

CITY OF ANN ARBOR INVITATION TO BID



City Hall Network Cabling Project Floors 3, 4 and 5 Guy C. Larcom Municipal Building

ITB No. 4311

**Due Date: Tuesday, November 19, 2013
On or Before 10:00 A.M. (Local Time)**

Information Technology Services Unit
Administering Service Unit

Issued By:
City of Ann Arbor
Procurement Unit
301 E. Huron Street
Ann Arbor, MI 48104

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**ADVERTISEMENT TO BID CITY OF ANN ARBOR
CITY HALL NETWORK CABLING PROJECT
ITB #4311**

Sealed Bids will be received by the City of Ann Arbor Procurement Unit, Fifth (5th) Floor, Guy Larcom City Hall, 301 East Huron St., Ann Arbor, MI 48107, on or before Tuesday, November 19, 2013 by 10:00 AM (Local Time) for City Hall Network Cabling Project. Bids will be publicly opened and read aloud at this time.

Work includes the installation of new easily accessible, network cabling that provides data and voice services for the 3rd, 4th and 5th floors of City Hall (all old cable to be abandoned in place).

The Base Bid price shall include materials and equipment selected from the designated items and manufacturers listed in the bidding documents. Quantities identified in the Bid documents represent actual quantities but may not be exact. Unless approved at the time of award, substitutions where items are specifically named **will not be considered**.

A mandatory pre-bid conference will be held Wednesday, November 6, 2013 at 10:00 AM at the 5th Floor Conference Room, located at the Ann Arbor Guy C. Larcom City Hall, 301 E. Huron Street, Ann Arbor, Michigan 48107

Bid documents, specifications, plans and addendum shall be downloaded by contractors at either of the following web sites, Michigan Inter-governmental Trade Network (MITN) www.mitn.info or City of Ann Arbor web site www.A2gov.org.

Each Bid shall be accompanied by a certified check, or Bid Bond by a recognized surety, in the amount of 5% of the total of the bid price.

A Bid, once submitted, becomes the property of the City. In the sole discretion of the City, the City reserves the right to allow a bidder to reclaim submitted documents provided the documents are requested and retrieved no later than 48 hours prior to the scheduled bid opening.

Precondition for entering into a contract with the City of Ann Arbor: (i) compliance with Chapter 112 of Title IX of the Code of the City of Ann Arbor. (ii) compliance with applicable prevailing wage and living wage requirements of Chapter 23 of Title I of the Code of the City of Ann Arbor. Further information is outlined in the contract documents.

After the time of opening, no Bid may be withdrawn for a period of sixty (60) days.

The City reserves the right to accept any Bid, to reject any or all Bids, to waive irregularities and/or informalities in any Bid, and to make the award in any manner the City believes to be in its best interest.

Any further information may be obtained from the Ann Arbor Procurement Office,
(734) 794-6500

CITY OF ANN ARBOR, MICHIGAN

NOTICE OF MANDATORY PRE-BID CONFERENCE

A **mandatory** pre-bid conference for this project will be held on **Wednesday, November 6, 2013** at 10:00 AM at the 5th Floor Conference Room, located at the Ann Arbor Guy C. Larcom City Hall, 301 E. Huron Street, Ann Arbor, Michigan 48107.

Attendance at this conference is required. Administrative and technical questions regarding this project will be answered at this time. The pre-bid meeting is for information only. Any answers furnished will not be official until verified in writing by the Financial Service Area, Procurement Unit. Answers that change or substantially clarify the bid will be affirmed in an addendum.

Failure to attend the meeting and sign the ITB #4311 sign-in sheet at the pre-bid meeting will automatically disqualify a bidder from submitting a valid bid. Any bid submitted by a party not attending and signing the roster at the pre-bid meeting will not be opened or considered.

INSTRUCTIONS TO BIDDERS

General

The City of Ann Arbor's Procurement Office is soliciting bids for the **City Hall Network Cabling Project**. Work to be done under this Contract is generally described through the detailed specifications and must be completed fully in accordance with the contract documents.

Any Bid which does not conform fully to these instructions may be rejected.

Preparation of Bids

Bids should be prepared providing a straight-forward, concise description of the Bidder's ability to meet the requirements of the ITB. Bids shall be written in ink or typewritten. No erasures are permitted. Mistakes may be crossed out and corrected and must be initialed and dated in ink by the person signing the Bid.

Bids must be submitted on "Bid Forms" provided with each blank properly filled in. If forms are not fully completed it may disqualify the bid.

Each person signing the Bid certifies that he/she is the person in the Bidder's firm/organization responsible for the decision as to the fees being offered in the Bid and has not and will not participated in any action contrary to the terms of this provision.

Questions or Clarification on ITB Specifications

All questions regarding this ITB shall be submitted via email. Emailed questions and inquires will be accepted from any and all prospective Bidders in accordance with the terms and conditions of the ITB.

All questions shall be due on or before Tuesday, November 12, 2014 by 3:00 p.m. and addressed below:

Specification questions emailed to: Russell Hanshue, Information Technology, Infrastructure Services Manager at: rhanshue@a2gov.org and William Duff, Senior Infrastructure Specialist at: wduff@a2gov.org.

Bid Process and HR Compliance questions emailed to: Karen Lancaster, Finance Director at: klancaster@a2gov.org.

The person making the request shall be held responsible for delivery and verification of receipt.

Any error, omissions or discrepancies in the specification discovered by a prospective contractor and/or service provider shall be brought to the attention of Tom McMurtrie, Solid Waste Coordinator, at rhanshue@a2gov.org after discovery as possible. Further, the contractor and/or service provide shall not be allowed to take advantage of errors, omissions or discrepancies in the specifications.

Addenda

If it becomes necessary to revise any part of the ITB, notice of the Addendum will be posted to Michigan Inter-governmental Trade Network (MITN) www.mitn.info and/or City of Ann Arbor web site www.A2gov.org for all parties to download.

Each Bidder must in its Bid, to avoid any miscommunications, acknowledge all addenda which it has received, but the failure of a Bidder to receive, or acknowledge receipt of; any addenda shall not relieve the Bidder of the responsibility for complying with the terms thereof. The City will not be bound by oral responses to inquiries or written responses other than written addenda.

Bid Submission

All Bids are due and must be delivered to the City of Ann Arbor Procurement Unit on or before Tuesday, November 19, 2014 by 10:00 AM (local time)

Bids submitted late or via oral, telephonic, telegraphic, electronic mail or facsimile **will not** be considered or accepted.

Each Bidder must submit one (1) original Bid and two (2) Bid copies in a sealed envelope clearly marked: **ITB # 4311 City Hall Network Cabling Project.**

Bids must be addressed and delivered to:

City of Ann Arbor
Procurement Unit, 5th Floor
301 East Huron Street
P.O. Box 8647
Ann Arbor, MI 48107

All Bids received on or before the Due Date will be publicly opened and recorded immediately. No immediate decisions are rendered.

