

Technology Package – Addendum 1 Eldridge Street Project

Addendum #1 for the Technology Package for the Eldridge Street Project contains the following:

DIVISION 17 – CABLING

17100 Information Transport System Cabling 17100-1 through 10

DIVISION 27 – COMMUNICATIONS

2720.00 Data Network 02730-1 through 2
2720.00 Wireless Network 02730-1 through 2
2730.00 Phone System 02730-1 through 3
2740.00 Audio Tour System 02730-1 through 1
2742.13 Point of Sales Terminals 02730-1 through 3

DIVISION 28 – ELECTRONIC SAFETY AND SECURITY

2810.00 CCTV/Alarm System 02730-1 through 2

ELDRIDGE STREET PROJECT

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CCTV/Alarm System

The physical security solution is specified for Bosch products must include the following: Bosch Dibos8, 18 channel MPEG4 Digital Video Recorder, 13 indoor cameras as specified mounted onto Blue Line Tri Tech PIR/Microwave detectors for intrusion detection. No substitutions will be allowed on the cameras and intrusions detection modules. Only bid for exact module as they appears on the itemized bid response form will be accepted.

The Bosch Access Easy Controller, and D7412GV2 Intrusion Control panels must be integrated with the Bosch Dibos DVR as part of the system. Additionally, a low temperature sensor, and water sensor must be integrated with the Intrusion Panel, allowing notification of alerts in advance of flooding or freeze damage.

Video Intercom- AIPhone AX Series video intercom/door release for 2 doors that must integrate with the Cisco phone system to allow call forwarding from the intercom stations to an internal phone anywhere on the network should be included.

All pricing must include installation cost, end user training and a one-year warranty for a complete turnkey solution.

CCTV/Alarm System/Video Intercom parts list

Part Number	Description	QTY.
AEC-4W-P2USE	4 reader system	1
ARD-R40	I-Class switch plate readers	2
ACD-IC16K26-50	I-Class Cards 16k Wiegand 26bit credentials 50 pack	1
TR-1850	Transformer for Access Easy	1
DS150i	Rex Motion (request to exit)	2
D7412GV2-C	Control Panel	1
D8128D	Octo popit 8 point expander	2
D1255	Key Pad	2
D166	Phone Jack	1

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PQR2-POS0-0000001	Microsoft Retail Point Of Sale Application v2.0	2
BR1300LCD	APC BACK-UPS RS 1300VA LCD 120V	2
Installation Costs	Installation Costs POS	1



021-07746	Microsoft® 2007 Office Standard	2
RB146AA	HP L5006tm Smart Buy Touch screen Flat Panel Display	2
EY023AA	HP USB Thermal Receipt Printer	2
EY022AA	HP USB Barcode Scanner	2
EY024AA	HP Point of Sale Cash Drawer	2
EY025AA	HP USB POS Keyboard	2
EY026AA	HP USB Mini Magnetic Strip Reader	2
EK694AA	HP Modem PCI high-speed 56K International Soft Modem	2
EA118AA	HP Wireless A+G PCI adapter	2
UE326E	HP 4 year 9x5 next business day onsite (system + peripherals excluding monitor)	2

Desktops

RU005UT#ABA	SMART BUY DC5700 MT E4400 2.0G 1GB 80GB COMBO XPP	2
	Intel® Media Accelerator 3000	2
	Integrated Broadcom Gigabit EtherNet	2
DT527A#ABA	HP PS/2 standard keyboard	2
EY703AA	HP PS/2 2-Button Optical Scroll mouse	2
U7897E	HP 4 year 9x5 next business day onsite	2
PY277AA	HP 160-GB SATA 3.0-Gb/s Hard Drive (2 per PC)	4
021-07746	Microsoft® 2007 Office Standard	2
EA118AA	HP Wireless A+G PCI adapter	2
AH047AA	DVD ROM SATA 16X 5.25hh Drive	2
RB146AA	HP L5006tm Smart Buy Touch screen Flat Panel Display	2





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Point of Sales Terminals

Four (4) wireless POS (point of sales) terminal must be provide as specified. 2 POS terminal will consist of a touch screen display, thermal receipt printer, barcode scanner, cash draw and magnetic strip reader. Two (2) additional systems will consist of PCs only for back office operations. The POS system will be based upon Microsoft's Retail POS application. Pricing should include on site installation, end user training and a 4 year 8x5 next business day on site extended maintenance contract.

