## SCOPE OF WORK

The scope of services provided to The University of Florida includes work associated with low voltage contracting and network and telecommunications infrastructure installations including work area outlets, backbone and riser cabling, equipment racks, cable tray, terminal blocks, cross-connect systems, optical fiber and terminations, removal of abandoned cabling, system testing and documentation.

The location of the work to be provided by the Contractor will largely be confined to the University of Florida main campus. The size of each project will vary from directing the Contractor to provide a singular cable installation to a complete structured cabling system and associated network infrastructure for a new building installation. All services shall be performed on an as needed basis.

Special Note: The University of Florida campus has an exceptionally high concentration of pedestrians, bicycles, and vehicular traffic. Additionally, much of the work entails operating in congested areas, hallways and office areas that require services to remain active. Precautionary measures that the Contractor must take in protecting the project work, as well as protecting pedestrians, is considered by the University as incidental to the work of this agreement. Therefore, the contractor shall bear this in mind when responding to the unit price schedule.

This solicitation will result in an award(s) in the best interest of the University to one or more vendors to provide services described above. It is up to the discretion of the University department/stakeholders which of the contractors are chosen for the job at hand. Award does not guarantee work.

#### **UNIVERSITY DEMOGRAPHICS**

The University of Florida is a major public land-grant research university. The state's oldest, largest, and most comprehensive university, the University of Florida is among the nation's most academically diverse public universities. The University has a long history of established programs in international education, research, and service. It is one of only 17 public land-grant universities nationwide and the only university in Florida belonging to the Association of American Universities. With more than 49,000 students, the University of Florida is now one of the ten largest universities in the nation.

The University of Florida has a 2,000-acre campus and more than 900 buildings (including 170 with classrooms and laboratories). The northeast corner of campus is listed as a historic district on the National Register of Historic Places.

The University's extensive capital improvement program has resulted in facilities ideal for 21st century research including the McKnight Brain Institute, the Health Professions, Nursing and Pharmacy Building, the Cancer and Genetics Research Complex, and the Proton Therapy Institute in Jacksonville. Overall, the university's current facilities have a book value of more than \$1 billion and a replacement value of \$2 billion.

For any additional information about the University of Florida, please visit the University's web page at: <a href="https://www.ufl.edu">www.ufl.edu</a>.

**END OF SECTION** 

#### **SOLICITATION STRUCTURE & INSTRUCTIONS**

This bid will consist of two (2) phases.

**Phase 1** is a Pre-qualification phase comprised of a timely and complete response to the Phase 1 Criterion and the supporting documentation of adequate pre-qualification considerations.

**Phase 2** is the evaluation of the Unit Price Schedule and award of the solicitation.

NOTE: Contractors are to submit sealed packages for both Phase 1 and Phase 2 at the same time and are to be clearly marked 'Phase 1' and 'Phase 2'. Bids that do not meet the requirements of Phase 1 may be rejected and not considered for Phase 2.

#### Incomplete bid packages may be disqualified.

This includes, but is not limited to:

- Failure to submit proposal by the stated time and date
- Failure to sign the Invitation to Bid Acknowledgement Form
- · Missing, invalid, or expired license
- · Missing, invalid, or expired proof of corporate status in the State of Florida
- Insufficient proof of insurance coverage
- Missing or incomplete Contractor's Qualification Statement, AIA Document 305
- Failure to include safety (EMR) data
- Failure to present Phase 1 packages in TABULAR format
- Failure to have 2 packages labeled Phase 1 and Phase 2

## **PHASE 1 CRITERION**

The following criteria shall be used in Phase 1 to pre-qualify contractors to continue to Phase 2 (bid packages should be presented in TABULAR format as per outline below):

#### **TAB 1 Contractor Qualifications**

Submit appropriate documentation for all the below:

- A. Completed Contractor's Qualification Statement, AIA Document 305. See page 34-39.
- B. **Structured Cabling Contractor Certification:** If the Contractor is responding to the ITB with pricing for Commscope installations the Contractor must be able to satisfy the following criteria:
  - 1. **Panduit Solution** (Major projects and new construction for CAT6A installations):

Panduit offers a complete Certification Plus System Warranty on eligible installations registered with Panduit. This warranty assures customers their registered structured cabling system's performance will meet all relevant cabling system standards for up to 25 years. To be eligible for the Certification Plus System Warranty, the system must be registered with Panduit, installed by a Panduit Certified Installer or a Panduit Project Authorized Installer, and must meet all program requirements.

- 2. Commscope Uniprise (Minor projects and renovations for CAT6 or CAT6A installations):
  - Contractor shall be Commscope Uniprise certified and offer a Commscope 20-year applications Assurance Warranty
  - Application Assurance warranty comprised of end to end Commscope Uniprise install
  - Contractor must have current Uniprise certified installer training for fiscal year for which project is installed. (1 per company)
  - Upon completion of project, contractor must present all test results to Commscope for review and/or site walk upon completion.

- Hard copy certification is released to the end user upon approval of the warranty.
- 3. Commscope Systimax- (Major projects and new construction for CAT6 or CAT6A installations):
  - Contractor shall be Commscope Systimax certified and offer a Commscope 20-year applications Assurance Warranty.
  - Contractor must have current Systimax installer training for fiscal year for which project is installed.
  - Training requirements- 1 Design and Engineering per company and 3 Installation and maintenance per company
  - Upon completion of project, contractor must present all test results to Commscope for review and or site walk upon completion
  - Hard copy certification is released to the end user upon approval as the warranty.

List all other connectivity solutions that the Contractor is certified to provide and provide associated documentation.

- C. Project Management Tools: The Contractor must be proficient in the utilization of software tools including AutoCAD, Flukeware and MS Project, or other project management tools necessary for the management of the project under this ITB. Submit a list of all software tools used and a sample project chart and methodology used on a previous project.
- D. **Project Manager Submit resume(s) for the following:** The Contractor will provide one Project Manager who will act as a single point of contact for all activities regarding each project assigned under this annual contract. The Project Manager must be a full-time employee of the Contractor, a current member of Building Industry Consulting Services International (BICSI) and a Registered Communications Distribution Designer (RCDD). The Project Manager will ultimately be responsible for this project. The Project Manager must have enough experience in this type of project as to be able to lend adequate technical support to the field forces during installation, during the warranty period, and during any extended warranty periods or maintenance contracts. A complete resume of the responsible Project Manager must be attached to the Contractor's response for evaluation by the University and should emphasize experience managing similar projects. The resume must include copies of current RCDD certification. Should the Project Manager/RCDD assigned to this project be replaced before or during the installation, the new Project Manager/RCDD assigned must also submit a resume for review and approval by the University.

If, in the opinion of the University, a replacement Project Manager does not possess adequate qualifications to support the project, the University reserves the right to require the Contractor to assign a Project Manager who, in the University's opinion, possesses the necessary skills and experience required for this project. If the Project Manager included in the original ITB should be replaced, and the Contractor cannot provide a Project Manager acceptable to the University, the University may void the contract with the Contractor and award the contract to another respondent to the ITB. The Project Manager will not be required to be on-site continuously but must be available twenty-four (24) hours a day by cell phone or pager. In addition the Project Manager will be required to attend regular scheduled project meetings (typically weekly) as well as any other meetings required by the University due to emergent circumstances. and together with the University, make impromptu on-site decisions regarding the scope of the work and any changes required by the work. The Project Manager will attend two (2) meetings, onsite, with the IT personnel and University of Florida Facilities Planning representatives prior to the start of the work. The Project Manager will be totally responsible for all aspects of the Contractor's work. Only the University shall have the authority to make decisions resulting in the installation differing from the plan. The Project Manager must be a management employee and will not be involved in personally performing craft installation work.

E. Construction Foreman – Submit resume(s) for the following: The Contractor shall provide a full time, on-site, Construction Foreman in addition to the Project Manager who shall act as a single point of contact for all site activities. A complete resume of the Construction Foreman must be attached to the Contractor's response for evaluation by the University and should emphasize experience supervising work on similar projects. The Construction Foreman will be responsible for all decisions required of the University and shall coordinate with all departments and trades during installation activities. The Construction Foreman shall notify the University's Inspector when inspections are scheduled and shall coordinate the inspection between the Contractor and the University's Inspector. The Construction Foreman must be certified by

BICSI, Panduit, or Commscope (as applicable) with a Technicians Level of Training. The Contractor must provide proof of certification. Should the Construction Foreman assigned to this project be replaced before or during the installation, the new Construction Foreman assigned must also submit a resume for review and approval by the University.

If, in the opinion of the University, a replacement Construction Foreman does not possess adequate qualifications to support the project, the University reserves the right to require the Contractor to assign a Project Manager who, in the opinion of the University, possesses the necessary skills and experience required for this project. If the Project Manager included in the original ITB should be replaced, and the Contractor cannot provide a Project Manager acceptable to the University, the University may void the contract with the Contractor and award the contact to another respondent to the ITB.

- F. Installation Technicians Submit resumes for the following: All copper installation and termination crew must be certified by BICSI, Panduit or Commscope with a Technicians level of training (as applicable). All optical fiber installation and termination crew must be certified by Panduit, Commscope or other approved organizations in Optical Fiber installation, termination and testing. The Contractor must provide proof of certification to the University prior to Technicians being allowed to work onsite.
- G. Local Office: Proof of a staffed office with available construction personnel located within 60 miles of UF Environmental Health and Safety, 916 Newell Drive, Gainesville, FL, 32611, for the ability to respond and perform the task on hand within a 2-hour time frame. Provide the number of employees that work out of this office.

## TAB 2 Past Performance and Experience

The Owner will evaluate the quality of the applicant's past performance considering currency, relevancy, sources, context and trends. This evaluation is separate and distinct from the responsibility determination. The assessment of the applicant's past performance will be used as a means of evaluating the relative capability of the firm to successfully perform the Work. The University reserves the right to obtain information for use in the evaluation of past performance from any and all sources it deems necessary.

The applicant shall demonstrate satisfactory performance on five (5) similar projects that have used the OSP/ISP services described in this Bid Document within the past five (5) years. At least two (2) of these installations must be in buildings of greater than 100,000 square feet and at least two (2) of these must demonstrate work experience in a complex renovation environment described below. Provide complete description of project, location, date of completion, and Owner name and address, and point of contact including name, phone number and email address.

