

Request for Purchase

**DESIGN AND INSTALLATION OF STRUCTURED COMMUNICATIONS
CABLE SYSTEMS**

For

The Village of Franklin Park

2014

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I. PROJECT DESCRIPTION / GENERAL SCOPE OF WORK

General Scope: The Village of Franklin Park is soliciting proposals from telecommunications cabling vendors (“Cabling Vendor”) to design and install a complete “end-to-end” certified system for transmission of voice and data signals. The system shall be designed, installed, tested to the proposed Category 6 specifications, and certified to a 1GB speed to the desktop. The vendor shall remove all existing legacy wires and equipment at no additional cost to the Village of Franklin Park.

A typical station location consists of universal cable runs and termination jacks for at least one (1) voice and one (1) data outlet. In addition, there could possibly be more than one (1) data connection at any given workstation.

Server Room and Wiring Closet

This room would be the central point for all data\voice terminations to patch panels. There will also be some custom wiring from the server racks to patch panels.

For pricing purposes, assume the following quantity of voice/data drops throughout the Village of Franklin Park’s facilities as the base scope of work in absence of plans:

Areas	Estimated Qty. of V/D Drops
Village Hall	45
Public Works	11
Pump House	4
Sanitation and Water Dept.	10
Total	70 (140)

II. PROJECT REQUIREMENTS

- A. Each Cabling Vendor responding to this RFP represents that (i) this document has been read and fully understood, (ii) they have site verified the proposed facilities and has included in its bid all appropriate labor, material, and cost provisions to account for all site conditions, and (iii) that the proposal submitted is based upon a full understanding of the requirements and specifications described in this RFP.
- B. The Village of Franklin Park reserves the right to accept or reject any or all proposals

in part or in whole, or to negotiate separately with any source whatsoever in any manner necessary to best serve the Village of Franklin Park, and makes no representation, implied or expressed, that it shall accept any proposal submitted to it. The Village of Franklin Park will not be liable for any cost incurred by the bidders in preparing responses to this RFP or negotiations associated with award of a contract. The Village of Franklin Park reserves the right to waive any minor informality or irregularity.

- C. The Village of Franklin Park reserves the right to immediately terminate any contract resulting from this RFP based upon the selected Cabling Vendor's failure to correct deficiencies. As they are identified, The Village of Franklin Park shall give written notice to the selected Cabling Vendor stating any and all deficiencies to be corrected within five (5) working days.
- D. The Village of Franklin Park reserves the right to require the replacement of the Cabling Vendor's project manager or any employee at any time during the contracted period.
- E. Cabling Vendor must be certified to install Category 6 UTP cabling systems (plenum rated) by Lucent Technologies, Chatsworth Products, FSR, Leviton, Panduit, or Pamona. Identify all certified personnel to be assigned to this project, each possessing a minimum of two (2) years of experience installing Cat 6 cable.
- F. All work shall be in accordance with all guidelines specified by the latest EIA/TIA Building Telecommunications Wiring Standards, the BICSI Telecommunications Distribution Methods Manuals (TDM), and manufacturer/vendor installation guidelines. These documents and standards form the basis for the installation, testing, and acceptance of the structured communications cable system.
- G. Cabling Vendor must be a reputable company having a minimum of ten (10) years of experience designing and installing structured communications wiring systems.
- H. The selected Cabling Vendor shall comply with all applicable laws, ordinances, rules, regulations and orders of the Municipal, Federal, and other governmental authorities having jurisdiction affecting any work to be done to provide the services required. The Cabling Vendor shall provide all necessary safeguards for safety and protection, as set forth by the U.S. Department of Labor, Occupational Safety and Health Administration. The Cabling Vendor must have in-house quality, safety, and training programs, and agrees to adhere to and follow the General Contractor's site safety guidelines as well.
- I. Cabling Vendor shall supply all necessary labor, tools, equipment, and permits required to execute the design and installation of the scope of work required by this RFP and by the best industry standards. In the event of a conflict, the most stringent and highest standard shall be applied for the benefit of the Village of Franklin Park. The selected vendor must own testing equipment and possess the ability to test to the most current adopted EIA/TIA standards.