Point-of-Sales Terminals parts list

Part Number	Description	QTY.
RT852UT#ABA	HP rp5700 Point of Sale System Bundle	2
	Genuine Windows® XP Professional	2
PQR2-POS0-0000001	Microsoft Retail Point Of Sale Application v2.0	2
	Intel® Core™2 Duo processor E6400e (2.13 GHz 2 MB L2 cache 1066 MHz FSB)	2
	Intel® Q963 Express chipset	2
	1GB PC2-5300 (DDR2-667) 1x1GB	2
	2x160GB Serial ATA Hard Drives (7200 rpm)	2
	RAID 1 Factory-configured	2
	Intel® Media Accelerator 3000	2
	Broadcom 5755 10/100/1000 NIC	2
AH047AA	DVD ROM SATA 16X 5.25hh Drive	2
DT527A#ABA	HP PS/2 standard keyboard	2
EY703AA	HP PS/2 2-Button Optical Scroll mouse	2

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Audio Tour System

The system consists of (6) Classic SoundStik audio tour players which must be MP3 player allowing the individual to hear pre-recorded messages as they choose to do so. The SoundStik will be mounted in (6) designated locations. Pricing must include installation, training and a one-year warranty.

Audio Tour System parts list

Part Number	Description	QTY.
TS-MP3-B48-HA-P	Classic Sound Stik (Black)	6
CF/1GB	1GB Compact FLASH memory	6
Installation	Installation and Configuration	1

CP-7941G-CH1	Cisco Ip phone 7941 business w / CCM License	1
CP-PWR-CUBE-3=	Cisco Ip Phone Power Transformer for 7900 Series	1
CP-PWR-CORD-NA=	Cisco 7900 Series Power cord	1
15192	Cat 5e Black or Grey 6' w/ Boots 7'	1
Installation	Installation Cost for Voice System	1
Extended Hardware Warranties		
Voice		
CON-OSP-C2811CCM	OS 24X7X4 + SAU 2811 Voice Bundle Smartnet 1 year 8 x 5 x NBD for Phones	1
CON-SNT-CPXX	(7961/7921/7906/7940)	20



	(Universal)	
WIC-1AM-V2=	One-port Analog Modem WAN Interface Card	1
S28NSPSK9-12403	Cisco 2800 SP SERVICES	1
MEM2800-64U256CF	64 to 256 MB CF Factory Upgrade for Cisco 2800 Series	1
MEMUSB-256FT	256MB USB Flash Token for Cisco 1800/2800/3800 series	1
CUE-LANG-ENU	Cisco Unity Express - North American English	1
FL-CCME-36	Cisco Call Manager Express Feature License For Up To 36 Users	1
PWR-2811-AC	Cisco 2811 AC power supply	1
CAB-AC	Power Cord,110V	1
ROUTER-SDM	Device manager for routers	1
MEM2800-256D-INC	256MB DDR DRAM Memory factory default for the Cisco 2800	1
15192	Cat 5e Black or Grey 6' w/ Boots	7' 1
Phones		
CP-7961G	Cisco IP Phone 7961	12
SW-CCME-UL-7961	Software Lic for CCME	12
15192	Cat 5e Black or Grey 6' w/ Boots	7' 12
CP-7921G-A-K9	Cisco 7921G FCC; CCM/CCME UL Required; Battery/PS Not Included	6
SW-CCME-UL-7921G	Cisco Unified CME User License for single Cisco 7921G	6
CP-BATT-7921G-STD=	Cisco Unified Wireless IP Phone 7921G Battery, Extended	6
CP-HOLSTER-7921G==	Cisco Unified Wireless IP Phone 7921G Holster Carry Case	6
CP-DSKCH-7921G-BUN=	Cisco Unified Wireless IP Phone 7921G Desktop Charger, PS	6
CP-7906G-CH1	Cisco 7906 Ip Phones Channel Bundle w/ CCM License	3
CP-PWR-CUBE-3=	Cisco Ip Phone Power Transformer for 7900 Series	3
CP-PWR-CORD-NA=	Cisco 7900 Series Power cord	3
15192	Cat 5e Black or Grey 6' w/ Boots	7' 3