Hand delivered bids will be date/time stamped/signed at the address above in order to be considered. Normal business hours are 8:00 a.m. to 4:00 p.m. Monday through Friday, excepting Holidays. The City will not be liable to any Bidder for any unforeseen circumstances, delivery or postal delays. Postmarking to the Due Date will not substitute for receipt of the Bid. Each Bidder is responsible for submission of their Bid.

Additional time will not be granted to a single Bidder; however, additional time may be granted to all Bidders when the City determines that circumstances warrant it.

Award

The City will award the bid to the responsive and responsible bidders who best meet the City's requirements and who offer the most advantageous combination of low price and highest

qualifications for the criteria described in this ITB document. The work may not be awarded to the lowest bidder(s).

Official Documents

The City of Ann Arbor shall accept no changes to the bid documents made by the Bidder unless those changes are set forth in the "Alternate" section of Bid form.

The City of Ann Arbor officially distributes bid documents from the Procurement Unit or through the Michigan Intergovernmental Trade Network (MITN). Copies of the bid documents obtained from any other source are not considered Official copies. Only those Bidders who obtain bid documents from MITN system are guaranteed access to receive addendum information if any issued. If you obtained City of Ann Arbor Bid documents from other sources, it is recommended that you register on www.MITN.info and obtain an official Bid.

Bid Security

Each bid must be accompanied by a certified check, or Bid Bond by a surety licensed and authorized to do business within the State of Michigan, in the amount of 5% of the total of the bid price.

Withdrawal of Bids

After the time of opening, no Bid may be withdrawn for the period of 60 days specified in the Advertisement.

Human Rights Information

The City's Purchase Order standard terms and conditions, attached as Appendix A, outline the requirements for fair employment practices under City of Ann Arbor contracts. It is the responsibility of the selected Bidder to comply, when applicable, with all State, Federal and Local non-discrimination laws, including MCL 37.2209 and City Ordinance Chapter 112, Section 9:161.

To establish compliance with this requirement, a Bidder should complete and return with its bid completed copies of the Human Rights Division Contract Compliance Forms attached as Attachment A. In the event Human Rights forms are not submitted with the bid, a bidder will have 24 hours to provide once requested by the City.

Assignment

The Contractor shall not assign this agreement or any part thereof without written consent of the City.

Subcontractors

No contract may be sublet without the written consent of the City of Ann Arbor. Any subcontractor, so approved, shall be bound by the terms and conditions of this contract. The contractor shall be fully liable for all acts and omissions of its subcontractor(s) and shall indemnify the City of Ann Arbor for such acts or omissions.

Debarment

Submission of a Bid in response to this ITB is certification that the Bidder is not currently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from participation in this transaction by any State or Federal departments or agency. Submission is also agreement that the City will be notified of any changes in this status.

Disclosures

All information in a submitter's bid is subjected to disclosure under the provisions of Public Act No. 442 of 1976 known as the "Freedom of Information Act". This act also provides for the complete disclosure of contracts and attachments thereto except where specifically exempted under the Freedom of Information Act.

Bid Protest

All Bid protests must be in writing and filed with the Purchasing Agent within five (5) business days of the award action. The vendor must clearly state the reasons for the protest. If a vendor contacts a City Service Area/Unit and indicates a desire to protest an award, the Service Area/Unit shall refer the vendor to the Purchasing Agent.

The Purchasing Agent will provide the vendor with the appropriate instructions for filing the protest. The protest shall be reviewed by the City Administrator or designee who's decision shall be final.

Reservation of Rights

The City of Ann Arbor reserves the right to accept any bid or alternative bid proposed in whole or in part, to reject any or all bids or alternatives bids in whole or in part and to waive irregularity and/or informalities in any bid and to make the award in any manner deemed in the best interest of the City.

INVITATION TO BID

City of Ann Arbor
Guy C. Larcom Municipal Building
Ann Arbor, Michigan 48107

Ladies and Gentlemen:

The undersigned, as Bidder, declares that this Bid is made in good faith, without fraud or collusion with any person or persons bidding on the same Contract; that this Bidder has carefully read and examined the bid documents, including Advertisement, Human Rights Division Contract Compliance Forms, Notice of Pre-Bid Conference, Instructions to Bidders, Bid, Bid Forms, General Conditions, Standard Specifications, Detailed Specifications, all Addenda, and understands them.

The Bidder also declares that it has extensive experience in supplying products/materials/services similar to the ITB specifications. The Bidder declares that it is fully informed as to the nature of the work and the conditions relating to the work's performance. The Bidder acknowledges that it has not received or relied upon any representations or warrants of any nature whatsoever from the City of Ann Arbor, its agents or employees, and that this Bid is based solely upon the Bidder's own independent business judgment.

In accordance with these bid documents, and **Addenda numbered** _____, the undersigned, as Bidder, proposes to supply goods/services following the ITB specification included herein for the amounts set forth in the Bid Forms.

The undersigned agrees that they have read and fully understand the bid documents and certify that the goods/services provided will meet or exceed the bid specifications in every respect.

The Bidder encloses a certified check or Bid Bond in the amount of 5% of the total of the Bid Price. If the Bidder enters into the Contract in accordance with this Bid, or if this Bid is rejected, then the accompanying check or Bid Bond shall be returned to the Bidder.

In submitting this Bid, it is understood that the right is reserved by the City to accept any Bid, to reject any or all Bids, to waive irregularities and/or informalities in any Bid, and to make the award in any manner the City believes to be in its best interest.

The undersigned agrees that if the bid is accepted by the City of Ann Arbor a binding contract will be in effect for the delivery of the goods in accordance with the bid.

SIGNED THIS DAY OF _____, 2013 .

Company Name _____

Authorized Signature of Bidder _____

Official Address _____

Print Name of Signer Above _____

Email Address Telephone Number _____

BID FORM

LEGAL STATUS OF BIDDER

(The Bidder shall fill out the appropriate form and strike out the other two.)

Bidder declares that it is:

* A corporation organized and doing business under the laws of the state of _____, for whom, _____, bearing the office title of, _____, whose signature is affixed to this bid, is authorized to execute contracts.

*If not incorporated in Michigan, please attach the corporation's Certificate of Authority

* A limited liability company doing business under the laws of the state of _____, for whom _____ bearing the title/office of _____, whose signature is affixed to this bid, is authorized to execute contracts on behalf of the LLC.

* A partnership organized under the laws of the state of _____, and filed with the county of _____, whose member are listed below (list all members and the street and mailing address of each):

* An individual, whose signature with address, is affixed to this proposal:
(initial here) _____

BID FORM
Section 1 - Schedule of Prices

Company:

Project: **City Hall Network Cabling Project Floors 3, 4, 5 ITB #4311**

Base Bid

For the entire work outlined in these documents, complete as specified, using equipment and materials only of the type and manufacturers where specifically named.

.....Dollars (\$_____)

BID FORM
Section 2 - Material and Equipment Alternates

The Base Bid price shall include materials and equipment selected from the designated items and manufacturers listed in the bidding documents. This is done to establish uniformity in bidding and to establish standards of quality for the items named.