- J. Cabling Vendor will be required to coordinate with the Village of Franklin Park telephone switch vendor Ricoh and provide all the necessary cable and infrastructure to support the Village of Franklin Park's telephone system, including the data \ voice backbone infrastructure from demarcation.
- K. Cabling Vendor will attend weekly project progress meetings and perform on-site visits as required. The progress meetings are in addition to any meetings that may be required during the project to coordinate with other trades.
- L. The cabling vendor proposal shall not charge request the Village of Franklin Park extra charges for overtime or after-hours and weekend work required to complete the cable installation, migration, and system cut-over requirements. The additional cost shall be the responsibility of the cabling vendor.
- M. Cabling Vendor will not subcontract services or labor without the express knowledge and consent of the Village of Franklin Park.
- N. Cabling Vendor will mobilize and make available on-site technicians during technology relocations to expedite and problem-solve cable issues during migration.
- O. The Primary or Secondary Main Distribution Frame (MDF) will be located in the server room / wiring closet or in a designated area select by the Village of Franklin Park. All cabling will be continuous (home-run) from each point-of-termination at the outlet to the point-of-termination in the MDF or wiring closet. In areas where no MDF exist the vendor shall install and setup a MDF. The vendor will also provide an environmentally protective housing that shall accommodate all existing devices and have room to accommodate an addition 6U size device. The vendor will also provide a network equipment enclosure with door and a key lock. It will protect equipment from dust and provide air flow to network equipment using fans. If no patch panels exist in network equipment enclosure the vendor will provide a patch panel. The vendor is responsible for hanging and mounting the network equipment enclosure.
- P. Furniture systems communications raceways to be fed via wall-mounted 'J' boxes.
- Q. The Village of Franklin Park has an agreement with Ricoh to install Voice Over IP solution. The telecommunication system is provided by Fonality. The Cabling Vendor shall coordinate with the telecommunications vendor (Ricoh and Fonality) to define and provide related cabling requirements including multi-pair cabling specification, routing, connections, cross-connections and terminations for both voice and data installations.
- R. The Cabling Vendor will be responsible for the daily clean-up and disposal of debris. The Cabling Vendor shall remove all legacy phone systems, cables and equipment. The vendor will also remove all legacy CAT 5 cables.
- S. Cabling Vendor shall make all wall penetrations necessary to complete the work and will be responsible for patch and repair related to same. Cabling Vendor will be responsible for fire sealing/acoustical sealing all penetrations in floors or walls made

by and/or used by the Cabling Vendor in the execution of its work.

III. SCOPE OF SERVICES

The anticipated scope of work to be addressed under this proposal is described as follows.

Phase 1 – Planning Tasks

- A. Client Interviews: Meet with selected the Village of Franklin Park representatives and Telecommunication vendor to discern and document requirements.
- B. Review Existing Physical Conditions: Inspect the premises, and the architectural documents.
- C. Standards Development: Develop design criteria based upon information gathered from client interviews. Prepare a narrative description of the system architecture.
- D. Regulatory Approvals: Identify applicable regulatory approval requirements.

Phase 2 – Design Documentation Tasks

- E. Prepare Schematic Design Documents: Prepare preliminary design documentation for Owner review and approval.
- F. Prepare Final Design Documents: Prepare final design documentation and samples for Owner review and approval. Coordinate architectural and electrical requirements the Village of Franklin Park.
- G. Regulatory Approvals: Secure all necessary regulatory approvals.

Phase 3 – Installation

- H. Coordinate installation with the Village of Franklin Park.
- I. Cross-connect/patch and station cables based on final design. Provide the connection to the electronic hardware, and grounding of all racks, cabinets, patch cables, and patch fields.
- J. Provide all labeling and documentation of all horizontal and vertical cabling installed, including providing a graphical mapping of all cabling systems. Handwritten labels are not acceptable.

Phase 4 – Project Close-out

- K. Testing: Provide a copy of testing procedures and methodology for approval. The Cabling Vendor shall define a start-up acceptance period and a start of warranty period beyond same. Cables which fail any of the parameters will be re-terminated and re-tested, or removed and reinstalled. Each bidder shall include a sample of its test results report with its

proposal response.