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Phone System

The phone system must include (12) Cisco 7961 wired handset and (6) Cisco 7921 wireless handsets with accessories, (3) Cisco 7906 wired handset, (1) 7941 wired handset. The wireless handsets must be usable anywhere in the building in which the wireless network services are available. The system must be based on Cisco's Call Manager Express platform, and must include a minimum of a 25-user voicemail system that can be expanded, as needed up to 250 users. The secondary office location must be support by the phone system through a VPN tunnel as specified in (Configuration 2: Data Network, and pricing for the VPN connection should be included in the Data Network section of the bid). A high-speed internet connect will be provide to the remote location as required for the VPN access to the Call Manager at the main location. This VPN connection will allow remote users to access voicemail and will provide the same functionality to all remote office users as if they were located at the main Call Manager location. Pricing must include on site installation and a 24x7x4 extended warranty on all critical components and a one-year 8x5xNBD on all handsets. Training for all end users, operators and system administrators must be included on site for one day.

Voice Processing and Gateway parts list

Part Number	Description	QTY.
CISCO2811-CCME/K9	2811 Voice Bundle w/ PVDM2-16,FL-CCME-36,SP Serv,64F/256D	1
MAX-28/38-FLASH-BN	64 to 256 MB CF Factory Upgrade and 256MB USB Flash Token for 2800/3800	1
NM-CUE=	Cisco Unity Express Network Module (includes SCUE-12-VM)	1
SCUE-2.3	Cisco Unity Express base release - 2.3	1
SCUE-LIC-25CME=	Unity Express License 25 Voice Mailbox-Auto Attendant-CCME	1
PVDM2-16U32=	PVDM2 16-channel to 32-channel factory upgrade	1
VIC2-4FXO=	Four-port Voice Interface Card - FXO	2

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Installation Costs Installation cost Wireless 1

Extended Hardware Warranties Voice & Data System

CON-OSP- WLC2006	ONSITE 24X7X4 2000 Series WLAN Con	1
CON-SNT- LAP1231A	Smartnet 1 year 8 x 5 x NBD 802.11g LWAPP AP Dual RP TNC Avail	4





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Wireless Network

The wireless network consists of (1) Cisco AIR-WLC2106 LAN Controller, and (4) 1231 access points, including installation, configuration. Pricing must also include a 24x7x4 hour on site warranty on the access controller and an 8x5xNBD warranty on the access points. Cabling will be provided by the general contractor, but installation and mounting of the access points will be the responsibility of the contractor. All access points must be mounted in such as way so to minimize visible of the access points.