Quantities identified in the Bid documents represent actual quantities but may not be exact. Unless approved at the time of award, substitutions where items are specifically named **will not be considered.**

If the Contractor must deviate from the specifications in this ITB, it may do so under this Section.

The Contractor must provide and substantiate that the equipment or components are no longer available and/or have been replaced by like-kind substitutes from the manufacturer specified in this ITB. Please list any exception in the section below and include the item number and description.

Exception and Reason	Item Description	Mfg.	Mfg. Part#	Quantity

If the Bidder does not suggest any material or equipment alternate, the Bidder **MUST** complete the following statement:

For the work outlined in this request for bid, the bidder does NOT propose any material or equipment alternate under the contract.

Signature of Authorized Representative of Bidder_____

BID FORM
Section 3 – Proposed Schedule

The project scheduled provided in the bid document is a proposed scheduled and is dependent upon and complimentary to the Schedule outlined in [ITB4310](#) . If the Bidder takes exception to the time stipulated in the Project Schedule, it is requested to stipulate below its proposed time for performance of the work. Consideration will be given to time in evaluating bids.

If the Bidder does not suggest any time alternate, the Bidder **MUST** complete the following statement:

For the work outlined in this request for bid, the bidder does NOT propose any time alternate under the contract.

Signature of Authorized Representative of Bidder_____

BID FORM
Section 4 - References

1. **REFERENCES** – Please list references from similar projects below. Failure to do so may disqualify the bid.

Provide three (3) references

Company Name	Contact Name	Email Address	Phone Number

CITY HALL NETWORK CABLING PROJECT SCOPE OF WORK

INTRODUCTION AND OVERVIEW

The City of Ann Arbor is completing a project to remove Asbestos-containing materials in the 3rd, 4th and 5th floor Ceilings of City Hall (refer to [ITB4310](#) for more details). This affords the City's Information Technology Services Unit the opportunity to replace network cabling infrastructure within the 3rd, 4th and 5th floors of City Hall that is antiquated Category 3 cabling.

This ITB specifies new network cabling installation on the 3rd, 4th and 5th floors of City Hall, Guy Larcom Municipal Building, located at 301 East Huron St., Ann Arbor, MI 48104.

The main goal of this project is to install new network cabling (abandon all old cable) and install easily accessible, network cabling that provides data and voice services for the 3rd, 4th and 5th floors of City Hall.

A majority of network cabling on the 3rd, 4th and 5th floors run horizontally through floor conduit and will be abandoned in-place. New horizontal cabling will be installed above a newly installed acoustical tile ceiling after asbestos abatement is completed (refer to [ITB4310](#) for more details).

All new horizontal cable runs will be installed above the ceiling tile grid on J-hooks and secured using Velcro. New Communication Closets, located on the west-side of each floor, will be equipped with standard network equipment racks and will house like-kind network equipment providing high-bandwidth data and voice network connectivity.

The current Data/Communications Closets, two (2) on each floor, will be abandoned in place as well. However, fiber optic cabling, telecommunications cabling (25-pair telecommunications copper wiring) and security cabling resident within the current Data/Communications Closets, will be extended to the new Data/Communications Closets located on the west-side of the building.

Once ceiling grid work has started as part of the Asbestos Abatement Project, or sooner, if time allows, vertical cabling will be installed within interior drywall walls with appropriate network outlet termination. No conduit installation is required for installation within interior walls.

Where exterior walls or columns exist, vertical cabling will be installed and covered with commercial-grade wire molding and be terminated to appropriate network outlets. All cabling, coax, fiber and telecom will home run to the new communications closets for each floor.

Cabling will be properly labeled, tested and documented on prints provided by the bidder. If necessary, electronic floor plans can be provided by the City's Information Technology Unit for updating.

The City (Owner) will be responsible for fiber optic terminations to the backbone of the City's network. Uninterruptable power supplies (UPS') installation and network connectivity will be completed by the Owner.

PROPOSED SCHEDULE

City Hall will be undergoing abatement of asbestos containing materials on the 3rd, 4th and 5th floors. This project is starting in January, 2014 and completing in June, 2014. The proposed asbestos abatement project schedule is provided in Table 1 below.

There are "scheduling windows" provided in the asbestos abatement project to accommodate the installation of all horizontal network cabling for each floor prior to and/or parallel with the installation of acoustical ceiling tiles and drop ceiling grids. Approximate one (1) week windows are provided to accommodate installation of primary horizontal network cabling (refer to [ITB4310](#)).

Please note: prospective bidders **will not** have access to work areas until the asbestos abatement is complete and air monitoring results indicate the areas are safe for general occupancy.

Vertical installation, routing down walls and termination to network outlets can be completed after the primary horizontal network cabling is completed above the ceilings.

**Table 1
Tentative Schedule for
Asbestos Abatement Project and
Network Cabling Project**

Activity	Approximate Timeline
Relocate 5 th Floor Operations	January 13 – January 17, 2014
Abatement/Restoration of 5 th Floor	January 20 – February 28, 2014
Complete Network Cabling Install for 5th Floor	February 21 – February 28, 2014
Relocate 4 th Floor Operations to 5 th Floor	March 3 – March 7, 2014
Abatement/Restoration of 4 th Floor	March 10 – April 18, 2014
Complete Network Cabling Install for 4th Floor	April 11 – April 18, 2014
Relocate 3 rd Floor Operations to 4 th Floor	April 21 – April 25, 2014
Abatement/Restoration of 3 rd Floor	April 28 – June 6, 2014
Complete Network Cabling Install for 3rd Floor	May 30 – June 6, 2014
Restore 3 rd Floor Operations to 3 rd Floor	June 9 – June 13, 2014
Restore 4 th Floor Operations to 4 th Floor	June 16 – June 20, 2014
Restore 5 th Floor Operations to 5 th Floor	June 23 – June 27, 2014
Project Completion	June 30, 2014

BID SPECIFICATIONS

The City Hall network cabling scope of work is listed below and provides the requirements of this ITB.

1. General Requirements

- Guaranty - Installation and Materials shall be guaranteed against defect for a period of 2 years and/or per the manufacturer's warranty specifications.
- Inspection - Any component or material which may be discovered to be defective within the guarantee period shall be removed and made good by the Contractor at its expense regardless of any previous inspection or final acceptance.
- Acceptance Testing - The City (Owner) will inspect the installation of network cabling to ensure proper connectivity is achieved prior to completion of the project. Email notification will be provided by the City (Owner) to the Contractor acknowledging acceptance.

2. Codes and Standards Requirements

Applicable portions of the codes, standards, regulations and recommendations of the following entities (listed below), shall be observed during installation of network cabling , Cabling , telecommunications and all associated networking equipment at City Hall.

These and any other local codes, standards and guidelines applicable to or relevant to the work shall also govern installation.