Renovation projects are defined as those with the following scopes or characteristics:

- University campus, Hospital or government project experience
- Projects with intense schedule, management, and logistical demands busy campus, adjacent residential
  facilities that will remain occupied during the work

Please list commercial installs only. No residential, warehouse and/or the compilation of smaller jobs to equal ~100,000 square feet will be accepted for this requirement. The University may, with full cooperation of the Contractors, visit the installation sites to observe cable installation and consult with references. Specified visits and discussion shall be arranged through the Contractors; however, Contractor personnel shall not be present during discussions with References.

For each project, submit the following summary:

Proje	ect Example 1:	
1.	Project Name:	
2.	Project Address:	

3.	Co	ntact Person:		
	Contact Phone Number/Email:			
	a.	Usable Square Feet:	_	
	b.	Number of WAOs Installed:		
	C.	Number of Telecommunications Closets Installed:		
	d.	Number of Cross Connected Jacks:		
	e	Date Project Started:	Completed:	

5. Description of project and services provided.

## **TAB 3** Insurance Coverages

Provide proof of the applicant's ability to provide liability insurance coverage in the amounts descried below:

- General Liability in the amount of \$1,000,000 per occurrence with UF named additional insured on the policy
- Automobile Liability in the amount of \$500,000 per occurrence with UF named additional insured on the policy
- Umbrella Liability in the amount of \$5,000,000 per occurrence
- Workers' Compensation per requirements of Chapter 440 of the Florida Statutes

Such proof may take the form of a draft 'ACORD' certificate or a letter of intent from the respective carrier or agent.

#### TAB 4 Safety Record

Outline the firm's approach to job-site safety management, training & education, and enforcement. Provide a copy of the firm's insurance experience modification rate (EMR) for the past three years.

#### TAB 5 Workload

Provide a simple list of all current and pending work by the applicant firm. Further, provide a more detailed list of all current and pending work that involves the key personnel identified in item 1 (Qualifications), noting the size, contract amount, scope, owner, A/E, general or prime contractor (if your firm is serving, or will serve as a subcontractor), current status, and projected completion date of each.

#### **EVALUATION**

Each applicant submittal will be reviewed in **Phase 1** by a committee consisting of UF representatives from the Department of Housing & Residential Education, UFHealth, Planning Design & Construction and UFIT – Network Services.

The contractor's response to each of the (5) above-listed criteria will be evaluated by each committee member.

Failure to provide proof of current license(s) and bonding capacity may be grounds for immediate disqualification.

NOTE: This process concludes with the determination of pre-qualified contractors who are eligible to bid. Relative standing from the pre-qualification process bear no relevance to the bidding process.

## NON-TECHNICAL SPECIFICATIONS

1. YEARLY CONTRACTS – The University of Florida is soliciting proposals from interested contractors to establish an indefinite quantity, firm fixed price contract to be used as the primary source for a certified Panduit Contractor, Commscope Contractor, or Contractors for other pre-approved low voltage and network installations, who will furnish and install products for Inside Plant (ISP) Cabling Infrastructure as well as installing Outside Plant Cabling (OSP) for both new and existing campus buildings.

Commodities or services will be ordered from time to time in such quantities as may be needed to fill any requirements of the University of Florida. As it is impossible to determine the precise quantities that may be needed, the Contractor is obligated to deliver any of the items, or combination of items, contracted for in accordance with the general and special conditions of this bid.

Prices quoted shall be all-inclusive and represent complete installation, testing and certification. The Contractor shall be responsible for all labor, and other associated apparatus, tools and equipment necessary to completely install, test, certify and turnover for acceptance to the University of Florida.

2. TERM OF CONTRACT - The University reserves the right to add and/or delete elements, or to change any element of the coverage and participation at any time without prior notification and without any liability of any kind or amount.

Term of Contract: The effective period of contract resulting from this bid will be <u>from date of award</u> through <u>June 30, 2021</u>.

The University shall have the option to renew this bid for four (4), one (1) year renewal periods under the same terms, if it should be deemed advisable and advantageous to do so. Renewal of this contract shall be contingent upon mutual acceptance by the University and Contractor.

Prior to renewal, the Contractor will have the opportunity to adjust prices for the contract that will be in force for the subsequent year. Price change requests shall be submitted to Procurement in writing, submitted at least sixty (60) days prior to the end of the current contract period, and shall be supported by written evidence of increased costs to the Successful Vendor. The University will not approve unsupported price increases that will merely increase the gross profitability of the Successful Vendor at the expense of the University. Price change requests shall be a factor in the contract extension review process. The University shall, in its sole opinion, determine whether the requested price increase or an alternate option is in the best interest of the University.

- 3. NON-MANDATORY PRE-BID CONFERENCE A non-mandatory pre-bid conference will be held remotely on June 23, 2020 at 3:00 PM. Please click <u>HERE</u> to log into this meeting. The purpose of this conference is to hear all questions arising from this Invitation to Bid. Answers to any questions that might arise will be in the form of an Addendum to the Invitation to Bid, prior to the bid opening. All such revisions must be acknowledged by signature and returned with the bid proposal.
- **4. BID SUBMITTALS** Contractors shall ensure that the submittal envelope(s) clearly and conspicuously display the following identifying information in addition to any other information otherwise required for transmittal and are sealed.

Proposals must be sealed and delivered to:

University of Florida Procurement Services 971 Elmore Drive Gainesville, FL 32611-5250 ITB21KO-103

on or prior to July 21, 2020 at 3:00 PM

It is the bidder's responsibility to ensure their proposal is received at the address above no later than the date and time listed above. Proposals which for any reason are not so delivered will not be considered. The

University shall not accept proposals received by facsimile or email. The University shall, at the specified closing date and time, open all proposals that are otherwise in order. The University will allow interested parties to attend such opening for purposes of identifying which vendors have responded. The University will make no immediate decision at such time, and there will be no disclosure of any information contained in any proposal until the earlier of (i) the time University provides notice of a decision or intended decision, or (ii) 30 days after the final competitive sealed proposals are all opened, whichever occurs earlier, vendor proposals become public record. When multiple solicitations have been scheduled to open at the same date and time, the University will open solicitations that have interested individuals present in sequential order by solicitation number. The University will return all unopened proposals received after the closing date and time and will not consider such proposals. The University reserves the right to retain or dispose of such proposals at its discretion; however, the University may return such proposals to their related vendors, but only at such vendor's request and at no cost of expense whatsoever to the University.

Contractors will submit two 2 sealed envelopes in their bid packages along with electronic format discs. Sealed Envelope 1 shall contain Phase 1 Pre-Qualification submittals; Sealed Envelope Phase 2 will contain pricing documentation. At the time of the bid opening, the University will only acknowledge receipt of proposals. Line items and qualifications submittals will not be reviewed at this time and receipt of bids will only be acknowledged.

**5. INQUIRIES –** The University will not give verbal answers to inquiries regarding the specifications, or verbal instructions prior to or after the award of the bid. A verbal statement regarding same by any person shall be non-binding. The University is not liable for any increased costs resulting from the bidders accepting verbal direction. All changes, if necessary, shall be made by written Addendum to the bid.

Any explanation desired by bidders must be requested of UF Procurement Services in writing, and if an explanation is necessary, a reply shall be made in the form of an Addendum. Direct all inquiries to Karen Olitsky, Procurement Agent III, kolitsk@ufl.edu.

All addenda will be posted to UF Procurement Services website only: <a href="https://procurement.ufl.edu/vendors/schedule-of-bids/">https://procurement.ufl.edu/vendors/schedule-of-bids/</a>

Bidders who want the addenda supplied to them in another form must notify the Procurement Agent listed above of that request. Otherwise, it will be the bidder's responsibility to check the website for any additional information and addenda concerning this ITB.

The University may not respond to any inquiries that require addenda if received by the University after **July 2, 2020 at 5:00 PM.** 

- **6. BID PRICING EVALUATION** Each line item on the Unit Price Schedule will be evaluated separately. Unit prices will be assigned points in order to calculate the overall lowest bidder(s). For example, if five proposal are received, per line item, the lowest bid will be given a 5, the second lowest will be given a four, the third lowest given a three and so on. Line items that are left blank will be given zero points. Items that are no charge must be indicated with N/C or \$0.00. No charge items will be awarded the highest points.
- 7. AWARD Award will be made in the best interest of the University to a pool of vendors that meet the requirements of Phase 1 and with the highest overall point score and the lowest bid numbers in Phase 2. After award, will be up to the discretion of the University which of the awarded contractors will be selected to quote individual projects under this contract. Award does not guarantee work.
- **8. SUBCONTRACTORS –** No subcontractors are allowed on this project.
- 9. COVERAGE AND PARTICIPATION the intended coverage of this solicitation and any resulting contract shall be for the use of all UF departments. With the consent and agreement of the successful bidder(s) purchases may be made under this ITB by other state universities, colleges, school boards, educational institutions, municipalities, state and governmental agencies.

The University reserves the right to add and/or delete elements, or to change any element of the coverage and participation at any time without prior notification and without any liability of any kind or amount.

