor for resale to End User as part of the Prime Contract and that is used exclusively by End User as part of its fire station alerting system; provided, however, that the term “System” specifically excludes any components, hardware, or software provided by third parties, including without limitation Prime Contractor’s or End User’s computers, laptops, computer peripherals, routers, switches, operating systems, computer programs, applications, internet and network connections, and any other parts or items not provided directly by USDD.
2. **Warranty.** End User acknowledges and agrees to the terms of the Product Warranty attached hereto at **Schedule 1** (the “Warranty”) and made a part hereof by this reference. End User agrees that all services provided under the Warranty will be provided directly by USDD and that USDD will not be obligated to honor any warranty claims made through Prime Contractor or any other entity.
 3. **Service Agreement.** Upon expiration of the Warranty Period (as defined in the Warranty), the System shall be subject to the Service Agreement entered into between USDD and the City of San Antonio attached to RFO #6100006459.
 4. **Intellectual Property.** End User hereby agrees and acknowledges that USDD owns all rights, title, and interest in and to the Intellectual Property. End User agrees not to remove, obscure, or alter USDD’s or any third party’s copyright notice, trademarks, or other proprietary rights notices affixed to or contained within or accessed in conjunction with or through any Hardware, Software, or other products. Nothing in this instrument, the Prime Contract, or the USDD Contract shall be deemed to give, transfer, or convey to End User any rights in the Intellectual Property other than the license to use the Software, as set forth below.
 5. **License.** At all times that End User is in compliance with the terms of the Prime Contract and any and all other agreements between the parties, End User shall have a non-exclusive, non-transferable, fully paid license to use the Software in conjunction with the System. All other rights to the Software and other Intellectual Property are reserved exclusively to USDD.

IN WITNESS WHEREOF, End User has executed this instrument as of the date set forth below.

CITY OF SAN ANTONIO FIRE
DEPARTMENT:

By _____

Name: _____

Its: _____

Date: _____

SCHEDULE 1

PRODUCT WARRANTY

US Digital Designs



PRODUCT WARRANTY

1. **Warranty.** Subject to the terms, conditions and limitations contained herein, US Digital Designs, Inc. (“USDD”) warrants that the Products purchased under the Fire Station Alerting System Purchase Contract (“Contract”) and integrated into the System shall not contain any material defects and shall function in material conformity with the descriptions and specifications set forth in the Contract for a period of 18 months from the date of the Contract (“Warranty Period”). Capitalized terms used herein and not specifically defined in this Warranty shall have the meanings set forth in the Contract.

2. **Hardware Defects.** If a Hardware defect arises and a valid claim is made within the Warranty Period, at its option, USDD will either (1) repair the hardware defect at no charge, using new parts or parts equivalent to new in performance and reliability or (2) exchange the product with a product that is new or equivalent to new in performance and reliability and is at least functionally equivalent to the original product. Any replacement product or part, including a user-installable part that has been installed in accordance with instructions provided by USDD, shall remain under warranty during the Warranty Period or for 90 days from the date of repair, whichever is later. When a product or part is exchanged, any replacement item becomes the Customer’s property and the replaced item becomes the property of USDD. Parts provided by USDD in fulfillment of its warranty obligation must be used in the System for which warranty service is claimed. Customer shall be responsible for and bear all risks and costs of shipping any Hardware to USDD for repair. USDD shall be responsible for and bear all risks and costs of returning any Hardware to Customer after repair or replacement. Replacement Hardware will be

returned to Customer configured as it was when the Hardware was originally purchased, subject to applicable updates.

3. **System Maintenance and Support.** During the Warranty Period, USDD shall provide Software updates and maintenance for the System (collectively the “Support Services”). The Services shall include the following:

a. Technical phone support Monday through Friday from 08:00 to 17:30 MST, excluding USDD holidays;

b. Remote access support Monday through Friday from 08:00 to 17:30 MST, excluding USDD holidays;

c. 24 hour per day telephone access for Customer’s System Administrator to USDD’s senior staff and engineers in the event of a “Mission Critical Failure” (as defined below); and

d. Updates for all System Software, as and when released by USDD.