Wireless Network parts list

Part Number	Description	QTY.
AIR-WLC2106-K9	Wireless LAN Controller 2106	1
CAB-AC-C5	AC Power Cord, Type C5, US	1
SWLC2106K9-41	WLAN Controller SW for WLC2106	1
ASA5505-PWR-AC	ASA 5505 spare AC power supply adapter	1
SSC-BLANK	ASA 5505 SSC Blank Slot Cover	1
SWLC2106K9-41-ER	WLAN Controller Emergency SW for WLC2106	1
15192	Cat 5e Black or Grey 6' w/ Boots 7'	2
AIR-LAP1231G-A-K9	802.11g LWAPP AP Dual RP-TNC:Avail Cbus Slot FCC Cnfg	4
S12RK9W-12311JX	Cisco 1200 Series IOS WIRELESS LAN LWAPP RECOVERY	4
AIRLAP-FIPSKIT	FIPS Kit for LWAPP APs	4
AIR-PWR-CORD-NA	AIR Line Cord North America Power Supply In:100-240VAC Out:48VDC 380mA -	4
AIR-PWR-A	1100,1130AG,1200,521	4
AIR-ANT4941	2.4 GHz,2.2 dBi Dipole Antenna w/ RP-TNC Connect	8
1062	Oberon 1062 Access Point/Equipment Enclosure	4

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SUA3000XL	APC Smart-UPS XL 3000VA 120V Tower/Rack mount (5U)	1
SUA48XLBP	APC Smart-UPS XL 48V Battery Pack Tower/Rack mount (5U)	2
AP9562	Rack PDU, Basic, 1U, 15A, 120V, (10)5-15	1
Installation Costs	Installation Costs Data System	1

Extended Hardware Warranties Voice & Data System

CON-OSP-356024PS	ONSITE 24X7X4 Catalyst 3560 24 10/100 PoE + 2 SFP Standard I	3
CON-OSP-AS5B50K8	ONSITE 24X7X4 ASA5505-50-BUN-K8	1





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Data Network

The data network consists of (2) 24 port Cisco Catalyst 3560 10/100 POE switches at the main location and (1) 24 port Cisco Catalyst 3560 10/100 POE switch for the remote office location. Cabling cost should not be included in the overall proposal, as cabling will be provided by the General Contractor. The data network must also include a VPN access device to allow remote users or remote offices to connect to the main data network via a dedicated connection to allow for phone and data services from the main site. Pricing must include on site installation and a 24x7x4 extended warranty on all components.

Data Network parts list

Part Number	Description	QTY.
WS-C3560-24PS-S	Catalyst 3560 24 10/100 PoE + 2 SFP Standard Image	3
CAB-SFP-50CM	Cisco Catalyst 3560 SFP Interconnect Cable (50 dcm)	1
15192	Cat 5e Black or Grey 6' w/ Boots 7'	12
Firewall and VPN Access		
ASA5505-50-BUN-K9	ASA 5505 Appliance with SW, 50 Users, 8 ports, DES	1
CAB-AC-C5	AC Power Cord, Type C5, US	1
SF-ASA5505-7.2-K8	ASA 5505 Series Software v7.2	1
ASA5505-SW-50	ASA 5505 50 User software license	1
ASA5500-ENCR-K8	ASA 5500 Base Encryption Level (DES)	1
ASA5505-PWR-AC	ASA 5505 spare AC power supply adapter	1
SSC-BLANK	ASA 5505 SSC Blank Slot Cover	1
15192	Cat 5e Black or Grey 6' w/ Boots 7'	1

UPS Systems (Power backup voice/data)

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- 6) Return Loss
- 7) Equal Level Far End Cross Talk or ELFEXT.
- 8) Power Sum Near End Cross Talk or PSNEXT.
- 9) Power Sum Elfext or PSELFEXT.

F. All test results shall be provided in the following formats:

1. Printed (three bound copies)
2. CD (Windows XP).

The test equipment specified has the ability to record test results to electronic memory for viewing and printing later utilizing free Fluke software. Submitting electronic test results is preferred in lieu of handwritten forms. In no instance will the test data be accepted in a spreadsheet or text based reporting software. This information shall be maintained as a permanent record for the purposes of maintenance and restorations.

G. All tests shall be coordinated with and performed in the presence of the Authority's Representative. Any defects or deficiencies discovered in any of the cabling system work shall be indicated on the test report and be corrected.