- **10. USE OF TERMS -** The terms University of Florida, University, UF and Procurement Services are used synonymously in this Invitation to Bid unless otherwise indicated. The terms Vendor, Proposer, Bidder and Contractor are used synonymously in this ITB unless otherwise indicated. The terms bid, proposal and submittal are used synonymously in this ITB unless otherwise indicated.
- 11. PRICES Prices are to be a fixed price, and include provision of all labor, equipment, tools, consumables, maintenance, permits, liability insurance, builder's risk insurance, training manuals and services necessary and/or proper for the completion of the work, except as may be otherwise expressly provided in the contract documents associated with the materials to be provided by the University. The University will not be liable for any costs beyond those proposed herein and awarded. Time and materials quotes will be unacceptable. In some cases, the University may order material in excess of that required by the plans. This is to allow for wastage, change orders, and potential loss by inventory. Prices should be calculated based upon the plans provided, and not upon the quantity of materials ordered.
- **12. AVAILABILITY OF FUNDS -** The State of Florida and the University's performance and obligation to pay under this contract is contingent upon an annual appropriation by the Legislature of the State of Florida.
- 13. CANCELLATION The University, by written notice, may terminate in whole or in part any purchase order resulting from this Invitation to Bid, when such action is in the best interest of the University. If the purchase order is terminated, the University shall be liable only for payment of services rendered prior to the effective date of the termination. Services rendered will be interpreted to include the cost of items already delivered, plus the reasonable cost of supply action short of delivery.
- 14. CONVENIENCE The University reserves the right to terminate the Agreement in whole or part at any time when in the best interests of the University without penalty or cause. Upon receipt of the written notice, the Successful Vendor shall immediately stop all work as directed in the notice, notify all subcontractors of the effective date of the termination and minimize all further costs to the University. In the event of termination under this provision, all documents, data and reports prepared by the Successful Vendor under the Agreement shall become the property of and delivered to the University. The Successful Vendor shall be entitled to receive just and equitable compensation for work in progress, work completed, and materials accepted before the effective date of termination. Such compensation shall be the Successful Vendor's sole remedy against the University in the event of termination under this provision.
- 15. STOP WORK ORDER The University may at any time, by written order to the Contractor, require the Contractor to stop all or any part of the work called for by the Agreement for a period of ninety (90) days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a Stop Work Order issued under this provision. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incidence of costs allocable to the work covered by the order during the period of work stoppage. If a Stop Work Order issued under this provision is canceled or the period of the order or any extension expires, the Contractor shall resume work. The University shall make an equitable adjustment in the delivery schedule or Agreement price, or both, and the Agreement shall be amended in writing accordingly.
- 16. CHANGES IN THE WORK The University may order, in writing, extra work or make changes by altering, adding to or deducting from the work, with the Contract Sum and Time of Completion being adjusted accordingly. The value of any such change shall be determined by estimate and acceptance of a lump sum. Claims by the Contractor for extra cost must be made in writing before executing the work involved.
- 17. REPORTS Vendor will provide reporting (electronic) to allow for audit / compliance. Reporting shall be provided when requested by the University and will include a summary of total completed job made under this contract. The following outlines a minimal list of fields to be included. Vendor and the University will work together to create additional reporting as deemed necessary by the University. All reporting will be in electronic format such as Excel. Fields should include Invoice Number, Invoice Date, Invoice Amount, PO Number, UF Department, Job due date, Job Completion, Description of Services provided such as material, labor, subcontractors, and if this was an emergency
- **18. PROTECTION OF PROPERTY -** The Contractor shall at all time guard against damage or loss to the property of the University or of other Vendors or Contractors and shall be held responsible for replacing or repairing any such loss or damage. The University may withhold payment or make such deductions as

deemed necessary to insure reimbursement or replacement for loss or damage to property through negligence of the Contractor or his agents. The Contractor shall provide all barricades and take all necessary precautions to protect buildings and personnel.

- **19. DEBRIS** The Contractor shall be responsible for the prompt removal of all debris which is a result of delivery, assembly, or installation.
- 20. INSPECTION, ACCEPTANCE AND TITLE The University shall always have access to the work wherever it is in preparation or in progress, and the Contractor shall provide proper facilities for such access and for inspection. The Contractor shall not enclose any work until the University has inspected the work. Should the Contractor enclose the work prior to inspection by the University, the Contractor shall uncover the work for inspection by the University at no cost to the University, and then recover the work according to the specification contained herein. The Contractor shall notify the University in writing when the work is ready for inspection. The University will inspect the work as expeditiously as possible after receipt of notification from the Contractor.
- **21. INSURANCE REQUIREMENTS –** See Article 19 of General Terms and Conditions. See #43 below for link to General Terms and Conditions.
- 22. INDEMNIFICATION/HOLD HARMLESS The Successful Vendor shall indemnify, defend, and hold harmless the University of Florida Board of Trustees, the University of Florida, the State of Florida and the Florida Board of Governors, its officers, agents, and employees from any and all claims, demands, suits, actions, proceedings, loss, cost, and damages of every kind and description, including attorneys' fees and/or litigation expenses, which may be brought or made against or incurred on account of loss of or damage to any property or for injuries to or death of any person, caused by, arising out of, or contributed to, in whole or in part, by reasons of any act, omission, professional error, fault, mistake, or negligence of Successful Vendor, its employees, agents, representatives, or subcontractors, their employees, agents, or representatives in connection with or incident to the performance of the Agreement. Successful Vendor's obligation under this provision shall not extend to any liability caused by the sole negligence of the University of Florida Board of Trustees, University, or its officers, agents, and employees. Such indemnification shall specifically include infringement claims made against any and all intellectual property supplied by Successful Vendor and third-party infringement under the Agreement.
- **23. PERFORMANCE AND PAYMENT BOND –** See Article 20 of General Terms and Conditions. See #43 below for link to General Terms and Conditions.
- 24. NOTICE TO CONTRACTORS OF ASBESTOS-CONTAINING MATERIALS IN UNIVERSITY BUILDINGS Asbestos Containing Materials (ACM) can be found in almost any building in the United States more than ten (10) years old. The University of Florida is no exception. The types of asbestos most commonly found are pipe and boiler insulation, fireproofing, hard panels known as "Transite", floor tile, and spray or trowel-applied ceiling finishes. ACM is generally not hazardous if left undisturbed.

The University has implemented an Asbestos Program to assure safe management and removal of ACM. Contractors, Consultants, and other Vendors providing service to the University may encounter ACM and must, therefore, comply with the following instructions:

- A. Avoid disturbing suspected ACM. Exercise caution and watch for possible ACM.
- B. If it is necessary to disturb ACM, first notify the appropriate Division Asbestos Representative listed in this notice, or the University of Florida Asbestos Coordinator, before proceeding with your work. You shall take whatever precautions are necessary to protect humans' health and the environment, and comply with all applicable Federal, State, and Local laws pertaining to asbestos.
- C. If you require additional information on possible locations of ACM in a building, contact the Asbestos Representative from the Division for which you are working.

DivisionAsbestos RepresentativeTelephoneFacilities ServicesAsst. Dir. Operations Facilities Svcs.(352) 294-0559Health CenterAsst. Dir. Health Ctr Facilities Svcs.(352) 273-5905

Housing	Maintenance Superintendent	(352) 392-2161
Reitz Union	Maintenance Superintendent	(352) 392-1614
IFAS	Engineer	(352) 392-6488
Environmental Health & Safety	Asbestos Program Manager	(352) 392-1591

- 25. OPEN COMPETITION The University encourages free and open competition among contractors. Whenever possible, specifications and proposal terms and conditions are designed to accomplish the objective, consistent with the necessity to satisfy the University's needs and the accomplishment of a sound economical operation. The Contractor's signature on the proposal guarantees that the prices quoted have been established without collusion with other Contractors and without effort to preclude the University from obtaining the lowest possible competitive price. The Contractor certifies that its officers or employees have not bribed or attempted to bribe or influence in any way on officer, employee or agent of the University.
- **26. EQUAL OPPORTUNITY STATEMENT -** The State Universities have established equal opportunity practices which conform to both the spirit and the letter of all laws against discrimination and prohibits discrimination based on race, creed, color, sex, age, national origin, marital status, or religion. To be considered for inclusion as a supplier under this agreement, the proposer commits to the following:
  - A. The provisions of Executive Order 11246, September 24, 1966, and the rules, regulations, and relevant orders of the Secretary of Labor are applicable to each order placed against this agreement regardless of value.
  - B. If the Contractor expects to receive \$10,000 in orders during the first twelve (12) months of this Agreement, a complete certificate of non-segregated facilities shall be attached to the proposal response.
  - C. If the Contractor expects to receive \$50,000 in orders during the first twelve (12) months of this agreement and employs more than fifty (50) people, standard form 100 (EEOO-1) must be filed prior to March 1st of each year.
  - D. If the Contractor expects to receive \$50,000 in orders during the first twelve (12) months and employs more than fifty (50) people, a written program for affirmative action compliance must be maintained by the Contractor, subject to review upon request by the user agencies of this Agreement.
- **27. OSHA REGULATIONS** It is the responsibility of the Contractor to ensure that <u>ALL</u> OSHA regulations applying to this job are always adhered to.
- 28. PUBLIC ENTITY CRIME A person or affiliate who has been placed on the Convicted Vendor List by the Department of Management Services, State of Florida, may not submit a proposal on a contract to provide any goods or services, including construction, repairs, or leases and may not be awarded or perform work as a Contractor, Supplier, Subcontractor, or Consultant for the University of Florida for a period of thirty-six (36) months from the date of being placed on the Convicted Vendor List, a "Person" or "Affiliate" includes any natural person or any entity, including predecessor or successor entities or any entity under the control of any natural person who is active in its management and who has been convicted of a Public Entity Crime (Rule 6C1-3.020 FAC).
- 29. FEDERAL DEBARRMENT By signing this bid/proposal, the Contractor certifies, to the best of its knowledge or belief, that the Contractor and its principals are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency; or have not within a three (3) year period preceding this offer, been convicted of or had a civil judgment rendered against them in connection with a public contract or subcontract; or are not criminally or civilly charged by a governmental entity with commission of offenses; or has not within a three (3) year period preceding this offer had a contract terminated for default by any Federal agency (Federal Acquisition Regulation 52.209-5).
- **30. DISCRIMINATION** An Entity or Affiliate who has been placed on the Discriminatory Vendor List may not submit a bid on a contract to provide goods or services to a Public Entity, may not submit a bid on a contract with a Public Entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not award or perform work as a Contractor, Supplier, Subcontractor or Consultant under contract with any Public Entity, and may not transact business with any public entity.