4. **Claims.** Prior to making a Warranty claim or requesting Support Services, Customer is encouraged to review USDD’s online help resources. Thereafter, to make a valid claim hereunder, Customer must contact USDD technical support and describe the problem or defect with specificity. The first such contact must occur during the Warranty Period. USDD’s technical support contact information can be found on USDD’s web site at <http://stationalerting.com/home/about-usdd/contact-usdd/>. Customer must use its best efforts to assist in diagnosing defects, follow USDD’s technical instructions, and fully cooperate in the diagnostic process. Failure to do so shall relieve USDD of any further obligation hereunder.

5. **Mission Critical Failure.** “Mission Critical Failure” means a failure in the materials, workmanship or design of the System that causes any fire station served by the System to be incapable of receiving dispatches through all communications paths, provided however, that any such failure caused by operator error, internet or telephony service outages, misuse or neglect of the System or any cause outside of USDD’s direct control does not constitute a Mission Critical Failure. Customer’s use of Emergency Support in the absence of a Mission Critical Failure shall constitute Additional Services under the Contract, which will be charged at USDD’s then current rates.

6. **Exclusions and Limitations.** USDD’s obligations under this Warranty are contingent on the Customer providing USDD with VPN access or other means for remote access to the System for remote diagnosis. USDD does not warrant that the operation of the System, Hardware, Software, or any related peripherals will be uninterrupted or error-free. USDD is not responsible for damage arising from Customer’s failure to follow instructions relating to the product’s use. This Warranty does not apply to any Hardware or Software not used in conjunction with the System and for its intended purpose. This Warranty does not apply to monitors or televisions manufactured by third parties. Recovery and reinstallation of Hardware and user data (including passwords) are not covered under this Warranty. This Warranty does not apply: (a) to

consumable parts, such as batteries, unless damage has occurred due to a defect in materials or workmanship; (b) to cosmetic damage, including but not limited to scratches, dents and broken plastic on ports; (c) to damage caused by use with non-USDD products; (d) to damage caused by accident, abuse, misuse, flood, lightning, fire, earthquake or other external causes; (e) to damage caused by operating the product outside the permitted or intended uses described by USDD; (f) to damage or failure caused by installation or service (including upgrades and expansions) performed by anyone who is not a representative of USDD or a USDD authorized installer or service provider; (g) to a product or part that has been modified to alter functionality or capability without the written permission of USDD; or (h) if any serial number has been removed or defaced. **TO THE EXTENT PERMITTED BY LAW, THIS WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN, STATUTORY, EXPRESS OR IMPLIED. AS PERMITTED BY APPLICABLE LAW, USDD SPECIFICALLY DISCLAIMS ANY AND ALL STATUTORY OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS.** If USDD cannot lawfully disclaim statutory or implied warranties then to the extent permitted by law, all such warranties shall be limited in duration to the duration of this express Warranty and to repair or replacement service as determined by USDD in its sole discretion. No reseller, agent, or employee is authorized to make any modification, extension, or addition to this Warranty. If any term is held to be illegal or unenforceable, the legality or enforceability of the remaining terms shall not be affected or impaired. **EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE EXTENT PERMITTED BY LAW, USDD IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOSS OF USE; LOSS OF REVENUE; LOSS OF THE USE OF MONEY; LOSS OF ANTICIPATED SAVINGS; LOSS OF GOODWILL; LOSS OF REPUTATION; and LOSS OF, DAMAGE TO OR CORRUPTION OF DATA. USDD IS NOT RESPONSIBLE FOR ANY INDIRECT LOSS OR DAMAGE HOWSOEVER CAUSED INCLUDING THE REPLACEMENT OF EQUIPMENT AND PROPERTY, ANY COSTS OF RECOVERING PROGRAMMING OR REPRODUCING ANY PROGRAM OR DATA STORED OR USED WITH USDD PRODUCTS, AND ANY FAILURE TO MAINTAIN THE CONFIDENTIALITY OF DATA STORED ON THE PRODUCT.** USDD disclaims any representation that it will be able to repair any Hardware under this Warranty or make a product exchange without risk to or loss of the programs or data stored thereon.