H. Upon completion of testing and problem resolution, all corrections tested are to be 100% error free.

3.08 COORDINATION WITH SYSTEM INTEGRATOR FOR DATA LAN NETWORK

- A. The Division 16 Contractor shall be available during LAN equipment (i.e. wiring switches, hubs, server, and workstations) installation and testing and assist school-wide LAN computer integrator to isolate faults that may exist in the cabling system installation.
- B. The contractor shall coordinate with other vendors where necessary to resolve any discrepancies between the cabling system and the vendor's cabling or equipment.



- B. The equipment indicated below represents test equipment utilized to develop this test specification. Substitute test equipment may be used only upon approval by the Authority's Engineer provided the same level and quality of testing is performed.**

- C. Test Equipment:**

FLUKE DTX1800 or approved equal.

- D. All tests are to be performed on the following aspects of data cabling system:**
 - 1. From the server room's data rack, patch panels to corresponding IDF patch panel and termination (backbone cable).**

 - 2. From each IDF patch panel to every workstation termination (workstation cable).**

- E. Tests to be performed:**
 - a. The test equipment shall be configured to test the maximum transmission performance for which the cable is rated.**

 - b. In accordance with TIA Standards for Category 5e cabling, the following minimum test information shall be provided for each permanent link:**
 - 1) Wire map: Verify Continuity on all eight conductors and assure no opens, crosses, splits or shorts to another conductor or ground. When applicable, report continuity of shield on screen twisted pair.**

 - 2) Length: Total length from LDF to workstation termination: The cable length shall conform to the maximum distance set forth in the TIA/EIA 568-A-5 standard (i.e. 90 M or 308 feet).**

 - 3) Propagation Delay and Delay Skew: Will be measured and reported.**

 - 4) Near End Cross Talk (NEXT) or Noise.**

 - 5) Attenuation: (db loss.**



3.05 GROUNDING

- A. All Data racks/cabinets shall be properly grounded according to manufacturer's instructions. Contractor shall provide a #6 stranded copper bonding conductor from each Data rack to the local Telecommunications ground bus within the IDF. The intent of this system is to provide a grounding system that is equal in potential to the building electrical ground system.

3.06 LABELING OF CABLES, JACKS AND PATCH PANELS:

- A. Cables are to be tagged at both station and closet ends with an alpha and four-digit number beginning with D001 and increasing in increments of one (1). It shall be a sticky tag, wrapped and secured to the cable behind both the jack faceplate and patch panel.

All cable and termination labels are unique identifiers, which shall be permanent and comply with TIA/EIA 606 labeling standards. At the closet end, the patch panel termination is labeled at the corresponding panel port with two points of information concerning the far end and each separated by a dash:

- (1) Room number at the other end of the cable
- (2) Cable number (four digits)

At the station side, the jack faceplate is labeled with two points of information pertinent to the cable far end and each separated by a dash:

- (1) Room number from the IDF or MDF
- (2) Cable number on the jack faceplate (four digits)

The cable numbers shall be in sequence for each closet. For example, if there are 50 data cables originating from IDF-1, then the cable numbers shall be D001 thru D050. Each closet would start over from D001.

In addition, every patch panel within the building shall be identified with a unique 2-digit number permanently stamped or labeled on the front middle top of each patch panel.

- B. Provide riser diagram framed under glass mounted on wall near Main Rack.

3.07 TESTING

- A. All tests are to be performed after installation of the complete system.



Horizontal wire management panels shall be provided as necessary to ensure a neatly dressed installation.

Cabling connection patch panels and equipment shall be dressed such that the labeling of the patch panels on equipment is readily visible and access to said items are not obstructed.