- **31. NOTICE TO CONTRACTOR** The University shall consider the employment by any Contractor of unauthorized aliens a violation of section 274A(e) of the Immigration and Nationality Act. Such violation shall be cause for unilateral cancellation of this contract.
- **32. CONTRACTOR SHALL IMPLEMENT -** A drug-free workplace program in accordance with the requirements of Section 440.102, Florida Statutes.
- 33. SMALL BUSINESS PROGRAM University is an equal opportunity institution and, as such, encourages the use of small businesses, including women and minority-owned small businesses in the provision of goods and services. Small businesses should have a fair and equal opportunity to compete for dollars spent by the University. Competition ensures that prices are competitive, and a broad vendor base is available. Vendor shall use good faith efforts to ensure opportunities are available to small businesses, including women and minority-owned businesses. For questions about the University's Small Business Program contact Kathey Porter, Director of Small Business and Vendor Diversity, 352-392-0380.
- **34. TOBACCO FREE CAMPUS -** The University of Florida campus is a tobacco-free campus. This policy was effective as of July 1, 2010. The use of cigarettes or other tobacco products in UF buildings, parking lots, or in vehicles in these areas is prohibited. The successful vendor is expected to respect this smoke free policy and fully comply with it.
- **35. PUBLIC RECORDS** All proposal information submitted and opened becomes subject to the Public Records Law set forth in Chapter 119 F.S. Any resulting Agreement may be unilaterally canceled for refusal by the vendor to allow public access to all documents, papers, letters, or other materials subject to the provisions of Chapter 119 F.S., and made or received by the Successful Vendor in conjunction with the Agreement
- **36. PAYMENT CONDITIONS -** Payment shall be made upon final acceptance of the job by the University designated Project Manager. The telecommunications distribution system will be deemed acceptable when the Contractor delivers to the University:
  - A. All cross connected cables are operational.
  - B. Cables which are one hundred percent (100%) free of defective pairs of copper or fiber strands.
  - C. Campus Telecommunications Standards must be followed when reporting test results on the horizontal and backbone cables.
  - D. All University purchased and furnished supplies are returned to the University.
  - E. If a Panduit or Commscope installation, acceptance will be deemed "in full" upon receipt of the Commscope Warranty documents. If not a Panduit or Commscope installation, acceptance will be deemed "in full" upon satisfactory physical inspection, review of testing documentation, and receipt of as built plans by the University department administering oversight of the installation. Refer to section 4.2 of this document.
  - F. Partial payments may be made at certain predetermined intervals, not to exceed one (1) payment per month, upon approval of a detailed invoice by University.
- **37. INVOICING AND PAYMENT TO CONTRACTOR** All invoices will need to contain a **UF Purchase Order Number**. Please include your Tax Identification number on the invoice. All invoices for payment should be submitted to the University of Florida via one of the following options:

Email: <u>UFL.invoices@edmgroup.com</u>

Fax: 1-570-496-5411

Mail: University of Florida Attn: Accounts Payable

PO Box 3357 Scranton, PA 18505

38. LABOR RATES – The Contractor will provide, on the Unit Price Schedule, hourly labor rates including labor burden and all applicable taxes and fees for the Project Manager, Construction Foreman, and various levels of Technicians to be used in calculating the cost of an installation and the pricing of changes requested by the University using the change order process.

While rare, some campus projects are subject to the Davis-Bacon Act of 1931. The Davis-Bacon Act requires contractors to pay their employees the "prevailing" wage for similar work in the area. UF will allow quotes based on ITB contract prices to be increased or decreased relative to the prevailing wage difference on a case-by-case basis only.

**39. CODES, STANDARDS, AND ORDINANCES -** All work shall conform in every detail to the rules and requirements of the National Fire Protection Association, the National Electrical Code, local codes and regulations and present manufacturing standards.

The cabling system described in this ITB is derived from the recommendations made in recognized Telecommunications Industry Standards. The following documents are incorporated by reference:

- A. The University of Florida Telecommunication Standards
- B. ANSI/TIA/EIA 568-B.1, Commercial Building Telecommunications Cabling Standard Part 1: General Requirements
- C. ANSI/TIA/EIA 568-B.2, Commercial Building Telecommunications Cabling Standard Part 2: Balanced Twisted-Pair Cabling Components
- D. ANSI/TIA/EIA 568-B.2-1, Commercial Building Telecommunications Cabling Standard Part 2: Balanced Twisted Pair Cabling Components, Addendum 1 – Transmission Performance Specifications for 4-pair 100 Ω Category 6 Cabling
- E. ANSI/TIA/EIA 568-B.3, Commercial Building Telecommunications Cabling Standard Part 3: Optical Fiber Cabling Components
- F. ANSI/TIA/EIA 569-A, Commercial Building Standard for Telecommunications Pathways and Spaces
- G. ANSI/TIA/EIA 570-A, Residential Telecommunications Cabling Standard
- H. ANSI/TIA/EIA 606-A, Administration Standard for Telecommunications Infrastructure of Commercial Buildings
- I. ANSI/TIA/EIA 607, Commercial Building Grounding and Bonding Requirements for Telecommunications
- J. ANSI/ TIA/EIA 758, Customer-Owned Outside Plant Telecommunications Cabling Standard
- K. BICSI TDMM, Building Industries Consulting Services International, Telecommunications Distribution Methods Manual (TDMM)
- L. National Fire Protection Agency (NFPA 70), National Electrical Code (NEC)
- M. FCC 47 CFR 68
- N. NEMA 250
- O. NEC Articles 770 and 800

#### P. ADA, Americans with Disabilities Act

If this document and any of the documents listed above are in conflict, the conflict shall be brought to the attention of the University for resolution. All documents listed are believed to be the most current releases of the documents. The Contractor has the responsibility to determine and adhere to the most recent release when developing the proposal for installation.

This document does not replace any code, either partially or wholly. The Contractor must be aware of local codes that may impact this project.

- **40. OTHER REQUIREMENTS** The Contractor will cooperate with the University for the network installation regarding work sequencing and jobsite routine for the overall project of which the network is a part, following such workplace rules and routines as the University may reasonably establish. This includes, for example, attendance at meetings coordinating work, participating in site cleanup, maintaining a clean and orderly worksite, general contractor safety regulations and drug control programs, etc.
- **41. BUSINESS REVIEW MEETINGS:** In order to maintain the partnership between the University and the Vendor, the University may require semi-annual business reviews. The meeting shall include but is not limited to reviewing Vendor performance and reporting.
- **42. AMERICANS WITH DISABILITY ACT** If special accommodations are needed in order to attend a meeting, contact Procurement Services at <a href="mailto:procurement@ufl.edu">procurement@ufl.edu</a> three (3) business days prior to either the preproposal meeting or proposal opening.
- 43. GENERAL TERMS AND CONDITIONS http://facilities.ufl.edu/forms/contracts/GTC.pdf
- **44. NON-TECHNICAL SPECIFICATIONS (DIVISION 0) -** http://facilities.ufl.edu/forms/contracts/Div0NonTechSpecs.pdf
- 45. NON-TECHNICAL SPECIFICATIONS (DIVISION 1) http://facilities.ufl.edu/forms/contracts/Div1\_NonTech\_Specs\_JULY\_2017.pdf
- 46. UF DESIGN AND CONSTRUCTION STANDARDS http://facilities.ufl.edu/forms/dcs.html
- **47. UF TELECOMMUNICATION STANDARDS** <u>https://it.ufl.edu/media/itufledu/ict/telecom/Telecom-Standards-MARCH-2011.pdf</u>

**END OF SECTION** 

## REQUIREMENTS FOR FEMA PUBLIC ASSISTANCE PROGRAM PROCUREMENT

The terms of this section are considered part of this solicitation and are applicable for projects/work that may be reimbursed through the Federal Emergency Management Agency (FEMA) Public Assistant Program. In the event of a conflict in terms, the terms of this section will control.

## 1. Termination.

- a. Termination for Convenience. The Agreement may be terminated by UF without cause upon no less than thirty (30) days written notice.
- b. Termination for Cause. Each term and condition of the Agreement is material and any breach or default by either party in the performance of each such term and condition will be a material breach or default of the Agreement. Either party may terminate the Agreement in the event the other party materially breaches or defaults in the performance of any of its obligations hereunder, and such default continues for thirty (30) days after written notice thereof is provided to the breaching party by the non-breaching party. Any termination will become effective at the end of such thirty (30) day period unless the breaching party cures any such breach or default prior to the expiration of such period.
- c. Administration of Termination. All written notices must be delivered by certified mail, return receipt requested, or in person with proof of delivery. In case of termination under the Agreement, only fees for Services rendered by the Vendor through the date of termination, if any, will be due and payable, and all work in progress will become property of UF and will be turned over promptly by the Vendor. Upon receipt of written notice of termination, up until the date of termination, the Vendor will make reasonable efforts to limit the incursion of additional fees and perform only those Services necessary for the timely delivery of work in progress to UF and/or to correct a material breach or default, as applicable. The Parties will not be relieved of the duty to perform their obligations up to and including the date of termination. A termination penalty may not be charged against UF.
- 2. **Equal Opportunity**. If the Services provided under the Agreement include construction, then the Vendor agrees as follows:
  - a. The Vendor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Vendor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Vendor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
  - b. The Vendor will, in all solicitations or advertisements for employees placed by or on behalf of the Vendor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
  - c. The Vendor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Vendor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
  - d. The Vendor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
  - e. The Vendor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
  - f. In the event of the Vendor's noncompliance with the nondiscrimination clauses of the Agreement or with any of the said rules, regulations, or orders, the Agreement may be canceled, terminated, or suspended in whole or in part and the Vendor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
  - g. The Vendor will include the portion of the sentence immediately preceding paragraph (a) and the provisions of paragraphs (a) through (g) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive

Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Vendor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event Vendor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction by the administering agency the Vendor may request the United States to enter into such litigation to protect the interests of the United States.

- 3. <u>Davis-Bacon Act</u>. If the Agreement NOT TO EXCEED amount is in excess of Two Thousand & 00/100 Dollars (\$2,000.00) and Services include construction, then the Vendor must comply with the Davis-Bacon Act (40 U.S.C. § 3141-3144 and 3146-3148) as supplemented by Department of Labor regulations at 29 C.F.R. Part 5 (Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction).
- 4. Compliance with Copeland "Anti-Kickback" Act. If the Agreement NOT TO EXCEED amount is in excess of Two Thousand & 00/100 Dollars (\$2,000.00) and Services include construction, then the Vendor agrees as follows:
  - a. Contractor. The Vendor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.P.R. pt. 3 as may be applicable, which are incorporated by reference into the Agreement.
  - b. Subcontracts. The Vendor shall insert in any subcontracts the clause above and such other clauses as FEMA may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The Vendor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.
  - c. Breach. A breach of the contract clauses above may be grounds for termination of the Agreement, and for debarment of Vendor and/or subcontractor(s), if any, as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.
- 5. Compliance with the Contract Work Hours and Safety Standards Act. If the Agreement NOT TO EXCEED amount is in excess of One Hundred Thousand & 00/100 Dollars (\$100,000.00) and Vendor employs mechanics or laborers, then Vendor agrees as follows:
  - a. Overtime Requirements. The Vendor and their subcontractor(s), if any, providing Services under the Agreement which may require or involve the employment of laborers or mechanics will not require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty (40) hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-halftimes (1 ½) the basic rate of pay for all hours worked in excess of forty (40) hours in such workweek.
  - b. Violation; Liability for Unpaid Wages; Liquidated Damages. In the event of any violation of the clause set forth in paragraph (a) of this section the Vendor and their subcontractor(s), if any, responsible therefor shall be liable for the unpaid wages. In addition, such Vendor and their subcontractor(s), if any, shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (a) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (a) of this section.
  - c. Withholding for Unpaid Wages and Liquidated Damages. FEMA shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Vendor and/or subcontractor(s), if any, under any such contract or any other Federal contract with UF, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by UF, such sums as may be determined to be necessary to satisfy any liabilities of Vendor and/or subcontractor(s), if any, for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b) of this section.
  - d. Subcontracts. The Vendor and subcontractor(s), if any, shall insert in any subcontracts the clauses set forth in paragraph (a) through (c) of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The Vendor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a) through (d) of this section.