- FCC
 - Part 15
 - Part 68
- NFPA 70 (NEC) or latest applicable edition
- NESC 2007 or latest applicable edition
- NFPA codes or latest applicable edition
- State and Local Municipal Construction-Related Codes
- Underwriters Laboratory
- IEEE:
 - 802.3
 - 802.3ab
 - 802.3ae
 - 802.3af
 - 802.3ah
 - 802.11a, b, g
 - 802.12
- BICSI

- TDMM 2006 11th Edition or latest applicable
- ITSIM 4th Edition or latest applicable
- C-O OSP: 2004, 3rd Edition or latest applicable
- TIA/EIS and all related addenda to each standard
 - 310-D
 - 455-13-A
 - 455-57-B
 - 455-59
 - 455-61
 - 455-95
 - 4720000-A
 - 472C000-A
 - 492AAAA
 - 492AAAC
 - 526-7
 - 526-14
 - 568-B.1
 - 568-B.2
 - 568-B.3
 - 569-A
 - 570-B
 - 598
 - 606-A
 - 607-A
 - 758
 - S-83-596
 - S-90-661

3. General Cabling System Requirements

The Category 5e cabling system within the 3rd, 4th and 5th floors of City Hall shall conform to the requirements of TIA/EIA 568B, the Commercial Building Telecommunications Cabling Standard. Bidders can use the floor plans provided in Appendix B to estimate the total feet of cabling and cabling extensions required for completion of the project.

In accordance with the above referenced standards, the cabling system shall be installed in the following manner:

- All cables shall meet or exceed the mechanical and performance requirements of the standard.
- All horizontal cable runs will be installed above the ceiling tile grid on J-hooks and secured using Velcro.
- Cabling shall not exceed 90 meters, including service loops, from each workstation outlet to each respective Communications/Data Closet.

- Backbone (optical fiber cabling) shall be home run from the old Communications/Data Closets six (6) – 2 per floor, to the new Communications Closets three (3) – 1 per floor.
- **NOTE: The Owner will terminate optic fiber cabling and connect new Communications/Data Closets to the City's Network.**

4. Identification and Labeling

An identification system will be provided **by the Owner** that uniquely identifies each equipment rack, pathway, patch panel and cable installed for each floor (refer to Appendix B Floor Plans and Communication Closet Racks in Figure 3-5 for examples).

All horizontal and backbone cables shall be assigned a unique alpha-numeric designation for identification purposes. Guidelines will be provided **by the Owner**.

Appropriately marked labels shall be provided at each end of each cable.

Labels having the appropriate cable designation shall be provided in the following locations for each cable:

- On the technology outlet faceplate.
- On the termination blocks in the Communications/Data Closets.
- On rack-mounted network equipment.
- Cable designations shall be designed for easy identification of serving room and termination location.

TIA/EIA 568B compliant color-coding shall be utilized for termination field identification. Color-coding shall be as follows:

- Yellow – for any wireless applications.
- Blue – for any horizontal cabling.
- Red – for any miscellaneous connections (alarm, security, etc.)

Hard copies of Auto-cad drawings or drawings in portable document format (pdf) will be supplied **by the Owner** for the Bidders use for documenting identification and labeling of cabling and the aforementioned network equipment. This is imperative as it will form the basis for effective administration and maintenance of network connectivity for the 3rd, 4th and 5th floors.

5. Horizontal Backbone Cabling Requirements (Data and Voice Network)

All primary backbone cabling for data and voice will conform to the following minimum requirements:

- High-speed optical fiber data backbone cables shall be laser-optimized, 62.5 micron (μm), multi-mode optical fiber.

- Optical fiber backbone cables will be extended by the Contractor from pre-existing Data/Communications Closets to newly located Data/Communications Closet on each floor.
- **NOTE: Optical fiber termination to rack-mount TIA/EIS-568B compliant panels in the Communications Closets will be completed by the Owner.**
- Data/Voice grade cabling shall be Category-5e unshielded twisted pair (UTP) cable, plenum rated.
- Coaxial cabling shall be RG 11U coaxial cable terminated according to industry standards and manufacturer recommendations.

The backbone cabling system for the Fiber, Coax and UTP shall be the following for floors 3-5:

- Six (6) strand multi-mode optical fiber cable extended from two (2) pre-existing Communications Closets on each floor to the new Communications Closets on the west-side of the building on each floor. The end result will be 12-strands of optical fiber cable un-terminated to the new Communications Closets per floor. **Connectivity to the City's Network will be completed by the Owner.**
- Two (2) RG-11 quad-shielded coaxial cable from the east-side electrical rooms (refer to Floor Plans provided in Appendix B).
- 25 pair count copper telecom cable from each one (1) Communications closet on each floor to the new Communications Closets located on the west-side of the building for each floor (refer to Appendix B Floor Plans). **Final connectivity to the City's telecommunications carrier point-of-presence will be completed by the Owner.**

Summarized in Table 2 are the total number of network outlets, coaxial cable outlets, telecommunications cabling and optical fiber cabling for each respective floor.

**Table 2
Network Components and Cabling Requirements**

Floor	Network Outlets	Coax Cable Outlets	Telco Pair - Extended from Existing Closet to New Closet	Optical Fiber Strands- Extended from Existing Closet to New Closet¹
3rd Floor	93	2	25 Pair	12 (6+6)
4th Floor	167	2	25 Pair	12 (6+6)
5th Floor	134	2	25 Pair	12 (6+6)

¹ The City will be responsible for termination of optical fiber network connections to the City's main data center.

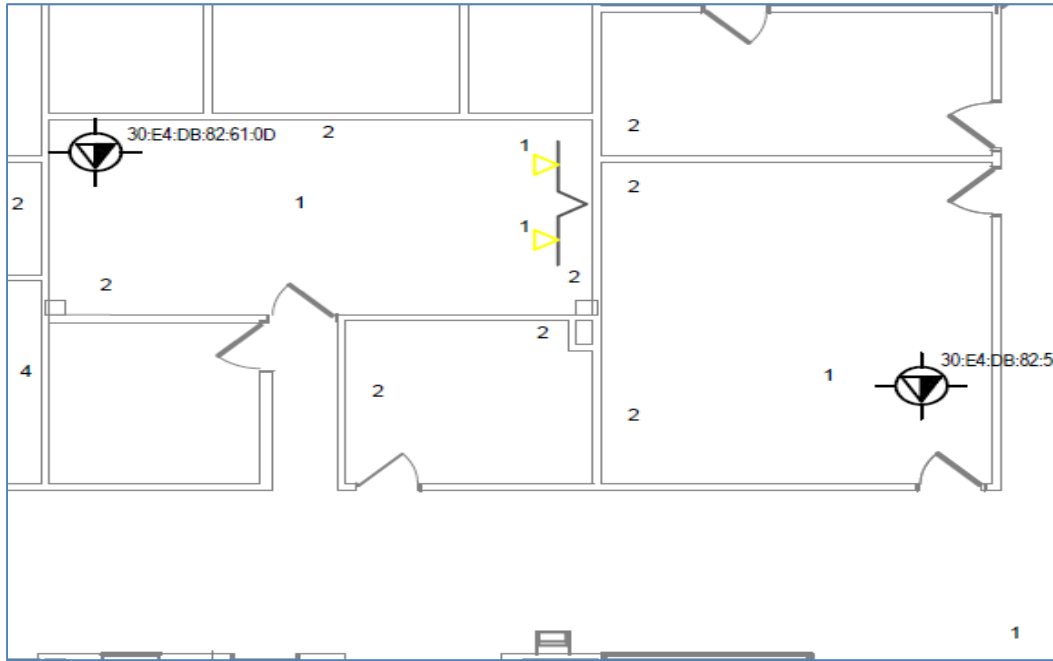
6. Horizontal, Vertical and Outlet Cabling Requirements (Data and Voice Network)