US DIGITAL DESIGNS

Tempe, Arizona USA

Phoenix G2 - Automated Fire Station Alerting

Quotation to:

City of San Antonio, Texas
San Antonio Fire Department

Project:

**Fire Station Alerting System
Station 18**

Proposal number:

SAT015 (3RD-PARTY / CONTRACTOR QUOTE)

**3rd-Party Purchase Agreement MUST be Executed with Awarded Contractor
before any USDD Materials or Services can be rendered**

Revision #

1

Quote Date:

14-Jan-2016

Quote Expires:

12-Jul-2016

FOR FINAL INSTALLATION CONTACT:

Custom Systems Design, Inc.

George Vigue / george@csdisa.com

By:

Erik Hanson

Project Manager

US Digital Designs, Inc.

1835 E Sixth St #27

Tempe, AZ 85281

602-687-1739 direct

480-290-7892 fax

ehanson@usdd.com

This Proposal is subject to corrections due to Errors or Omissions

US DIGITAL DESIGNS

1835 E. Sixth St. Suite #27
 Tempe, Arizona 85281
 877-551-8733 tel 480-290-7892 fax

QUOTE

DATE: 1/14/2016
 Expires: 7/12/2016

Quote SUBMITTED TO:
 City of San Antonio, Texas
 Fire Station Alerting System

REF PROPOSAL

SAT015 (3RD-PAR) Station-Level Equipment/Services

STATION 18

Based from USDD G2 Fire Station Alerting System Design Drawing # USDD.SATX.FS18.2015.10.13.pdf

Item	Unit	Mfr	Qty	Description	Part No.	US List Unit	USDD Direct Unit	USDD Direct Ext
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STATION LICENSES

L1	Ea	USDD	1	G2 VOICEALERT - Single Station License. One-Time/Perpetual (unless further USDD modification is needed)	VA	\$ 927.00	\$ 834.30	\$ 834.30
L2	Ea/Yr	USDD	24	G2 MOBILE FSAS APP - Single Device License. Up to 24 Licenses-Per-ATX are offered at \$0.00 cost each as long as system is currently under warranty or elected recurring annual support coverage. See 'Mobile' Section for more detail.	G2-APP-DL	\$ -	\$ -	\$ -

PHOENIX G2 - STATION CONTROLLER (Required)

Control up to (8) peripherals

1	Kit	USDD	1	G2 ATX STATION CONTROLLER - Power/Signal/Control up to 8 peripheral Remote Options. 4 Unique Amps/Zones available.	ATX	\$ 20,000.00	\$ 18,000.00	\$ 18,000.00
2	Kit	USDD	0	Rack Mount Ears	ATX-E	\$ 54.00	\$ 48.60	\$ -
3	Kit	USDD	0	Base Plate	ATX-P	\$ 54.00	\$ 48.60	\$ -

STATION CONTROLLER OPTIONS

4	Kit	USDD	1	ATX EXPANSION KIT - Allows ability to Power/Signal/Control up to 12 more peripheral Remote options per EXP.	ATX-EXP	\$ 6,660.00	\$ 5,994.00	\$ 5,994.00
5	Kit	USDD	0	Rack Mount Ears	ATX-E	\$ 54.00	\$ 48.60	\$ -
6	Kit	USDD	0	Base Plate	ATX-P	\$ 54.00	\$ 54.00	\$ -

