

CUSTARD CONSTRUCTION SERVICES

PO BOX 271080

FLOWER MOUND, TEXAS 75027-1080

214-415-2383

Tips/Taps Contract #241001

HUB CERTIFICATION # 1454932931700



(Mesquite Fire Station No. 2)



|| October 22, 2025

OVERVIEW

Customer:

City of Mesquite

1527 N. Galloway

Mesquite, TX. 75149

1. Project Background and Description

Network cabling for City of Mesquite Fire Station #2 building

1. Network cabling
2. Alert notification / speakers cat-6 Shielded
3. Low voltage cable day/night speakers
4. 4 cat-6 for camera locations

2. Project Scope network category-6 cabling

Installation of Ninety-eight (98) new category-6 form MDF Server Rm 103 terminated on NetKey Orange Panduit inserts on Two port Face plate or Surface mount device, supported in ceiling with 2- or 4-inch J-hooks with MDF Server Closet Rm 103 build-out with CPI product to support One (1) 19x7 relay Rack and Panduit Product for termination and wire management Per **Mesquite Fire Station # 2 Data/Telecom prints**

- All Data-Voice cables will consist of a 4-pair Category 6 Plenum Cable (Blue).
- All Data-Voice cables will terminate on Category 6 Jack Insert (Orange) at the workstation location
(PANDUIT NK688MOR).
- At the workstation locations, all Cat 6 jack insert (Orange) will connect to a 2-port faceplate
(PANDUIT NK2FWH). A 15-ft Service Loop will be left in the ceiling.
- At the WAP locations, the Cat 6 jack inserts will connect to a 2-port surface mount box
(PANDUIT NK2BWH). A 25-ft Service Loop will be left in the ceiling.

Above Ceiling pathways

- 4" Cable Hooks w/ Clip (B-LINE BCH64-W2) for pathways that have more than 40 Cat-6 and 2" Cable Hooks w/ Clip (PANDUIT JP2DW-L20) for pathways that have less than 40 Cat-6 Support.

Cabling shall be suspended in the ceiling above air conditioning ducts, sprinkler where elevations allow, and following established building lines like hallways, corridors, and ceilings, Cable Supports will be installed through cables route, No Ceiling grid wire, electrical conduit, and sprinkler pipes will not be used to secure communications cabling.

- Plenum Rated Velcro to secure Cable in organized bundles Above Ceiling pathways and services loops. No tie wraps to be used.

Station cable breakdown

- Voice Fourteen (14) Locations with one cat-6 blue plenum cable per location. Total 14 cables.
- Data Fourteen (14) Locations with Two cat-6 blue Plenum cables per location. Total 28 cables.
- WAP Four (4) Wireless Access location One (1) cat-6 plenum cable per location. Total 4 cables.

- Four (2) outside camera locations parking and rear gate (2) apron bay locations Total 4 cables.

Add/Delete \$200.00 price

MDF/IDF Equipment Subsystem Buildout Server Room 103

Closet Buildout and elevation specifics to be coordinated on site with City of Mesquite, city of Garland General, General contractor to deconflict space assignment.

- One (1) 19"W x 84"H Equipment Rack with Floor Mount Kit (CHATSWORTH 55053-703) bolted to the floor.
- One (1) 10' x 18" black ladder rack (CPI 10250-718) installed down the wall and across to the top of the rack for rack support and cable pathway.
- Four (4) Wall angle support bracket kit (CPI 11421-718) installed to support ladder rack on the wall going horizontal
- Four (4) Vertical wall bracket (CPI 10608-001) to mount ladder on wall going vertical
- One (1) 3" channel rack to runway mounting bracket (CPI 10595-718) mounted to the top of the racks to support ladder to rack
- One (1) 2" to 4" Standoff Kit (CPI 10506-702) mounted from the 2-post rack to the ladder rack above.
- Two (2) Double-Sided Vertical Wire Manager (PANDUIT WMPV45E) mounted on the rack for both sides for cable management.
- One (1) Horizontal Power Distribution Unit (PANDUIT P12B01M) mounted on the rack at 24U
- Two (2) Modular Patch panels 48-port Modular Patch Panel mounted on the rack for the Data-Voice cable terminations on (PANDUIT NKPP48FMY)
- Fifty (50) RJ45 Category 6 Jack Insert (Orange) (PANDUIT NK688TGOR) for the termination of Data-Voice cables.
- #6 AWG Ground Wire will be used to ground all equipment and racks to Telcom Grounding Bar.

Labeling

- Labeling –will label both ends of each cable with computer generated self-laminating labels. Labeling shall be attached per TIA-606 standards. Each wall jack shall be labeled with

the corresponding patch panel location. Floor plans shall be marked with the corresponding patch panel/ jack number.

Category 6 Testing

Category 6 Testing - Shall perform a Category 6 test for each data cable installed. Tests include Line Map (continuity and polarity), Resistance, Near End Crosstalk (NEXT), Far End Cross Talk (ELFEXT), Power Sum ELFEXT, Attenuation, Length, and Delay Skew at rates up to 1GHz for Cat 6.