- 6. <u>Clean Air Act and the Federal Water Pollution Control Act</u>. If the Agreement NOT TO EXCEED amount is in excess of One Hundred Fifty Thousand & 00/100 Dollars (\$150,000.00), then the Vendor agrees as follows: a. Clean Air Act.
  - i. Vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
  - ii. Vendor agrees to report each violation to the (name of the state agency or local or Indian tribal government) and understands and agrees that the (name of the state agency or local or Indian tribal government) will, in turn, report each violation as required to assure notification to the (name of recipient), Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
  - iii. Vendor agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FEMA.
  - b. Federal Water Pollution Control Act.
    - i. Vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
    - ii. Vendor agrees to report each violation to UF and understands and agrees that UF will, in tum, report each violation as required to assure notification to Federal Emergency Management Agency and the appropriate Environmental Protection Agency Regional Office.
    - iii. Vendor agrees to include these requirements in each subcontract exceeding One Hundred Thousand & 00/100 Dollars (\$100,000) financed in whole or in part with Federal assistance provided by FEMA.
- 7. <u>Energy Policy and Conservation</u>. Vendor will comply with the Energy Policy and Conservation Act (P.L. 94-163; 42 U.S.C. § 6201-6422), and Florida's State Energy Management Plan adopted pursuant to § 255.257, F.S.

#### 8. Suspension and Debarment.

- a. If the Agreement is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000, then the Vendor hereby certifies that neither the Vendor, its principals (defined at 2 C.F.R. § 180.995), nor its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
- b. The Vendor must comply with 2 C.P.R. pt. 180, subpart C and 2 C.P.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transactions with subcontractors and/or suppliers.
- c. This certification is a material representation of fact relied upon by UF. If it is later determined that the Vendor did not comply with 2 C.P.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the State of Florida and UF, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
- d. The Vendor agrees to comply with the requirements of 2 C.P.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C throughout the period of the Agreement. The Vendor further agrees to include a provision requiring such compliance in its lower tier covered transactions with subcontractor and/or suppliers.
- 9. <u>Byrd Anti-Lobbying Amendment</u>. If the Agreement NOT TO EXCEED amount is One Hundred Thousand & 00/100 Dollars (\$100,000) or more, then Vendor shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

## 10. <u>Procurement of Recovered/Recycled Materials</u>.

- a. In the performance of the Agreement, Vendor shall make maximum use of products containing recovered materials that are EPA designated items unless the product cannot be acquired:
  - i. Competitively within a timeframe providing for compliance with the contract performance schedule;
  - ii. Meeting contract performance requirements; or,
  - iii. At a reasonable price.

Information about this requirement is available at EPA's Comprehensive Procurement Guidelines website, <a href="https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program">https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program</a>. The list of EPA-designate items is available at <a href="https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program#products">https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program#products</a>.

**END OF SECTION** 

# **Technical Specifications**

#### **PART 1 - GENERAL SPECIFICATIONS**

#### 1.1 Scope

- A. This document describes the execution requirements relating to furnishing, installing, cross-connection and activation of the telecommunications cabling infrastructure at the new buildings for the University of Florida. Outside Plant Backbone, Inside Plant Backbone, Horizontal Cabling and support systems are covered under this document and shall be provided as telecommunications drawings when needed.
- B. A typical Horizontal (workstation) Cabling System shall consist of two (2), 4-pair Unshielded Twisted Pair (UTP) Copper Cables to each work area outlet unless otherwise noted for specific locations. The cables shall be installed from the Work Area Outlet to the Telecommunications Room (TR) as indicated on the drawings, located on the same floor, using existing conduit telecommunication outlet boxes and cable tray, and routed to the appropriate rack serving that area and terminated as specified in this document.
- C. All cable, related terminations, support hardware and grounding hardware will be provided by the contractor and installed, tested, labeled, and documented by the Contractor.
- D. All electronic network equipment will be provided by the University. After the University has installed and tested the electronic data network equipment and if directed by the UF Project Manager and, if incorporated into the project scope of work, the Contractor (as specified in construction documents) may patch individual work stations to the network switches located in each of the buildings telecommunications rooms. Note: Various UF entities may or may not include cross-connecting into their project scope.
- E. General design considerations and installation guidelines are provided in this document. Quantities of telecommunications outlets, typical installation details, cable routing and outlet types will be provided in plans for individual projects (Bill of Materials and Drawings). If the other documents are in conflict, this specification shall take precedence. In any case, conflicts in specifications should be brought to the attention of the University. Only the University has the authority to resolve conflicting specifications. The Contractor shall meet or exceed all requirements for the cable system requirements described in this document.

#### 1.2 Regulatory References

- A. All work and materials shall conform in every detail to the rules and requirements of the National Fire Protection Association, the local electrical code and present manufacturing standards.
- B. All materials shall be UL Listed and shall be marked as such. If UL has no published standards for an item, then other national independent testing standards shall apply, and such items shall bear those labels. Where UL has an applicable system listing and label, the entire system shall be so labeled.
- C. All materials shall be ETL Verified (not tested).
- D. The cabling system described in this is derived from the recommendations made in recognized Telecommunications Industry Standards. Refer to Section 42 in Special Conditions and comply with the noted standards, codes and ordinances.
- E. If this document and any of the documents referenced above are in conflict, then the more stringent requirement shall apply. <u>All documents listed are believed to be the most current releases of the documents</u>. The Contractor has the responsibility to determine and adhere to the most recent release when developing the proposal for installation.
- F. This document does not replace any code, either partially or wholly. The Contractor must be aware of local codes that may impact this project, including University of Florida Telecommunications Standards. In

the event any standard industry practices conflict with the University of Florida Telecommunications Standards, the conflict shall be brought to the attention of the University before proceeding.

#### 1.3 Approved Contractor

- A. If performing a warranted installation, the Contractor must be a manufacturer approved Installer. A copy of certification documents must be submitted with the bid in order for such quote to be valid. The Contractor shall be responsible for workmanship and installation practices in accordance with the manufacturer to ensure that the installation meets or exceeds the requirements Warranty.
- B. For all installations there must be a BICSI or Commscope certified installer present.

## 1.4 Approved Products

A. For Panduit installations, all products must comply with Panduit specifications. For all installations, all materials shall conform to the plans for the specific project. Substitutions and equivalent products shall be pre-approved by UFIT or UFHealth network services designated project manager.

#### 1.5 Work Included

- A. Work included under this specification consists of furnishing all labor, materials, equipment, supplies, tools and performing all operations necessary to complete the installation of the structured cabling system in compliance with these technical specifications. The Contractor will install all the required material to form a complete system whether specifically addressed in the technical specifications or not.
- B. Work will commence within a reasonable amount of time after contractor's receipt of a UF Purchase Order. Contractor will work with UF's Project Manager/Representative in order to determine when work shall begin. UF reserves the right to cancel any Purchase Order for work that does not start at the predetermine time.
- C. The work for any individual project shall include, but not be limited to the following, as indicated on the plans for that project:
  - 1. Install all products for a complete telecommunications cabling infrastructure.
  - 2. Contractor is responsible to purchase and furnish patch cords matching the wiring brand installed. The contractor will NOT install the patch cords unless directed by the project scope of work.
  - 3. Install material including but not limited to, and terminate all horizontal UTP cable, Indoor Multi-pair Copper Backbone Cable, Indoor RG11 Coaxial Backbone Cable (Contractor will not be required to terminate the coax cable), Indoor Optical Fiber Backbone or Riser Cable and Outdoor Optical Fiber Backbone Cable, as required by the plans provided for a particular installation.
  - 4. Install all wall plates, jacks, patch panels and patch cords as required by the plans provided for an installation.
  - 5. Install all required equipment racks as indicated.
  - Install all required cable tray and ladder rack in telecommunications rooms as indicated. Cable tray
    external to the communications rooms is the responsibility of the electrical contractor. Comply with UF
    Telecom Standards for telecom room build out regarding use of Readyspec backboard.
  - 7. Install all required ground bars and bond equipment racks, cable tray and ladder rack as indicated.
  - 8. Install any other material provided by the University required for a complete system.
  - 9. Perform link or channel testing, one hundred percent (100%) of horizontal and/or backbone links/channels, and certification of all components.

- 10. Furnish test results of all cabling to the University in electronic and paper format, listed by each closet, then by workstation ID. Test results to be documented per University of Florida Telecommunications Standards.
- 11. If a warranted installation, adhere and comply with all requirements of warranty agreement.
- 12. Provide to UFIT Project Manager a statement of work, project schedule and resource plan to meet the commitment of the project milestones.
- 13. Provide project documentation and as-built drawings (provide one soft copy in AutoCAD format and PDF format to the project.) Cable test reports and labeling shall be coordinated with the as-built drawings. For UFIT managed projects, the Contractor shall also update STARS data (Planning Design & Construction space management system). Final payment is based on approved inspection and receipt of all stated documentation.
- 14. No substituted materials shall be installed without approval in writing from the University of Florida UFIT or UF Health Network Services or UF Housing designated project manager.
- D. Completion time will vary depending on the project. Contractor will work with UF's Project Manager/Representative in order to determine reasonable Substantial Completion and Final Completion per project.

#### 1.6 Submittals

- A. As part of this ITB the Contractor shall:
  - 1. Submit copies of Company licensing documentation.
  - 2. If responding to the ITB for Panduit or Commscope installations submit proof from manufacturer of Contractor's good standing in manufacturer's program.
- B. Work shall not proceed without the University's approval of the submitted items.