All horizontal and outlet cabling for data and voice services shall conform to the following minimum requirements:


- All UTP cabling shall be minimum TIA/EIA-568B Category 5e compliant 4-pair unshielded twisted pair (UTP) cables.
- UTP workstation cables will be terminated on TIA/EIA-568B compliant rack-mounted termination blocks in the respective Communications Closet for each floor, and on TIA/EIA-568B compliant modular jacks at each technology outlet location (i.e., each network drop location identified on floor plans provided in Appendix B.)
- Each Floor Plan provided in Appendix B, identifies the location(s) of network cabling outlets for that locale and the total number of UTP cables to be provided.

As an example, Figure 1, provides an excerpt of a scaled floor plan provided in Appendix B. Each drawing is scaled at 1/8" = 1'-0" and depicts each floor layout. **Network outlet locations and the number of network outlet drops per location are provided as well.**

**Figure 1
Floor Plan Extract**



 - Coaxial Cable Drop/Network Drop

 - WIFI Access Point

 - Number of Network Connection Drops

7. List of Required Equipment and Materials

A list of required equipment and materials, along with the corresponding Manufacturer and the Manufacturer’s Part Number and required quantity, are provided in Table 3 below.

The City **will not accept substitute** different manufacturers or deviations from the required networking equipment listed below. If deviations are unavoidable (i.e., the part is no longer manufactured or there is a new part number), please indicate and explain the reason for substitution in Bid Form, Section 2, entitled “Material and Equipment Alternates”.

Please note: A lower cost manufacturer is **not** a viable reason for substitution and the City reserves the right to reject any bid that does not adhere to these specifications.

**Table 3
Required Equipment and Materials**

Item Description	Mfg.	Part #	Spec Sheet	Quantity
Category 5e Compliant Cabling (Blue) ¹	Any Mfg.			Determined by Bidder
RG-11U Coaxial Cable	Any Mfg.			Any Mfg.
Standard Equipment Rack, 19", Black, 72.00"H, 3" Channel	Ortronics	OR-19-72-T2SDB	Spec Sheet	Refer to Figures 2-4
MM6 Vertical Cable Management Cage with dual hinged covers, 6" x 7" x 7'	Ortronics	OR-MM6VMS706	Spec Sheet	Refer to Figures 2-4
Universal Style Tubular Runway, 12"W, black	Ortronics	OR-URT10-12B	Spec Sheet	Feet - Determined by Bidder
Clarity 5E 48-port panel, Cat5e, six-port modules, 19" x 5.25"	Ortronics	OR-PSD5E6U48	Spec Sheet	Refer to Figures 2-4
Cable Management Panel	Ortronics	OR-808004818	Spec Sheet	Refer to Figures 2-4
Clarity 5E 24-port panel, Cat5e, six-port modules, 19" x 1.75"	Ortronics	OR-PHD5E6U24	Spec Sheet	Refer to Figures 2-4
Cable Management Panel	Ortronics	OR-808004759	Spec Sheet	Refer to Figures 2-4
Triangular Support Bracket, Aluminum, For 6"-12"W Runway 11312-X12	Chatsworth Products	OPA-1811-10	Spec Sheet	Determined by Bidder
Closet Connector Housing (CCH), 2 rack units, accepts up to 4 CCH panels, cassettes or modules; comes with blank panels and hardware to strain-relieve cables internally or externally	Corning	CCH-02U	Spec Sheet	3
Wall-Mountable Connector Housing (WCH), holds 2 CCH Connector Panels	Corning	WCH-02P	Spec Sheet	6
Closet Connector Housing (CCH) Panel, 12 F, SC Simplex, 62.5 µm multimode (OM1)	Corning	CCH-CP12-56	Spec Sheet	6

Closet Connector Housing (CCH) Panel, 12 F, ST® Compatible, 62.5 µm multimode (OM1)	Corning	CCH-CP12-15T	Spec Sheet	6
UniCam® High-Performance Connectors, SC, 62.5 µm multimode (OM1)	Corning	95-000-41-Z	Spec Sheet	3
UniCam® High-Performance Connectors, ST® Compatible, 62.5 µm multimode (OM1)	Corning	95-000-51-Z	Spec Sheet	3
MIC® DX Armored Cable, Plenum, 12 F, 62.5 µm multimode (OM1) – ~ 140' (feet) per floor	Corning	012K88-33130-D3	Spec Sheet	~ 420 Determined by Bidder
25 pair Telco cable approx. 70' (feet) per floor	Any supplier			~210 feet Determined by Bidder
110 punch down blocks	Any supplier			3

¹ The amount of CAT5e cabling (in feet) is **not** provided and needs to be determined by each respective bidder. Estimates can be calculated using the scaled drawings (1/8"= 1'-0") provided in Appendix B for each floor.

8. Intermediate Distribution Facility (a/k/a Data/Communications Closets)

The three (3) Communications Closets are enclosed architectural spaces located on the west-side of the building on each floor. The Communications Closet are used for housing network, telecommunications equipment, cabling and cabling terminations, and any cross-connect cabling required to distribute network, telecommunications signals throughout the localized area (i.e., each floor).

The Data/Communications Closet will be fitted to support the following systems and equipment:

- Patching and termination components for network cabling ;
- Rack-mounted active network components for wired and wireless signal distribution; and rack or wall-mounted active and passive components for existing or future video signal distribution.

Each communications rack and **required components** for the 3rd, 4th and 5th floors of City Hall are provided in Figures 2-4. The rack-mounted required components are also listed in Table 3 of this ITB.