3.02 HORIZONTAL DISTRIBUTION CABLE INSTALLATION

- A. Maintain the twist of horizontal and backbone cables to within 0.5" at the point of termination.**
- B. When running cable through dropped ceiling space, the Contractor shall assure proper cable strain relief at all times and shall install cables so that they do not rest on or touch ceiling tiles.**
- C. Cable shall be installed so that there are no bends less than four times the cable's outside diameter (4X Cable O.D.) at any point in the run.**
- D. Horizontal distribution cables shall not be bundled in groups of greater than 40 cables. Cable bundle quantities in excess of 40 may cause deformation of the bottom cables within the bundle.**
- E. Pulling tension on 4-pair UTP cables shall not exceed 25-pounds for a single cable.**

3.03 DISTRIBUTION CABLE INSTALLATION

The CAT 5e risers shall be installed as continuous runs from the patch panel located in the server room data cabinet to each floor's IDF closet data enclosure. Terminate the wiring on 110 blocks located on IDF wall field.

3.04 WIRELESS ACCESS POINT (WAP) CABLE INSTALLATION

The cable allocated for the wireless access point shall be home run from the floor's IDF to the location receiving the access point. The cable shall be left coiled in the drop ceiling above the room, with enough slack to reach any location in the room. The cable shall be terminated on a Cat 5e data jack.



PART 3 - EXECUTION

3.01 INSTALLATION

A. Workstation Cabling:

1. Workstation outlets may be described as one of the following:
 - a. Voice and data outlet
2. A voice and data workstation outlet shall consist of the following cabling:
 - a. One (1) to four (4) Category 5e twisted pair cable for voice (4 pair twisted, #24 AWG)
3. Workstation cabling may terminate in one of the following locations:
 - a. Wall mounted box
 - b. Floor Boxes

Use only modular patch panels with IDC 110 block to terminate cables, utilizing Printed Circuit Board (PCB) technology for internal wiring, and certified for category 5e applications as per TIA/EIA 568B specification.

TIA/EIA 568B Wiring scheme uses the following pin configuration:

Pair	Pin
1	4 & 5
2	1 & 2
3	3 & 6
4	7 & 8

All cabling run vertically along the Data Rack frame shall be neatly dressed and secured to vertical side member of the frame using cable support rings (D-rings) spaced 24" on center. Data Rack shall be mounted three (3) feet minimum from interior walls.



9. Data Jack:

Data jack shall be Category 5e modular eight-pin connector, EIA T568B wiring, UL listed. Data jacks shall be Leviton - QuickPort 5G108-BA5, Ortronics - TracJack Clarity5E P/N OR-TJ5E00-00 or approved equal.

10. Labels

a. Provide typewritten labels on all cables detailing cable run number. Identification shall be by means of self-laminating wrap around "Brady" type labels. All station outlets, MTR and TR must be labeled and all circuits clearly identified utilizing designation strips in compliance with TIA/EIA 606 standards.

b. Labels for risers, cables, faceplates, cover plates etc. shall be provided with textual descriptions.

c. Identification of all equipment frames, racks, and wall termination fields shall be by means of engraved lamacoid nameplates showing 1" high white lettering on a black background.

11. Cable ties: All cable ties used to support telecommunications cabling shall be fire-resistant nylon type. The support rating of the cable ties used shall be a minimum of twice that of the weight per unit of the cables to be supported. Cable ties shall be deployed every four (4) feet minimum data cables in horizontal cable tray and two (2) feet minimum when fastening cables vertically on wall or rack.

12. Rack shall be grounded with manufacture suggested Rack Grounding kit.

13. Power outlets:

Provide (2) quad, dedicated 20A A/C receptacles (type 5-20R) located at least two feet apart near main data rack (MTR) in the telecommunication room and (2) duplex, dedicated 20 amp A/C receptacles located two feet apart near the (TR) data cabinet in all intermediate telecommunication closets and one 20 amp A/C quad receptacle inside wall data cabinets.



Plenum grade cable shall be used only when required by code for plenum spaces. The cable shall be Superior Essex – P/N 51-240-2G, Berk-Tek LANmark 350 10032064, Systimax – PowerSUM 2016 004FGN or approved equal.