## 1.7 Delivery, Storage and Handling

- A. All products provided by the University to the Contractor for installation shall be the responsibility of the Contractor. All University-provided equipment for installation by the Contractor shall be picked up by the Contractor at the start of the job at a location to be specified by University. The Contractor shall be responsible for properly storing and protecting the equipment during the job. Damage, loss or theft of any material/products will be at the Contractor's expense. Delays in the project schedule due to damage, loss or theft after receipt of the products by the Contractor shall be the responsibility of the Contractor. Any materials ordered by University after the start of the job may be delivered to a site of the Contractor's choice. The Contractor must have adequate insurance to cover loss or damage to materials.
- B. Cable shall be stored according to manufacturer's recommendations as a minimum. In addition, cable must be stored in a location protected from vandalism and weather. If cable is stored outside, it must be covered with opaque plastic or canvas with provision for ventilation to prevent condensation and for protection from weather. If air temperature at cable storage location will be below forty (40) degrees Fahrenheit, the cable shall be moved to a heated, fifty (50) degrees Fahrenheit minimum, location. If necessary, cable shall be stored off site at the Contractor's expense. Cable shall be allowed to reach room temperature prior to installation.
- C. On-site workspace may be limited. Contractor may be required to store products and equipment off-site at their own expense. Furthermore, Contractor is responsible to transport products and equipment from any offsite storage location to construction site as it is recommended that the Contractor coordinate deliveries with the University's suppliers.

#### 1.8 Drawings

- A. It shall be understood that the telecommunications details and drawings provided with a specification package for a proposed project are diagrammatic. They are included to show the intent of the specifications and to aid the Contractor in responding to a request for a quote for the job. The Contractor shall make allowance to cover whatever work is required to comply with the intent of the plans and specifications. The Contractor shall verify all dimensions at the site and be responsible for their accuracy.
- B. Prior to quoting a project, the Contractor shall call the attention of the University to any materials or apparatus the Contractor believes to be inadequate and to any necessary items of work omitted.

## **PART 2 – PRODUCTS**

## 2.1 Equivalent products

A. As determined by the project scope of work, all products/materials to be installed by the Contractor will be furnished by the Contractor unless otherwise noted. The project scope will specify the brand and category of the required solution. No equivalents will be acceptable. The UFIT / UFHealth / Housing IT project manager shall determine how the structured cabling system components shall be sourced and specified.

## 2.2 Grounding and Bonding

- A. The Contractor will provide the facility with a Telecommunications Bonding Backbone (TBB) as required by project telecommunications plans. This backbone shall be used to ground all telecommunications cable shields, equipment, racks, cabinets, raceways, and other associated hardware that has the potential to act as a current carrying conductor. The TBB shall be installed in addition to the building's electrical and building ground and shall be designed in accordance with the recommendations contained in the ANSI/TIA/EIA-607 Telecommunications Bonding and Grounding Standard.
- B. The main entrance facility/equipment room in each building shall be equipped with a telecommunications main grounding bus bar (TMGB). Each telecommunications room shall be provided with a telecommunications ground bus bar (TGB). The TMGB shall be connected to the building's electrical entrance grounding facility. The intent of this system is to provide a grounding system that is equal in potential to the building's electrical ground system. Therefore, ground loop current potential is minimized between telecommunications equipment and the electrical system to which it is attached.
- C. All equipment racks, metallic backboards, cable sheaths, metallic strength members, splice cases, cable trays, ladder rack, etc. entering or residing in the TR or ER shall be grounded to the respective TGB or TMGB using a minimum #6 AWG stranded copper bonding conductor and compression connectors in accordance with the product manufacturers grounding/bonding recommendations.
- D. All wires used for telecommunications grounding purposes shall be identified with a green insulation. Non-insulated wires shall be identified at each termination point with a wrap of green tape. All cables and bus bars shall be identified and labeled in accordance with the System Documentation Section of this specification.

## 2.3 Firestop

- A. A firestop system is comprised of the item or items penetrating the fire rated structure, the opening in the structure and the materials and assembly of the materials used to seal the penetrated structure. Firestop systems comprise an effective block for fire, smoke, heat, vapor and pressurized water stream. All penetrations through fire-rated building structures (walls and floors) shall be sealed with an appropriate firestop system. This requirement applies to through penetrations (complete penetration) and membrane penetrations (through one side of a hollow fire rated structure). Any penetrating item i.e., riser slots and sleeves, cables, conduit, cable tray, and raceways, etc. shall be properly firestopped. Plans should be consulted to determine type of firestopping to be used and the extent of work required by the telecommunications contractor.
- B. Permits: Note that some projects may require a permit pulled with the local authority having jurisdiction and in this case is the University of Florida Environmental Health and Safety. Contractor is required to pull

a permit and work with UF – EHS to obtain all inspections required and close out permits, which follow UF practices. The contractor should add this permit costs into the price of the project.

## PART 3 - EXECUTION

#### 3.1 Work Area Outlets

- A. Cables shall be coiled in the in-wall boxes. No more than 12 inches of UTP or 36 inches of fiber slack shall be stored in an in-wall box, modular furniture raceway, or insulated walls.
- B. Cables shall be dressed and terminated in accordance with the T568A recommendations made in the ANSI/TIA/EIA-568-B.1 document, manufacturer's recommendations and best industry practices.
- C. Cables shall be terminated at both ends.
- D. Pair untwist at the termination shall not exceed 12mm (one-half inch).
- E. Bend radius of the horizontal cable shall not be less than four (4) times the outside diameter of the UTP cable.
- F. The cable jacket shall be maintained to within 25mm (one inch) of the termination point.

#### 3.2 Horizontal Distribution Cable Installation

- A. Cable shall be installed in accordance with manufacturer's recommendations and best industry practices.
- B. A pull cord (nylon; 1/8in minimum) shall be co-installed with all cable installed in any conduit.
- C. Cable raceways shall not be filled greater than the ANSI/TIA/EIA-569-A maximum fill for the raceway type or forty percent (40%).
- D. Cables shall be installed in continuous lengths from origin to destination (no splices).
- E. The cable's minimum bend radius and maximum pulling tension shall not be exceeded.
- F. At no point shall cable(s) rest on acoustic ceiling grids or panels.
- G. Horizontal distribution cables shall be bundled in groups of no more than 24 cables. Cable bundle quantities in excess of 24 cables may cause an undesirable heat gain and degrade cable performance. Cables should not be bundled in cable tray at all except for dressing cable into equipment racks in the telecommunications rooms.
- H. Cables shall not be attached to ceiling grid or lighting fixture wires.
- I. Any cable damaged or exceeding recommended installation parameters during installation shall be replaced by the Contractor prior to final acceptance at no cost to the University.
- J. Cables shall be identified, at both ends, by a self-adhesive label in accordance with the System Documentation Section of this specification and ANSI/TIA/EIA-606-A and UF Telecommunications Standards. The cable label shall be applied to the cable behind the faceplate on a section of cable that can be accessed by removing the cover plate.
- K. Unshielded twisted pair cable shall be installed so that there are no bends smaller than four (4) times the cable outside diameter at any point in the run and at the termination field.
- L. Pulling tension on 4-pair UTP cables shall not exceed 25-lbf for a four-pair UTP cable.

#### 3.3 Horizontal Cross connect Installation

- A. Cables shall be dressed and terminated in accordance with the recommendations made in the ANSI/TIA/EIA-568-B standard, manufacturer's recommendations and best industry practices.
- B. Pair untwist at the termination shall not exceed 13mm (0.5 inch) or the manufacturer's specification; whichever is more stringent.
- C. Bend radius of the cable in the termination area shall not exceed four (4) times the outside diameter of the cable or 1in.
- D. Cables shall be neatly bundled and dressed to their respective panels or blocks. Each panel or block shall be fed by an individual bundle separated and dressed back to the point of cable entrance into the rack or frame.
- E. The cable jacket shall be maintained as close as possible to the termination point.
- F. Each cable shall be clearly labeled on the cable jacket behind the patch panel at a location that can be viewed without removing the bundle support ties. Cables labeled within the bundle, where the label is obscured from view shall not be acceptable.

#### 3.4 Optical fiber termination hardware

- A. For each end of the cable; 1m of furcated fiber slack shall be neatly coiled within the fiber enclosure, and a twenty 20ft length of jacketed fiber cable shall be coiled and neatly secured to the wall behind the equipment rack.
- B. Each cable shall be individually attached to the respective termination enclosure by mechanical means. The cables strength member shall be securely attached the cable strain relief bracket in the enclosure.
- C. Each fiber bundle shall be stripped upon entering the termination enclosure and the individual fibers routed in the splice tray.
- D. Each cable shall be clearly labeled at the entrance to the termination enclosure. Cables labeled within the bundle shall not be acceptable.
- E. All fiber shall be terminated using fusion splices.

#### 3.5 Backbone Cable Installation

- A. Backbone cables shall be installed separately from horizontal distribution cables.
- B. A pull cord (nylon; 1/8in minimum) shall be co-installed with all cable installed in any conduit.
- C. Where cables are housed in conduits, the backbone and horizontal cables shall be installed in separate conduits.
- D. Where backbone cables are installed in an air return plenum, riser rated cable shall be installed in metallic conduit.
- E. Where backbone cables and distribution cables are installed in a cable tray or wireway, backbone cables shall be installed first and bundled separately from the horizontal distribution cables.
- F. All backbone cables shall be securely fastened to the sidewall of the TR on each floor.
- G. Backbone cables spanning more than three (3) floors shall be securely attached at the top of the cable run with a wire mesh grip and on alternating floors or as required by local codes.
- H. Vertical runs of cable shall be supported to messenger strand, cable ladder, or other method to provide proper support for the weight of the cable.

I. Large bundles of cables and/or heavy cables shall be attached using metal clamps and/or metal banding to support the cables.

#### 3.6 Copper Termination Hardware

- A. Cables shall be dressed and terminated in accordance with the recommendations made in the ANSI/TIA/EIA-568-B standard, manufacturer's recommendations and Campus Telecommunications Standards.
- B. Pair untwist at the termination shall not exceed 12mm (one-half inch) or the manufacturer's specification; whichever is more stringent.
- C. Bend radius of the cable in the termination area shall not exceed four (4) times the outside diameter of the cable.
- D. Cables shall be neatly bundled and dressed to their respective panels or blocks. Each panel or block shall be fed by an individual bundle separated and dressed back to the point of cable entrance into the rack or frame.
- E. The cable jacket shall be maintained to within 25mm (one inch) of the termination point.
- F. Each cable shall be clearly labeled on the cable jacket behind the patch panel at a location that can be viewed without removing the bundle support ties. Cables labeled within the bundle, where the label is obscured from view shall not be acceptable.