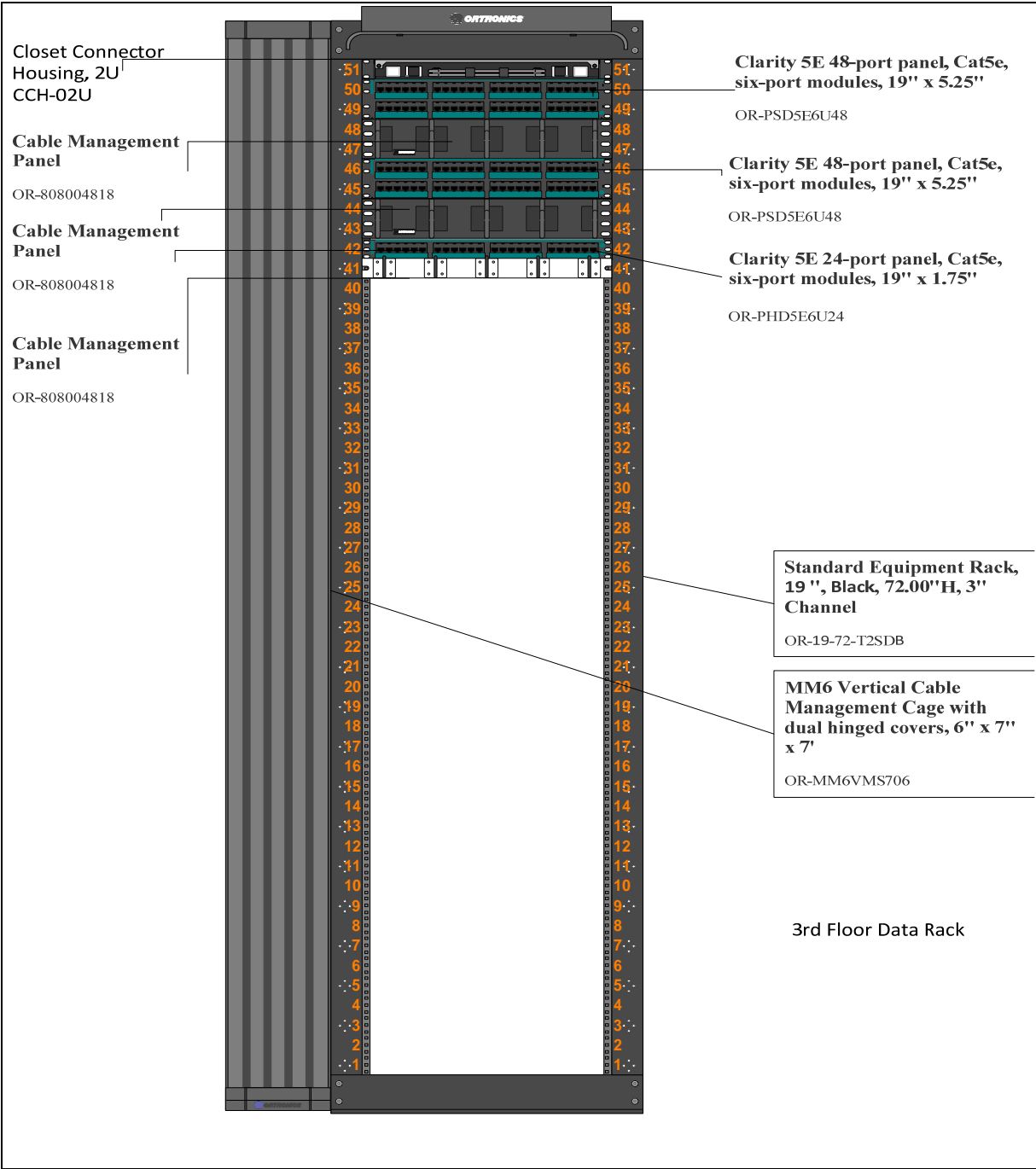


Figure 2
3rd Floor Communications Rack

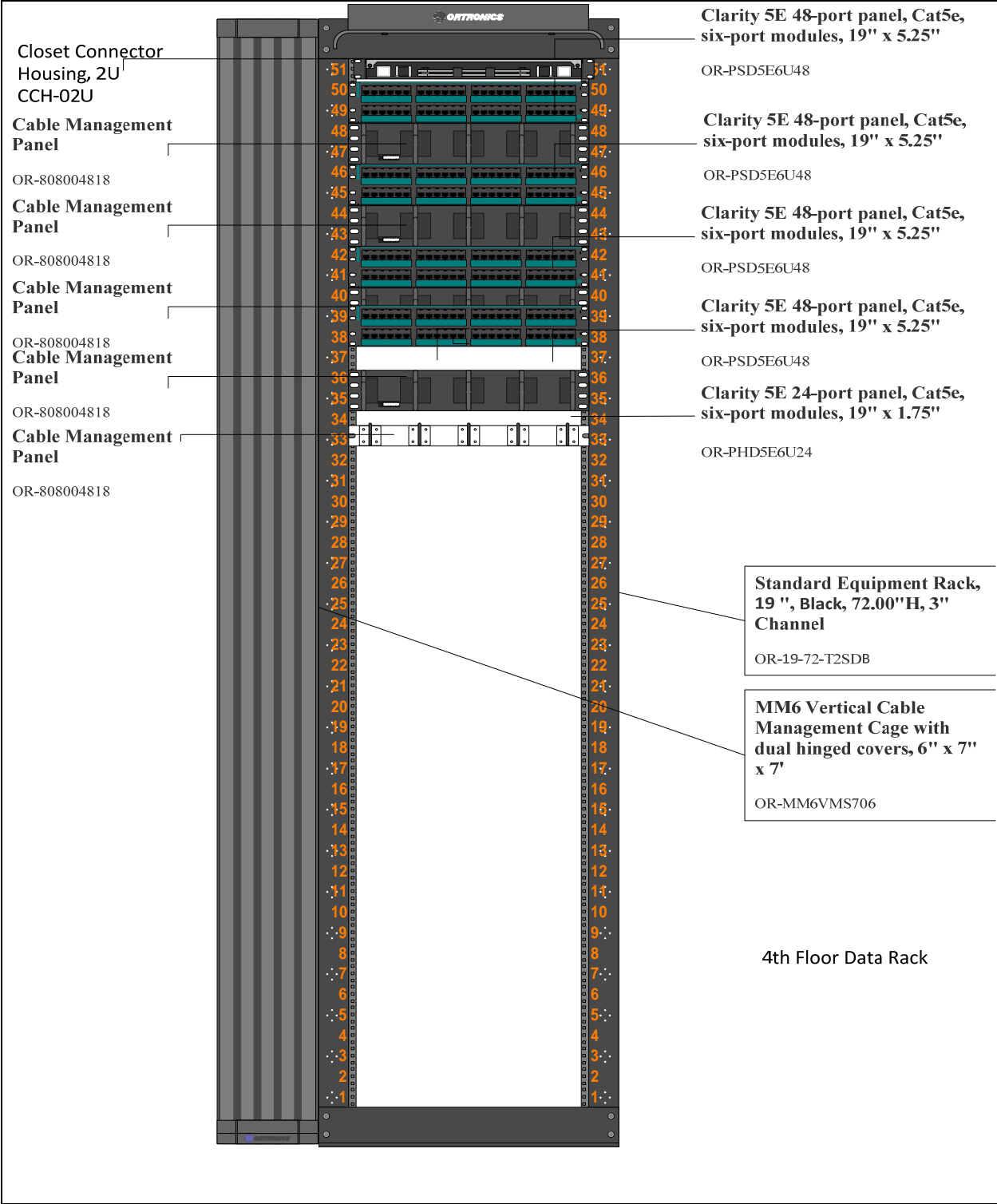


Figure 3
4th Floor Communications Rack

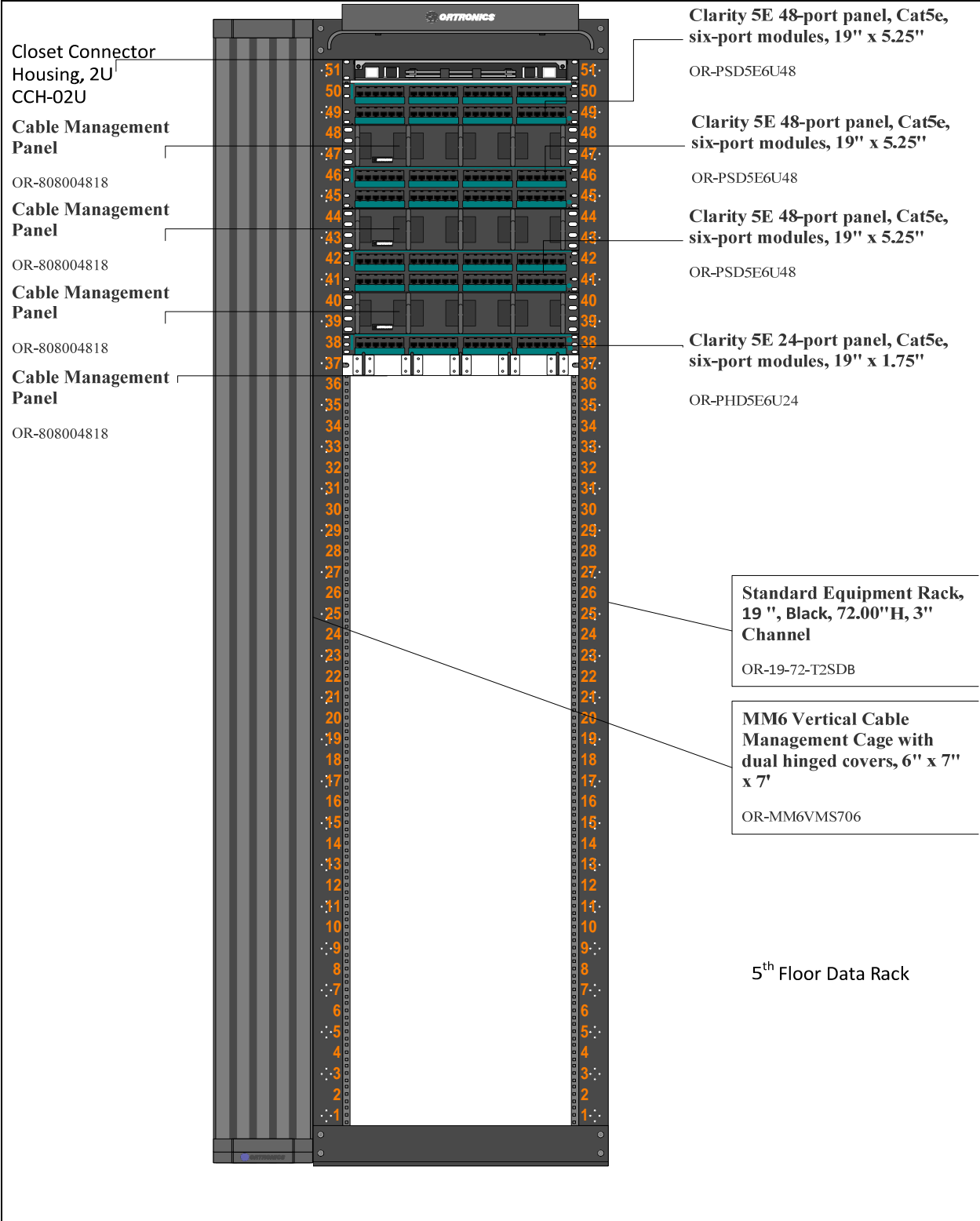


Figure 4
5th Floor Communications Rack

ATTACHMENT A - CONTRACT COMPLIANCE FORMS

**City of Ann Arbor Procurement Office
INSTRUCTIONS FOR CONTRACTORS**

For Completing CONTRACT COMPLIANCE FORM

City Policy

The “non-discrimination in contracts” provision of the City Code, (Chapter 112, Section 9:161) requires contractors/vendors/grantees doing business with the City not to discriminate on the basis of actual or perceived race, color, religion, national origin, sex, age, condition of pregnancy, marital status, physical or mental limitations, source of income, family responsibilities, educational association, sexual orientation, gender identity or HIV status against any of their employees, any City employee working with them, or any applicant for employment. It also requires that the contractors/vendors/grantees include a similar provision in all subcontracts that they execute for City work or programs.

This Ordinance further requires that each prospective contractor/vendor submit employment data to the City showing current total employee breakdown by occupation, race and gender. This allows the Human Rights Office to determine whether or not the contractor/vendor has a workforce that is reflective of the availability of women and under-represented minorities within the contractor’s labor recruitment area (the area where they can reasonably be expected to recruit employees). *This data is provided to the City on the Human Rights Contract Compliance Forms (attached).*

To complete the form:

1) If a company has more than one location, then that company must complete 2 versions of the form.

- **Form #1** should contain the employment data for the **entire corporation.**
- **Form #2** should contain the employment data for those employees:
 - who will be working on-site;
 - in the office responsible for completing the contract; or,
 - in the case of non-profit grantees, those employees working on the project funded by the City grant(s).