The following color code shall be utilized:

COLOR CODE	PAIR NO.
White/Blue and Blue/White	1
White/Orange and Orange/White	2
White/Green and Green/White	3
White/Brown and Brown/White	4

6. Category 5e Backbone cable:

Cable shall be twenty-five pairs of 24 AWG solid conductors, unshielded twisted pairs, UL/NEC CMR rated with PVC jacket. The cable shall meet the following performance requirements in addition to other standard Cat 5e performance requirements.

Plenum grade cable shall be used only when required by code for plenum spaces. The cable shall be Superior Essex – Power Sum, P/N 51-478-35, Mohawk – M58142, Commscope – 5E25 or approved equal.

7. Punch down Blocks:

The punch down blocks is to be 110 IDC type. The pair count will vary from 100 pairs and 300 pairs. The punch down blocks shall be Leviton 41DW2-100 41DW2-300, Ortronics # OR-110ABC5E100 OR -110ABC5E300, Panduit – P110BW100-X P110BW300-X or approved equal.

8. Faceplate:

Provide faceplate with integrated connector and modular jacks to accept input cable and provide two to six combination jacks as required. Faceplate shall be plastic in a color selected by the Architect, with color-matched screws. Unit shall be Leviton 41080-1IP 2IP 3IP 4IP and 6IP, Ortronics OR-40300549 OR-40300548 OR-40300547 OR-40300546 and OR-40300545, Belden AX10132 AX101436 AX101440 or approved equal suitable for mounting on a single gang device box.



2.02 DATA NETWORK

Data network cabling system described herein is based upon TIA/EIA 568B Commercial Building Wiring standard. The installation shall include but not be limited to the following.

1. **Data Rack (Server Room/IDF's):**

Open Rack shall be seven feet high, floor mounted, 19" EIA Standard RS-310C, bolted to floor. Provide ground bar kit to connect rack to local telecommunications ground buss bar. Provide all accessories to house patch panels. Rack shall be CPI-48353-503, Ortronics - OR-604004600, or Panduit - CMR19X84 or approved equal.

2. **Category 5e Patch Panel:**

Patch panels shall be Category 5e with 24 or 48 ports, as necessary with modular eight conductor jacks, 110-connector system. Panels shall be TIA/EIA 568B wiring standards. The 48 port patch panels shall be Leviton - 59596-U48, Ortronics - OR-PSD5E6U48HM, or approved equal. The 24 port patch panels shall be Leviton - 59596-U24, Ortronics - OR-PSD5E6U24HM or approved equal.

3. **Vertical Wire Managers:**

This panel helps route and organize patch cable. The vertical wire managers shall be CPI 11374-705, Ortronics # VO-84-CM6E, Panduit - PRVF6 or approved equal.

4. **Horizontal Wire management panel:**

This panel helps route and organize patch cable. The wire management panel shall be Leviton - 49253-LMP, Ortronics # OR-808004759, Panduit - CMPHF1 or approved equal.

5. **Category 5e cable:**

Cable shall be four pairs of 24 AWG solid conductors, unshielded twisted pairs, UL/NEC CMR rated with PVC jacket. The cable shall meet the following performance requirements in addition to other standard Cat5e performance requirements.



highlighted to indicate the items that are applicable. Faxed copies or poor quality copies of manufacture catalog sheets are unacceptable.

- C. **Sample: Prior to assembling or installing the data communications work, the followings shall be submitted for review.**
 - 1. **Category 5e Cable**
 - 2. **Cable connector**
 - 3. **Wiring device plate complete with label**
 - 4. **Identification label**
- D. **Certificate of compliance with the Quality Assurance and Maintenance requirements.**
- E. **Certified Test Report**

1.03 CABLE DELIVERY

- A. **No cable over one (1) year old when delivered to the site will be accepted.**

1.04 QUALITY ASSURANCE

- A. **Installer's Qualifications:**

The persons actually installing the work of this section shall have a minimum of two-(2) year's experience in Data Cabling System. Installer must be certified by the cable manufacturer and proof of certification must be submitted to the Authority for approval.