## 3.7 Racks

- A. Racks shall be securely attached to the concrete floor using a minimum of 3/8in hardware or as required by local codes.
- B. Racks shall be placed as shown on the telecommunications detail drawings provided for each telecommunications room. There should be a minimum of a 36in clearance from the walls on all sides of the rack. When mounted in a row, maintain a minimum of 36in from the wall behind and in front of the row of racks and from the wall at each end of the row.
- C. All racks shall be grounded to the telecommunications ground bus bar in accordance with ANSI/TIA/EIA 607. Commercial Building Grounding and Bonding Requirements for Telecommunications.
- D. Rack mount screws not used for installing patch panels and other hardware shall be bagged and left attached to the rack upon completion of the installation.
- E. Listed and fire rated backboards shall be provided and installed by the Contractor as shown on the telecommunications drawings. Wall mounted termination block fields shall be mounted on 4ft x 8ft x .75in void free plywood as shown on the drawings.
- F. Wall mounted termination block fields shall be installed with the lowest edge of the mounting frame 18in from the finished floor.

#### 3.8 Firestop System

A. Shall be installed in accordance with the manufacturer's recommendations and per Section 2.3 and shall be completely installed and available for inspection by the local inspection authorities prior to cable system acceptance. Refer to plans and specifications and adhere to the direction of the UF Project Manager for firestop methodology.

## 3.9 Grounding System

- A. The TBB shall be designed and/or approved by a qualified PE, licensed in the state that the work is to be performed. The TBB shall adhere to the recommendations of the ANSI/TIA/EIA-607 standard and shall be installed in accordance with best industry practice.
- B. The licensed Contractor shall perform installation and termination of the main bonding conductor to the building service entrance ground.

#### 3.10 Identification and Labeling

- A. Labeling shall follow the guidelines of ANSI/TIA/EIA-606-A. The Contractor shall develop and submit for approval a labeling system in accordance with the detail drawings and ANSI/TIA/EIA –606-A for the cable installation. CLARIFY At a minimum, the labeling system shall clearly identify all components of the system: equipment racks, cables, panels and outlets. The labeling system shall designate the cables origin and destination and a unique identifier for the cable within the system. Racks and patch panels shall be labeled to identify the location within the cable system infrastructure. All labeling information shall be recorded on the as-built drawings and all test documents shall reflect the appropriate labeling scheme. Refer to UF Telecommunications Standards and become familiar with the extensive documentation and labeling requirements mandated.
- B. All label printing will be machine generated (handwritten labels are not acceptable) using indelible ink ribbons or cartridges. Self-laminating labels will be used on cable jackets, appropriately sized to the OD of the cable, and placed within view at the termination point on each end. Outlet, patch panel and wiring block labels shall be installed on, or in, the space provided on the device.

## 3.11 Testing and Acceptance

#### A. General

- 1. All cables and termination hardware shall be one hundred percent (100%) tested for defects in installation and to verify cabling system performance under installed conditions according to the requirements of ANSI/TIA/EIA-568-B and University of Florida Telecommunications Standards. All pairs of each installed cable shall be verified prior to system acceptance. Any defect in the cabling system installation including but not limited to cable, connectors, feed through couplers, patch panels, and connector blocks shall be repaired or replaced in order to ensure one hundred percent (100%) useable conductors in all cables installed.
- All cables shall be tested in accordance with this document, the ANSI/TIA/EIA standards, the cable
  manufacturer's certification warranty (if applicable), the University of Florida Telecommunications
  Standards and best industry practice. If any of these are in conflict, the Contractor shall bring any
  discrepancies to the attention of the University for clarification and resolution.

## B. Copper Channel Testing

- 1. All twisted-pair copper cable links shall be tested for continuity, pair reversals, shorts, opens and performance as indicated below. Additional testing is required to verify category performance.
- 2. Horizontal cabling shall be tested using a Level III test unit for Category 6 UTP cables and Level IIIe for Category 6A UTP, per plan.

The basic tests required are:

- a. Wire Map
- b. Length
- c. Attenuation
- d. NEXT (Near end crosstalk)
- e. Return Loss
- f. ELFEXT Loss
- g. Propagation Delay
- h. Delay Skew

- i. PSNEXT (Power sum near-end crosstalk loss)
- j. PSELFEXT (Power sum equal level far-end crosstalk loss)
- 3. Continuity Each pair of each installed cable shall be tested using a test unit that shows opens, shorts, polarity and pair-reversals, crossed pairs and split pairs. Shielded/screened cables shall be tested with a device that verifies shield continuity in addition to the above stated tests. The test shall be recorded as pass/fail as indicated by the test unit in accordance with the manufacturers' recommended procedures and referenced to the appropriate cable identification number and circuit or pair number. Any faults in the wiring shall be corrected and the cable re-tested prior to final acceptance.
- 4. Length Each installed cable link shall be tested for installed length using a TDR type device. The cables shall be tested from patch panel to patch panel, block to block, patch panel to outlet or block to outlet as appropriate. The cable length shall conform to the maximum distances set forth in the ANSI/TIA/EIA-568-B Standard. Cable lengths shall be recorded, referencing the cable identification number and circuit or pair number. For multi-pair cables, the shortest pair length shall be recorded as the length for the cable.

## C. Fiber Testing

- All fiber testing shall be performed on all fibers in the completed end-to-end system. There shall be no splices. Testing shall consist of an end-to-end power meter test performed per EIA/TIA-455-53A. The system loss measurements shall be provided at 850 and/or 1300 nanometers for multimode fibers and 1310 and/or 1550 nanometers for single mode fibers. These tests also include continuity checking of each fiber.
- 2. Backbone multimode fiber cabling shall be tested at both 850nm and 1300nm (or 1310 and 1550nm for single mode) in both directions.
- Test set-up and performance shall be conducted in accordance with ANSI/EIA/TIA-526-14 Standard, Method B.
- 4. Where links are combined to complete a circuit between devices, the Contractor shall test each link from end to end to ensure the performance of the system. ONLY LINK TEST IS REQUIRED. The Contractor can optionally install patch cords to complete the circuit and then test the entire channel. The test method shall be the same used for the test described above. The values for calculating loss shall be those defined in the ANSI/TIA/EIA Standard.
- 5. Attenuation testing shall be performed with an approved handheld tester from an industry recognized test equipment manufacturer.

## 3.12 System Documentation

- A. Upon completion of the installation, the Contractor shall provide full documentation sets to the University for approval. Documentation shall include the items detailed in the sub-sections below.
- B. Documentation shall be submitted within ten (10) working days of the completion of each testing phase (e.g. subsystem, cable type, area, floor, etc.). This is inclusive of all test results and draft as-built drawings. Draft drawings may include annotations done by hand. Machine generated (final) copies of all drawings shall be submitted within thirty (30) working days of the completion of each testing phase. At the request of the University, the Contractor shall provide copies of the original test results.
- C. The University may request that a ten percent (10%) random field re-test be conducted on the cable system, at no additional cost, to verify documented findings. Tests shall be a repeat of those defined above. If findings contradict the documentation submitted by the Contractor, additional testing can be requested to the extent determined necessary by the University, including a one hundred percent (100%) re-test. This re-test shall be at no additional cost to the University.

## 3.13 Test Results

- A. Test documentation shall be per the schedule of events for each project. The storage media shall be clearly marked on the outside front cover with the words "Project Test Documentation", the project name, and the date of completion (month and year). This shall include all results required by the University of Florida Telecommunications Standard, including a record of test frequencies, cable type, conductor pair and cable (or outlet) I.D., measurement direction, reference setup, and crew member name(s). The test equipment name, manufacturer, model number, serial number, software version and last calibration date will also be provided at the end of the document. Unless the manufacturer specifies a more frequent calibration cycle, an annual calibration cycle is anticipated on all test equipment used for this installation. The test document shall detail the test method used and the specific settings of the equipment during the test as well as the software version being used in the field test equipment.
- B. The field test equipment shall meet the requirements of ANSI/TIA/EIA-568-B including applicable TSB's and amendments. The appropriate Level III or Level IIIe tester shall be used to verify Category 6 or Category 6A cabling systems.
- C. The Contractor shall submit the appropriate documentation electronically via email or cloud storage link.
- D. When repairs and re-tests are performed, the problem found and corrective action taken shall be noted, and both the failed and passed test data shall be documented.

## 3.14 As-Built Drawings

- A. The as-built drawings are to include cable routes and outlet locations. Outlet locations shall be identified by their sequential number as defined elsewhere in this document. Numbering, icons, and drawing conventions used shall be consistent throughout all documentation provided. The University will provide floor plans in paper and electronic (PDF, DWG, AutoCAD, RevIT) formats on which as-built construction information can be added. These documents will be modified accordingly by the Contractor to denote asbuilt information as defined above and returned to the University. All requirements of the deliverables section of University of Florida Telecommunications Standards must be complied with.
- B. The Contractor shall annotate the base drawings.

## 3.15 Cross-connection and systems activation

A. The University will provide and install all Electronic Network Equipment in the telecommunications rooms and cross-connect all backbone connections between telecommunications room equipment four (4) weeks prior to occupancy of the building. After completion of equipment installation, the Contractor may be required to install patch cords provided by the University and cross-connect network switch ports to Work Area Outlet locations and install patch cords at the Work Area Outlet for connection of Work Area Devices by the University. Plans for a project must be consulted to verify whether cross connects are to be installed by Contractor or University if required. The University will provide schedules of ports to be cross connected to the Contractor as phases of the building near completion. Note: Various UF entities may or may not include cross-connecting into their project scope.

## 3.16 Traditional telephone systems

A. Prior to the Authority Having Jurisdiction (AHJ) issuing a certificate of occupancy for the facility all elevator telephones and other life safety systems will be required to have an operational telephone connection to the local service provider. Prior to the AHJ's scheduled inspection it shall be the responsibility of the Contractor to cross-connect dial-tone as necessary to assure that the elevator and life/safety telephone connections are active.