2) If the company has only one location, fill out Form #1 only.

3) Complete all data in the upper section of the form including the name of the person who completes the form and the name of the company/organization’s president.

4) Complete the Employment Data in the remainder of the form. Please be sure to complete all columns including the Total Columns on the far right side of the form, and the Total row and Previous Year Total row at the bottom of the form.

5) Return the completed form(s) to your contact in the City Department for whom you will be conducting the work.

For assistance in completing the form, contact:

**Procurement Office of the City of Ann Arbor
(734) 794-6500**

If a contractor is determined to be out of compliance, the Procurement Office will work with them to assist them in coming into compliance.

**CITY OF ANN ARBOR PROCUREMENT OFFICE
HUMAN RIGHTS CONTRACT COMPLIANCE FORM**
Entire Organization (Totals for All Locations where applicable)

Form #1

Name of Company/Organization _____ Date Form Completed _____

Name and Title of Person Completing this Form _____ Name of President _____

Address _____ County _____ Phone # _____
(Street address) (City) (State) (Zip) (Area Code)

Fax# _____ Email Address _____
(Area Code)

EMPLOYMENT DATA

Job Categories	Number of Employees (Report employees in only one category)												TOTAL COLUMNS A-L
	Male						Female						
	White	Black or African American	Asian	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	American Indian or Alaska Native	White	Black or African American	Asian	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	American Indian or Alaskan Native	
A	B	C	D	E	F	G	H	I	J	K	L		
Exec/Sr. Level Officials													
Supervisors													
Professionals													
Technicians													
Sales													
Admin. Support													
Craftspeople													
Operatives													
Service Workers													
Laborers/Helper													
Apprentices													
Other													
TOTAL													
PREVIOUS YEAR TOTAL													

**CITY OF ANN ARBOR PROCUREMENT OFFICE
HUMAN RIGHTS CONTRACT COMPLIANCE FORM**
Local Office (Only those employees that will do local or on-site work, if applicable)