STATION PERIPHERAL OPTIONS

7	Ea	USDD	14	G2 ROOM REMOTE Module	RR	\$ 1,830.00	\$ 1,647.00	\$ 23,058.00
8	Ea	USDD	0	G2 ROOM REMOTE Module / 2016 version 2	RR2	\$ 1,780.00	\$ 1,602.00	\$ -
8	Ea	USDD	0	RR Trim Plate, for Flush-Mount	RR-TP	\$ 46.00	\$ 41.40	\$ -
9	Ea	USDD	0	RR Back-Straps, for solid-wall flush-mounting	RR-BS	\$ 27.00	\$ 24.30	\$ -
10	Ea	USDD	0	RR Back-Box, for solid-wall flush-mounting	RR-BB	\$ 86.00	\$ 77.40	\$ -
11	Ea	USDD	5	G2 MESSAGE REMOTE Module	MR	\$ 1,167.00	\$ 1,050.30	\$ 5,251.50
12	Ea	USDD	3	G2 SIGN REMOTE Module	SR	\$ 583.00	\$ 524.70	\$ 1,574.10
13	Ea	USDD	0	G2 HDTV REMOTE / STATION Module (TV & Electrical Outlet by Others)	TVR-S	\$ 875.00	\$ 787.50	\$ -
14	Ea	USDD	0	G2 MESSAGE SIGN , Digital LED (STANDARD GammaSign / 24" Active Screen Width)	MS-G2-S	\$ 883.00	\$ 794.70	\$ -
15	Ea	USDD	0	G2 MESSAGE SIGN , Digital LED (EXTENDED GammaSign / 36" Active Screen Width)	MS-G2-E	\$ 1,325.00	\$ 1,192.50	\$ -
16	Ea	USDD	13	MESSAGE SIGN, Digital LED (BetaBrite - LEGACY Replacement 24" Screen Width)	MS-B	\$ 360.00	\$ 324.00	\$ 4,212.00
17	Ea	USDD	6	MS Adapter Plate, VESA 100	MS-ADPT-V100	\$ 60.00	\$ 54.00	\$ 324.00
18	Ea	USDD	3	MS Tie-Straps (pair) - join two MSs	MS-ADPT-STRP	\$ 27.00	\$ 24.30	\$ 72.90
19	Ea	USDD	3	MS Mount - Articulating, Long reach	MS-MNT-ART-L	\$ 287.00	\$ 258.30	\$ 774.90
20	Ea	USDD	0	G2 DOUBLE MS KIT (MR, 90-deg Mount, x2MS)	MS-X2K	\$ 2,065.00	\$ 1,858.50	\$ -
21	Ea	USDD	0	G2 I/O REMOTE w/ 8 In & 8 Out	IOR	\$ 1,165.00	\$ 1,048.50	\$ -
22	Ea	USDD	0	G2 Strobe Light / Red LED	STR	\$ 500.00	\$ 450.00	\$ -
23	Ea	USDD	0	G2 Color Indicator Remote - Up to 8 unique colors	CIR	\$ 635.00	\$ 571.50	\$ -
24	Ea	USDD	4	Push Button, Standard (Black)	PB-B	\$ 100.00	\$ 90.00	\$ 360.00

25	Ea	USDD	0	Push Button, Emergency (Red)	PB-R	\$ 100.00	\$ 90.00	\$ -	
26	Ea	Atlas	2	Audio Amplifier, External, Standard	AMP	\$ 987.00	\$ 888.30	\$ 1,776.60	
27	Ea	Atlas	2	Shelf, Under Table or Wall Mount, for 1U 1/2 Rack	AMP-S	\$ 66.00	\$ 59.40	\$ 118.80	
28	Ea	Bogn	10	Speaker-APP/Weatherized (A2T), Surface, 70v	SPK-W-SM	\$ 280.00	\$ 252.00	\$ 2,520.00	
29	Ea	Bogn	22	Speaker - Standard, Flush Mount, 70v (S86)	SPK-STD-FM	\$ 73.00	\$ 65.70	\$ 1,445.40	
30	Ea	Bogn	0	Speaker - Surface Mount (MB), 70v	SPK-STD-SM	\$ 73.00	\$ 65.70	\$ -	
31	Ea	USDD	15	G2 LED SPEAKER - Flush Mount, 70v	SPK-LED-FM	\$ 297.00	\$ 267.30	\$ 4,009.50	
32	Ea	USDD	0	G2 LED SPEAKER - Surface Mount (MB), 70v	SPK-LED-SM	\$ 297.00	\$ 267.30	\$ -	
33	Ea	TIC	14	Transformer, 8ohm to 70V, External	XFMR	\$ 53.00	\$ 47.70	\$ 667.80	
34	Ea	TBD	2	ATX UPS, Standard	UPS-STD	\$ 923.00	\$ 830.70	\$ 1,661.40	
35	Ea	TBD	2	Shelf/Bracket, Wall-Mount for UPS	UPS-WMB	\$ 57.00	\$ 51.30	\$ 102.60	
36	Ea	USDD	0	UPS Extended Runtime Battery	UPS-EXT	\$ 2,765.00	\$ 2,488.50	\$ -	