Tests shall be conducted with a Fluke VERSIV cable analyzer. A hard copy of the test results will be

issued at completion of the work

Documentation

Documentation - Upon completion of the project, we will provide an installation report containing:

- A hard copy of all cable test reports.
- CADD drawing showing all workstation outlets and their numbers will be provided only if electronic CADD drawings can be obtained from the customer.
- Red Line As-built drawing Arch C size 18x24 laminated copy of floor plan and cable pathway installed in Server room 103

3. Alert Notification *Mesquite Fire Station #2 Fire Station Alerting plan*

- IDB Ten (10) locations Originating from Server Room 103 consisting of Two (2) cat-6 shielded blue Plenum cables per location. *Terminated by COG Radio Department Closet side.* Total 20 cables
- FAS Sixteen (16) locations Originating from Server Room 103 consisting of one (1) cat-6 shielded blue Plenum cables per location daisy-chained in and out. *Terminated by COG Radio Department both sides.*
- Visual LED alert Bar Fourteen (14) location Originating from Server Room 103 consisting of two cat-6. *Terminated by COG Radio Department Closet side.* Total 28 cables

Add/Delete \$150.00 price

4. Speakers Category-6 shielded Mesquite Fire Station #2 Fire Station Alerting plan

Installation of 47 indoor/outdoor speaker locations from Server with Two (2) cat-6 Shielded blue plenum cables to each location, *Terminated by COG Radio Department both side total 94 cables*

- Indoor Speaker Forty-two (42) Locations Originating from Server Room 103 consisting of Two cat-6 Shielded blue Plenum cables per speaker location. *Terminated by COG Radio Department both sides.*
- Outdoor Speaker Five (5) Locations Originating from Server Room 103 consisting of with Two cat-6 Shielded blue Plenum cables per speaker location. *Terminated by COG Radio Department both sides.*

Add/Delete \$150.00 price

5. Low voltage Mesquite Fire Station #2 Fire Station Alerting plan

One (1) 18-4 shielded cable Originating from Server Room 103 for watch room day/night switch location. *Terminated by COG Radio Department both sides.*

Two (2) 18-6 Originating from Server Room 103 for last man-out both sides of Apparatus Bay locations. *Terminated by COG Radio Department both sides.*

Four (4) 18-4 shielded cables one each per speakers Apparatus Bay locations Originating from Server Room 103. *Terminated by COG Radio Department both sides.*

Add/Delete \$150.00 price

Specific Exclusions from Scope

- Nothing specifically stated about the scope of the work.
- Any Engineering or Design associated with project.
- Furniture moving of any kind/ Furniture must be moved out of offices and workspaces.
- Permits or any fees associated with permits.
- Any equipment or electronics
- Electrical power
- Fiber termination or equipment
- Conduit.

The above Scope of work for telecom and alerting cabling is

\$ 86,652.00

Scope of Work

Project: Installation of camera system, access control system, and two displays for recreational viewing.

Overview:

will provide and install:

- Camera package consists of a recording device and (4) cameras for viewing the Front Apron, Rear Apron, Rear Gate, and Rear Parking areas.
- Access control package for control of doors 101A, 103, 124, and 150.
- Wall-mounted 85" display with soundbar located in the Day Room.
- Wall-mounted 55" display located in the Fitness Room.

Installation Requirements:

- The locations where televisions will be mounted must have adequate structural support to accommodate the display and the mount.
- A duplex power outlet must be provided to power the display.

Scope Inclusions:

- Procurement and delivery of all necessary equipment, materials, and parts.
- Development and provision of shop drawings to support the installation process.
- Coordination of shipping and logistics for all required components.

Deliverables:

- Camera system with recording device.
- Access control system.
- Two displays for recreational viewing.
- Shop drawings documenting installation details.

This quote is all-inclusive, covering equipment, shipping, materials, shop drawings, and labor necessary for project completion.

- Camera for rear apron area
- Alternate camera types for increased field of view
- Gate control cabling From Server Room for, fuel, rear gate locations, Strobe sensor
- Gate control hardware including
 - Dual-height card reader on a pedestal mount rear gate
 - Tomar Strobeswitch system rear gate opening
 - Walk out gate control switch for pedestrian exit
 - Hold-open override switch to hold the rear gate open for events
 - Avigilon 180° Cameras (2)
 - Avigilon Dome Camera (Lobby Doorway)
 - Tomar Strobeswitch
 - Gate lockout for pedestrian exit
 - Card reader and access interface
 - Dual-height card reader
 - Lift rental
 - Mule tape
 - Cables
 - Wire lube
 - Consumables
 - Hardware

Assumptions

- **Pathways to locations provided by other.**
 - **All work is to be done during normal working hours 7am-5pm Monday through Friday.**
 - **The ability to work weekends and after hours if needed.**

Data-Voice / Alert cabling	\$86,652.00
Camera systems /access control	\$72,270.00
Additional Cameras / gate control hardware	\$35,446.95
Subtotal total	\$194,388.95
BOND excluded 3%	(NA)

total	\$194,388.95
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Invoice to be paid in full within 15 days of completion and acceptance of work Bid good for 15 days



Approved By

10/22/2025
Date

Approved By

Date

Custard Construction Services / 214-415-2383 / chris@ccsvcs.com

Due to unpredictable tariff situations, we have excluded forecasting of any future tariff increases from this proposal. Any tariffs incurred that impact this proposal will be passed through to our customers at the time of the increase. Amounts will be charged accordingly based on the timeline and magnitude of any tariff incurred. Custard Construction will do everything to ensure that the tariff increases are fair and help mitigate the impact of these cost increases. Pricing associated with this proposal is only valid for (30) days.