Form #2

Name of Company/Organization _____ Date Form Completed _____

Name and Title of Person Completing this Form _____ Name of President _____

Address _____ County _____ Phone # _____
(Street address) (City) (State) (Zip) (Area Code)

Fax# _____ Email Address _____
(Area Code)

EMPLOYMENT DATA

Job Categories	Number of Employees (Report employees in only one category)												
	Male						Female						TOTAL COLUMNS A-L
	White	Black or African American	Asian	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	American Indian or Alaska Native	White	Black or African American	Asian	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	American Indian or Alaskan Native	
	A	B	C	D	E	F	G	H	I	J	K	L	
Exec/Sr. Level Officials													
Supervisors													
Professionals													
Technicians													
Sales													
Admin. Support													
Craftspeople													
Operatives													
Service Workers													
Laborers/Helper													
Apprentices													
Other													
TOTAL													
PREVIOUS YEAR TOTAL													

APPENDIX A

Purchase Order Terms and Conditions

City of Ann Arbor: General Terms and Conditions

The following General Terms and Conditions shall apply to all purchases by or on behalf of the City of Ann Arbor unless specifically provided otherwise on the front of this Document:

Tax Exemption: The City of Ann Arbor is tax exempt, ID# 38-6004534.

Acceptance of Contract: This order is the City's contract to purchase the goods and services described on the reverse front side of this document from the Vendor. The City's placement of this order is expressly conditioned upon the Vendor's acceptance of all the terms and conditions of purchase contained on or attached to this purchase order. All specifications, drawings, and data submitted to the Vendor with this order are hereby incorporated and made part hereof.

Amendments: No agreement or understanding to modify this contract shall be binding upon the City unless in writing and signed by the City's authorized agent.

Delivery: All prices must be F.O.B. delivery point. Time is of the essence on this contract. If delivery dates cannot be met, the Vendor agrees to advise the City, in writing of the earliest possible shipping date. The City reserves the right to cancel or purchase elsewhere and hold the Vendor accountable.

Risk of Loss: Regardless of F.O.B. point, the Vendor agrees to bear all risk of loss, injury, or destruction of goods and materials ordered herein which may for any reason occur prior to delivery or acceptance by the City, whichever is later. No such loss, injury, or destruction shall release the Vendor from any obligations hereunder.

Inspection: Goods and materials must be properly packaged. Damaged goods and materials will not be accepted. The City reserves the right to inspect the goods at a reasonable time subsequent to delivery where circumstances or conditions prevent effective inspection of the goods at the time of delivery. All rejected goods shall be returned to the Vendor at no cost to the City, whether the damage is readily apparent at the time of delivery or later. The City's acceptance is conditioned on such inspection.

Patents and Copyrights: If an article sold and delivered to the City hereunder shall be protected by any applicable patent or copyright, the Vendor agrees to indemnify and save harmless the City, from and against any and all suits, claims, judgments, and costs instituted or recovered against it by any person whomsoever on account of the use or sale of such articles by the City in violation or right under such patent or copyright.

Uniform Commercial Code: All applicable portions of the Michigan Uniform Commercial Code shall govern contracts for goods with the City of Ann Arbor; except as modified by contract documents.

Non-waiver of Rights: No failure of either party to exercise any power given to it hereunder or to insist upon strict compliance by the other party with its obligations hereunder, and no custom or practice of the parties at variance with the terms hereof, nor any payment under this agreement shall constitute a waiver of either party's right to demand exact compliance with the terms hereof.

Material Safety Data Sheets: Applicable Material Safety Data Sheets, in compliance with OSHA/MIOSHA hazard communication regulations/standards, must be provided by the Vendor to the City at the time of purchase.

Assignments: The Vendor agrees not to assign or transfer this contract or any part thereof without the written consent of the City of Ann Arbor, acting through its authorized representative. Any unauthorized assignment may subject the contractor to immediate termination.

Laws Governing: This contract shall be governed by and construed according to the laws of the State of Michigan. Vendor agrees to submit to the jurisdiction and venue of the Circuit Court of Washtenaw County, MI, or if original jurisdiction is established, the U.S. District Ct. for Eastern District of MI, Southern Division. The Vendor stipulates venues referenced are convenient and waives any claim of non-convenience.

Prevailing Wage: It shall be the responsibility of the Vendor to comply, when applicable, with the prevailing wage requirements and/or the Davis-Bacon Act as amended.

Living Wage: It shall be the responsibility of the Vendor to comply, when applicable, with the City of Ann Arbor's Living Wage Ordinance as defined in Chapter 23, Section 1:811-1:821.

Non-Discrimination: It shall be the responsibility of the Vendor to comply, when applicable, with, all State, Federal and Local non-discrimination laws, including MCL 37.2209 and City Ordinance Chapter 112, Section 9:161.

Indemnification: To the fullest extent permitted by law the Vendor shall indemnify, defend and hold the City, its officers, employees and agents harmless from all suits, claims, judgments and expenses including attorney's fees resulting or alleged to result from any act or omission, associated with the performance of this contract by the Vendor or anyone acting on the Vendor's behalf under this contract. The Vendor shall not be responsible to indemnify the City for losses or damages caused by or resulting from the City's sole negligence. This indemnity survives delivery and acceptance of the Vendor's goods and services.

Warranty: The Vendor warrants to the City that all goods and services furnished hereunder will conform in all respects to the terms of this contract, including any drawings, specifications and standards incorporated herein. In addition, the Vendor warrants the goods and services are suitable for and will perform in accordance with the purposes for which they were intended.

Payment Terms: The City of Ann Arbor's payment terms are net 30. The payment date will be calculated based on the invoice receipt date or delivery date, whichever is later.

Payments: All invoices for goods and services shall be emailed to accountspayable@a2gov.org. Mailed invoices shall be addressed to the City of Ann Arbor, Accounts Payable, P.O. Box 8647, Ann Arbor, MI 48107, as indicated on the front of this purchase order. Invoices must include the Vendor's name, phone number, and clearly listed item descriptions, quantities and units of measure. The Vendor acknowledges and understands that invoices not addressed as stated above shall have the net 30 begin once the invoice is received by Accounts Payable.

Compliance with Laws: The Vendor certifies that in performing this contract it will comply with all applicable provisions of Federal, State and Local laws, regulations, rules and orders.

Termination for Cause: In the event the Vendor fails, at any time, to comply with, fully perform or strictly adhere to any covenant, condition or representation contained within the contract, the City shall have the right to give written notice to Vendor of such failure. If such failure is not cured to the City's satisfaction within ten (10) business days from the time of delivery to Vendor of such notice, the City shall have the right to terminate immediately without the requirement of a further notice.

APPENDIX B Floor Plans

Larcom City Hall 3rd, 4th, and 5th Floor Floor Plans pdf files must be separately downloaded from one of the following sites:

- Michigan Inter-governmental Trade Network (MITN) www.mitn.info
- City of Ann Arbor web site www.A2gov.org