- L. Provide a statement of warranty on the installation of the Category 6 networking cabling, video/broadcast reception cabling and materials used. The materials and the installation shall be warranted for a minimum of twenty (20) years.
- M. Provide a guaranteed maximum of twenty-four (24) hour response time to repair/replace defective cables or connections. This guarantee shall apply to all materials and installation performed under the contract. Provide a guaranteed maximum four (4) hour response time for emergencies.
- N. Final Documentation: Provide three (3) sets of “as-built” record drawings, CDs of electronic files of plans in AutoCAD format, cut sheets of all installed equipment, certificates, guarantees, warranties, and testing reports.

IV. SPECIFICATIONS

- A. Each voice/data duplex outlet will be supported by (at least) two (2) dedicated 4-Pair UTP Category 6 cables rated for exposed use in ceiling plenums.
 - One (1) 4-Pair UTP cable shall be used to deliver voice services to one (1) RJ-45 Category 6 modular jack.
 - One (1) 4-Pair UTP cable shall be used to deliver 10/100BaseT LAN/data services to one (1) RJ-45 Category 6 modular jack.
- B. Poke-through floor devices will be required in selected locations such as conference rooms to support power/tele/data connections at tables.
- C. Voice services shall be via 24 AWG plenum station UL certified Category 6 cable with color matching jacks and icons. Data services shall be via different colored 24 AWG plenum station UL certified Category 6 UTP cables with color matching jacks and icons.
- D. All cabling shall be “CMP” rated for use in air conditioning plenum spaces without conduit. Bridle ring or “Caddy” sling horizontal distribution shall be used for cable runs above ceilings. Quantity and installation techniques in distribution of the cable runs shall comply with system manufacturer’s specifications.
- E. All horizontal/vertical cabling shall be:
 - E.1 Factory certified Category 6 compliant, in accordance with the most current EIA/TIA standards.
 - E.2 Less than one hundred (100) meters in length.
 - E.3 Free of splices to fulfill the requirements of this specification and be terminated in

accordance with the most current EIA/TIA standards.

- E.4 Routed to be concealed within walls and ceilings where possible, except in transfer closets, or secured to structure above.
- E.5 Placed parallel and perpendicular to the building lines and follow cable tray pathways and hallways where practical from the MDF and IDF's to the station termination outlets.
- E.6 Routed to maintain the following distances from electromagnetic interference (EMI) producing sources in accordance with the most current EIA/TIA standards:

Minimum Separation Distance	< 2kVA	2-5 kVA	5kVA
Unshielded power lines or electrical equipment in proximity to open or nonmetal pathways	5 in.	12 in.	24 in.
Unshielded power lines or electrical equipment in proximity to a grounded metal conduit pathway	2.5 in.	6 in.	12 in.
Power lines enclosed in a grounded metal conduit, or equivalent, in proximity to a grounded metal conduit pathway	----	3 inches	6 inches

- F. All horizontal/vertical cabling shall be externally shielded from EMI according to the manufacturer's written instructions in any areas where the Vendor must violate the above guidelines, and at no additional cost to the Village of Franklin Park.
- G. Category 6 UTP Data Cabling Testing: All cable shall be tested to EIA/TIA 568A, (proposed TSB 67) Category 6 specifications and standards. At a minimum, test all Category 6 UTP cabling for wire map, length, near-end crosstalk (NEXT), PS NEXT, Return Loss, and attenuation, and provide a detailed report of all cable tests.
- H. CAT 6 UTP Voice Testing: The Cabling Vendor shall test for wire map (proper pin assignment) and continuity.
- I. In general, all cabling is to be installed exposed or above ceilings. All conduit and CAT 6 cable is to be provided by the Cabling Vendor. It is the Cabling Vendor's responsibility to provide design drawings specifically identifying the locations, quantity, and description of required conduit and cable specification in to RFP requirements.
- J. The Cabling Vendor shall mount or install backboards consisting of ¾" smooth-faced plywood for the purpose of terminating wiring and mounting of network or telephone equipment to be provided at each tele/data closet or room by the Cabling Vendor.

Convenience outlets on the top and bottom of each board to be provided by the Cabling Vendor.

- K. If no ground exists at the MDF the Cabling vendor shall provide.

Work to be Provided by the Village of Franklin Park and Ricoh :

- L. Arrangement for, installation of, and payment of all fees associated with all incoming spare/future pairs and active C.O. lines/multiplexers/processors or other digital services as required and provided by the local exchange carrier to be the responsibility of the Village of Franklin Park. The Village of Franklin Park is responsible for scheduling the installation of lines and termination in the building main telecommunications room.
- M. Telecommunications system including switch, equipment, and handsets to be provided by the Village of Franklin Park and Ricoh.