PART 2 - PRODUCT

2.01 MANUFACTURERS

- A. **Acceptable manufacturers of Data cabling system are Leviton, Belden, Ortronics, and Panduit or approved equal. All equipment shall be the product of one manufacturer for compatibility and shall fully meet all the requirements of this specification.**
- B. **Acceptable cable manufacturers are Superior Essex, Belden, Mohawk, and Berk-Tek or approved equal.**





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SECTION 17100- INFORMATION TRANSPORT SYSTEM CABLING

PART I - GENERAL

1.01 DESCRIPTION OF WORK

The intent is to provide a state-of-the art Data Cabling System for use in Local Area Network (LAN) cabling infrastructure.

The Eldridge Street Synagogue shall be provided with Voice and Data Cabling infrastructure.

- A. Department Wide LAN: Provide Category 5e (Cat5e) cables runs from Communications Equipment room data racks to outlets at Dispatch Desk, conference rooms, offices, etc. The work also includes providing data racks, patch panels, associated hardware, power and grounding in Server room.

1.02 SUPPLEMENTAL SUBMITTALS

A. Shop Drawings:

1. Composite wiring and/or schematic diagrams of the complete cabling system as proposed to be installed (standard diagrams will not be acceptable).
2. Coordinated rack/cabinet elevations of main telecommunications room and each telecommunications rooms identifying the locations, dimensions of all terminating hardware provided by this contractor and in future by others.

B. Product Data:

1. Catalog sheets, factory assembly drawings, specifications and installations for all products. Documents will not be accepted for review unless they are submitted as a package where they pertain to related items. All catalog sheets must be clearly identified or

ELDRIDGE STREET PROJECT

2720.00	Wireless Network	02730-1 through 2
2730.00	Phone System	02730-1 through 3
2740.00	Audio Tour System	02730-1 through 1
2742.13	Point of Sales Terminals	02730-1 through 3

DIVISION 28 – ELECTRONIC SAFETY AND SECURITY

2810.00	CCTV/Alarm System	02730-1 through
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D161	Phone cord	1
D126	Batteries for Intrusion and Access systems	2
ISM-BLD1-P	Blue Line TriTech Passive Infrared Detector	14
ISM-BLA1-CC-N OD850-F1	Blue Line Color Camera Module Outdoor Tri-Tech Motion detector	13 4
B338	Universal Ceiling Bracket	4
ISN-CHS-30W	Hidden Terminal Contacts	2
GI-2600	GRI Water Sensor	2
GI-T8005	GRI 41 degree Temperature Sensor	1
DB18C3160R2	DIBOS Rack mount, 18 CH., 6 Audio CH., 16 IP CH., 1600 GB, DVD-RW, 270 IPS.	1
MON170CL	17-Inch Color LCD Monitor, 500TVL, 1280 X 1024 RESOLUTION, CVBS,VGA,Y/C,AUDIO, 120/230VAC, 50/60HZ.	1
VDC-485V03-20	Camera Flexidome-XF, Color NTSC, 540TVL, 12VDC/24VAC 60HZ, W/3-9.5MM F1.0 Varifocal White.	5
VDA-445WMT	Wall Mount for Flexidome XF	5
LTC 5416/60	Power Supply, 16 Camera, 120VAC, 60HZ Input, 24VAC, 10.5VA per Output	1
MISC. Part	Door Strike/Contact	2
 <u>Video Intercom</u>		
AX-8MV	Audio/Video Master Black 8 Door & 8 Master Buttons	2
AX-DV	Video Door Station Surface Mount	2
AX-084C	Main CEU for 8 Doors , 4 Masters , AX	1
PS-2420UL	24V DC, 2A Power Supply (110 Vac)	1
K-1900-5	Viking K-1900-5 Hot Touch Tone Dialer	2
RC-3	Viking Remote DTMF Control	2
ATA186-I1-1P-CH1-A	ATA186-I1 W/ 1PORTU LICENSE	1
Installation	Installation and Configuration / of Security Solution	1