STATION-LEVEL SERVICES

37	Ea	USDD	1	Station Installation (Custome Systems Design, Inc)	ST-INST	\$ 27,337.66	\$ 24,603.89	\$ 24,603.89	
38	Ea	USDD	0	Station Remediation (NA/TBD)	ST-INST	\$ -	\$ -	\$ -	
39	Ea	USDD	0	Station Installation Supervision	ST-IS	\$ -	\$ -	\$ -	
40	Ea	USDD	1	Station Configuration & Start-Up	ST-SU	\$ 1,582.32	\$ 1,424.09	\$ 1,424.09	
41	Ea	USDD	1	Station Project Management	ST-PM	\$ 935.01	\$ 841.50	\$ 841.50	
42	Ea	USDD	1	Station Engineering / Design Services	ST-ES	\$ 503.46	\$ 453.12	\$ 453.12	
43	Ea	USDD	1	Station Documentation	ST-DM	\$ 57.54	\$ 51.78	\$ 51.78	
44	Ea	USDD	0	Station Training - User/Technician via streamed online video with per-station license and participant registration/verification.	TRA-UT-VID	\$ -	\$ -	\$ -	
45	Ea	USDD	0	Station Training - User/Technician. On-Site @ Station. 1 Hour, 1 Visit. (3 Units/Hours suggested to cover 3 shifts)	TRA-UT-OS	\$ -	\$ -	\$ -	
46	Ea	USDD	0	Training - Installation Contractor / USDD G2 Certification (TBD - only needed if using non-certified contractor)	TRA-IC	\$ -	\$ -	\$ -	
47	Ea	USDD	0	Miscellaneous/TBD	MISC	\$ -	\$ -	\$ -	

STATION 18	Individual Station Equipment & Services Subtotal	\$ 100,132.18
	Individual Station Shipping	\$ 2,688.00
	INDIVIDUAL STATION GRAND TOTAL	\$ 102,820.18

Installation Notes:	
01 - Unless specifically detailed in this proposal, no installation by USDD or it's subcontractors is assumed or provided.	
02 - Because these are mission-critical systems, USDD can only warrant and support systems installed by G2 Trained and Certified Contractors.	
03 - USDD can source, qualify, train and certify Local Licensed Regional Subcontractors where needed.	
04 - Installation warranted by installation contractor - G2 FSAS warranted, serviced and supported by USDD.	
05 - Unless specifically detailed in this proposal, installation to be performed during normal working hours.	
06 - Unless specifically detailed in this proposal, no permit fees or material charges have been included.	
07 - Unless specifically detailed in this proposal, no removal or remediation has been assumed or included.	
08 - Unless specifically detailed in this proposal, no bonds of any type (performance, bid) have been assumed, included or budgeted for in this proposal.	
09 - USDD FSAS Equipment to be made available by owner to Installation Contractor prior to on-site arrival.	
10 - Structural backing for system devices and other millwork (not specifically detailed) by others.	
11 - If applicable, Gas Control Shutoff Valve Addendum (to USDD and installation contractor) must be signed prior to installation.	
12 - All electrical power, including (but not limited to) raceway, conduit, backboxes, service panels, high-voltage wiring and fixtures by others.	
13 - All communications pathway infrastructure (network, radio, etc.) by others unless specifically detailed in this proposal.	
14 - USDD cannot warrant nor support any owner-furnished (3rd-Party) system or component we are required to integrate with.	

US DIGITAL DESIGNS

1835 E. Sixth St. Suite #27
Tempe, Arizona 85281
877-551-8733 tel 480-290-7892 fax

QUOTE

DATE: 1/14/2016
Expires: 7/12/2016

Quote SUBMITTED TO:
City of San Antonio, Texas
Fire Station Alerting System

REF PROPOSAL

SAT015 (3RD-PARTY) Section Totals

(unless otherwise noted, all prices are \$US)

Station 01 FSAS Subtotal \$ 102,820.18

US Digital Designs System Total \$ **102,820.18**

END OF SPEC SECTION 270000
WITH EXHIBITS
(USDD.SAT.FS18.DWG next page)