V. PROJECT SCHEDULE

Time is of the essence in the development of this project. All consultants, contractors, and vendors will be expected to expedite the completion of each task by committing to applying sufficient resources as required to meet the milestones identified in the *Comprehensive Project Schedule*, attached as Exhibit C.

Provide estimated durations for the following phases:

Activity	Duration (weeks)
Phase I- Planning Phase II - Design Documentation Phase III – Installation Phase IV – Project Close-out	

VI. INSURANCE REQUIREMENTS

The Cabling Vendor shall be required to obtain and maintain such insurance types with minimal coverage as follows.

Insurance Type	Coverage Amount
Workmen's Compensation and Employer's Liability Insurance	Statutory Amount
Comprehensive Automobile and Commercial General Liability (per occurrence)	\$2,500,000
Errors and Omission and Professional Liability	\$500,000

Insurance (per occurrence)

The cost for all such insurance coverage shall be included within the lump sum proposal.

VII. CONTRACT

The Village of Franklin Park ultimately intends to enter into a lump sum contract with a Cabling Vendor. Once the scope of work has been finalized, the selected Cabling Vendor will submit a final price to perform the work, and a contract will be negotiated in a form acceptable to both parties. The Village of Franklin Park is under no obligation to accept any proposal received.

VIII. COST PROPOSAL

Given the indeterminate scope of the work at this time, the Village of Franklin Park recognizes the impracticality of soliciting a lump sum price without significant contingencies. While pricing will be a basis for selecting a Vendor, it will not be the sole determining factor. The successful Cabling Vendor will submit the most creative approach to providing a quality design solution, as well as economical installation.

The proposal should respond to the base scope and specifications as defined. Please segment the cost into the following categories.

	% of Fee	Total
Design		
Materials		
Labor		
Tax, Shipping, Other		
Testing		
Close-out		
Total	100%	

Additional Services

Submit hourly rate schedules that shall be used as a basis for the billing of any additional services if required.

Alternate Pricing

Provide pricing requested below should the scope of work be increased or decreased incrementally as the architectural design develops.

Device	Add	Deduct
Wall-mounted outlet and cabling		

(each)		
Furniture-mounted outlet and cabling (each)		
Poke-through outlet and cabling		

IX. EXHIBITS

Dwg.	Title	Date
A.	Power & Telephone Plan	
B.	Not used	
C.	Comprehensive Project Schedule	

X. QUALIFICATIONS STATEMENT

The Cabling Vendor shall provide the following information

- A. Name and Address of the Cable Vendor :

- B. Name(s) of Cable Vendor Principal Owners:

- C. Date of Founding of Cable Vendor Organization :

- D. Describe recent history of gross billings by the bidding Cable Vendor :

	This Year	2 yrs. Ago	5 yrs. Ago
Total Annual Billings			
Median Project Value			
Typical No. of Projects per Year			

- E. List current major projects, the size and type, and the phase status:

Project	Size	Type	Status
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F. Description of Employees (at branch office to be employed):

	This Year	2 yrs. Ago	5 yrs. Ago
Principals			
Project Managers			
Designers			
Administrative			
Other			
Total			

G. Provide resumes of senior personnel and personnel proposed for this project.

H. Describe any design philosophy or production technique that bidding vendor believes is essential to the quality of the work produced.

I. Describe the circumstances surrounding any project that the bidding vendor was terminated from within the preceding ten (10) years.

J. Describe any litigation that the bidding vendor has been a party to during the last five (5) years.

K. Describe any awards, Certificates of Recognition, or other accolades that have been bestowed upon the bidding vendor during the last five (5) years.

L. Provide three (3) PROJECT OWNER references for whom the bidding vendor has provided services during the last three (3) years.

a. Organization:
Address:

Telephone No.:
Contact Name:
Position:

b. Organization:
Address:

Telephone No.:
Contact Name:
Position:

- c. Organization:
 Address:

 Telephone No.:
 Contact Name:
 Position:

Provide a brief description of at least two (2) projects designed by the bidding vendor in the last five (5) years that are similar in complexity and size to the proposed project (include name and location of project, project size, client, and completion date).