## Part 4 – WARRANTY AND SERVICES

#### 4.1 Commscope Warranty Installations

- A. The Commscope Warranty provides a twenty (20) year applications assurance warranty. Commscope (Manufacturer) shall provide the warranty directly to the end-user.
- B. The Application Assurance Warranty shall cover the failure of the wiring system to support the applications that are designed for the link/channel specifications of ANSI/TIA/EIA–568-B.1. These applications include, but are not limited to, 10BASE-T, 100BASE-T, 1000BASE-T, 155 Mb/s ATM, and 1Gb/s ATM.
- C. The Contractor shall provide a warranty on the physical installation.
- D. Completion of the installation, in-progress and final inspections, receipt of the test and as-built documentation, and successful performance of the cabling system for a two (2) week period will constitute acceptance of the system. Upon successful completion of the installation and subsequent inspection, the end user shall be provided by the Contractor with a numbered certificate, from Commscope registering the installation.
- E. For Commscope installations, upon successful completion of the installation and subsequent inspection, the end user shall be provided by the Contractor with a numbered certificate, from Commscope, registering the installation.

#### 4.2 Panduit Warranty Installations

A. Panduit also offers a complete Certification Plus System Warranty on eligible installations registered with Panduit. This warranty assures customers their registered structured cabling system's performance will meet all relevant cabling system standards for up to 25 years. To be eligible for the Certification Plus System Warranty, the system must be registered with Panduit, installed by a Panduit Certified Installer or a Panduit Project Authorized Installer, and must meet all program requirements.

**END OF SECTION** 

# **Phase Two: Price Schedule**

#### 1.0 HOURLY COST ITEMS

These rates and charges apply to work performed by the Low Voltage Contractor involving special projects that cannot be adequately priced using the specific "Unit Pricing" listed or for routine work that is complicated by unforeseen events or obstacles.

The Low Voltage Contractor shall maintain such full and detailed accounts as may be necessary to substantiate billing rendered under provisions of this exhibit. The University shall be afforded access to all the Contractor's books, financial records, payrolls, correspondence, instructions, receipts, vouchers, memorandum, etc. relating to billing. The Contractor shall preserve all such records for a period of three (3) calendar years after final payments under this contract.

The Low Voltage Contractor will not be compensated for transporting work crews. Trucks assigned to work crew for transportation of personnel are to be paid for based on the number of hours that the crew works. No compensation shall be made to the Contractor for time lost because of lack of equipment or equipment breakdowns, nor for equipment left on the job site at the Contractor's discretion after the University Project Manager advises that the equipment is no longer needed at the job site.

Labor hours shall be defined as follows:

REGULAR TIME: 8:00 AM through 5:00 PM, Monday - Friday

OVERTIME: 5:00 PM – 8:00 AM, Monday – Friday; 5:00 PM to Midnight Friday,

WEEKEND: Saturday and Sunday

HOLIDAY: Recognized University of Florida holidays are as follow: New Year's Day, Martin Luther King Jr.'s Birthday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day.

- Work schedule may be adjusted as directed or approved by the UF Project Manager.
- There will be a two (2) hour on-site response time expectation for the Contractor. Contractors must be located within 60 miles from Gainesville.
- The punch list and inspection correction items will be performed at no additional cost to the University.

**Additional Port Request -** The Contractor must provide a price for additional ports as they may be required. The first price will be for an additional cable pull with cross-connect using the University's parts. The second quote is for the same work using the Contractor's parts.

## 2.0 Unit Price Schedule

Having read all of the specifications attached hereto and any Addenda issued, I/we hereby propose to furnish all required materials and equipment in strict compliance with the project manual, the Addenda and all other documents relating thereto or on file in the Division of Purchasing, and if awarded the contract, to deliver said equipment within the time limits specified, for the sums as enumerated herein (contractors may submit pricing for either one, or both of the types of installations listed below):

Pricing Matrix:

Please note: Costs will include labor burden and any other costs.

All hourly rates are considered to be onsite.

Permanent links include patch panel, horizontal cable, data insert, and data wall plate.

Panduit Certified Installations						
	Normal	Overtime	Weekend & Holidays			
Project Manager Hourly Rate \$	\$	\$	\$			
Foreman Hourly Rate \$	\$	\$	\$			
Technician Hourly Rate \$	\$	\$	\$			
	Single	Two	Three			
	Cable	Cables	Cables			
Contractor Furnished Panduit CAT6A	\$	\$	\$			
Permanent Link \$						

Commscope Systimax Certified Installations						
	Normal	Overtime	Weekend & Holidays			
Project Manager Hourly Rate \$	\$	\$	\$			
Foreman Hourly Rate \$	\$	\$	\$			
Technician Hourly Rate \$	\$	\$	\$			
	Single	Two	Three			
	Cable	Cables	Cables			
Contractor Furnished Commscope Systimax	\$	\$	\$			
CAT6 Permanent Link \$						
Contractor Furnished Commscope Systimax	\$	\$	\$			
CAT6A Permanent Link \$						

Commscope Uniprise Certified Installations						
	Normal	Overtime	Weekend & Holidays			
Project Manager Hourly Rate \$	\$	\$	\$			
Foreman Hourly Rate \$	\$	\$	\$			
Technician Hourly Rate \$	\$	\$	\$			
	Single Cable	Two Cables	Three Cables			
Contractor Furnished Commscope Uniprise CAT6 Permanent Link \$	\$	\$	\$			
Contractor Furnished Commscope Systimax CAT6A Permanent Link \$	\$	\$	\$			

I hereby certify that for all statements and ar	nounts herein made o	on behalf of:	
(Company or Individual Name):			
I have carefully prepared this Bid Proposal f such statements and submit this Bid Propos			
Signed and sealed this	day of	, 2020.	
(Signature)	(Printed	or typed)	
(Address, City State, Zip)			
(Telephone)	(Fax)		
Witness:			
(Signature)	(Printed)		

END OF SECTION

#### AIA Document A305

# **Contractor's Qualification Statement**

#### 1986 EDITION

This form is approved and recommended by The American Institute of Architects (AIA) and The Associated General Contractors of America (AGC) for use in evaluating the qualifications of contractors. No endorsement of the submitting party or verification of the information is made by the AIA or AGC.

The Undersigned certifies under oath that the information provided herein is true and sufficiently

complete so as not to be misleading. SUBMITTED TO: **University of Florida Procurement Services** ADDRESS: 971 Elmore Drive, Gainesville, FL 32611-5250 SUBMITTED BY: Other ☐ Partnership ☐ Individual ☐ Joint Venture Corporation NAME: ADDRESS: PRINCIPAL OFFICE: NAME OF PROJECT: ITB21KO-103, Annual Contract for Installation of Network Infrastructure TYPE OF WORK (file separate form for each Classification of Work): ☐ General Construction ☐ HVAC ☐ Plumbing ☐ Electrical

Copyright 1964, 1969, 1979, 1986 by The American Institute of Architects, 1735 New York Avenue N.W., Washington, D.C. 20006. Reproduction of the material herein or substantial quotation of its provisions without written permission of the AIA violates the copyright laws of the United States and will be subject to legal prosecution.

Other (please specify):

## 1. ORGANIZATION

1.1	How many years has your organization been in business as a Contractor?				
1.2	How many years has your organization been in business under its present business name?				
	1.2.1	Under what other or former names has your organization operated?			
1.3	If your organization is a corporation, answer the following and enclose proof of incorporation from the Florida Department of State:				
	1.3.1	Date of incorporation:			
	1.3.2	State of incorporation:			
	1.3.3	President's name:			
	1.3.4	Vice-president's name(s):			
	1.3.5	Secretary's name:			
	1.3.6	Treasurer's name:			
1.4	If your	organization is a partnership, answer the following:			
	1.4.1	Date of organization:			
	1.4.2	Type of partnership (if applicable):			
	1.4.3	Name(s) of general partner(s):			
1.5	If your	organization is individually owned, answer the following:			
	1.5.1	Date of organization:			
	1.5.2	Name of owner:			
1.6	If the fo	orm of your organization is other than those listed above, describe it and name the principals:			

# 2. LICENSING

3.

LICENS	ING	
2.1	indicate	sdictions and trade categories in which your organization is legally qualified to do business, registration or license numbers, and enclose proof of licensure to perform work in the f Florida.
2.2	List juris	edictions in which your organization's partnership or trade name is filed.
EXPER	ENCE	
3.1	List the	categories of work that your organization normally performs with its own forces.
3.2	Claims	and Suits. (If the answer to any of the questions below is yes, please attach details)
	3.2.1	Has your organization ever failed to complete any work awarded to it?
	3.2.2	Are there any judgments, claims, arbitration proceedings, or suits pending or outstanding against your organization or its officers?
	3.2.3	Has your organization filed any lawsuits or requested arbitration with regard to construction contracts within the last five years?
3.3	principa	he last five years, has any officer or principal of your organization ever been an officer or I of another organization when it failed to complete a construction contract? (If the answer is ase attach details)
3.4	applicar attach a	hether or not, within the past five years, any contract for construction or CM services by the nt has been considered in default, suspended, or terminated for convenience or cause. If so, an explanation of the matter, including the name and location of the project, the name and of the owner's representative, and all pertinent details of the default, suspension or tion.
3.5	any reas	hether or not, within the past five years, the applicant has been debarred or suspended for son by any federal, state, or local government procurement agency or refrained from bidding blic project due to an agreement with such procurement agency. If so, please attach a full tion and contact information for the Owner.

REFER	ENCES	
4.1	Trade R	deferences:
4.2	Bank Re	eferences:
4.3	Surety:	
	4.3.1	Name of bonding company:
	4.3.2	Name and address of agent:
	4.3.3	Enclose proof that the surety and/or its agent is licensed to conduct business in the State of Florida and has a Best Rating of "A" and a financial size of "Class X" or better.
	4.3.4	Attach a letter from the Surety or its agent licensed to do business in Florida verifying the applicant's capability to provide performance and payment bonds for this project up to \$1,000,000.
	4.3.5	State whether or not, within the past five years, a contract or any portion of the Work connected to a contract was completed by the Owner or the applicant's surety. If so, attach an explanation providing the name and location of the project, the name and address of the owner's representative, and all pertinent details of the matter.

4.

#### FINANCING

- 5.1 Financial Statement.
  - 5.1.1 Attach a financial statement, preferably audited, including your organization's latest balance sheet and income statement showing the following items:
    - Current Assets (e.g., cash, joint venture accounts, accounts receivable, notes receivable, accrued income, deposits, materials inventory and prepaid expenses);
    - Net Fixed Assets;
    - Other Assets;
    - Current Liabilities (e.g., accounts payable, notes payable, accrued expenses, provision for income taxes, advances, accrued salaries and accrued payroll taxes).
  - 5.1.2 Name and address of firm preparing attached financial statement, and date thereof:
  - 5.1.3 Is the attached financial statement for the identical organization named on page one?
  - 5.1.4 If not, explain the relationship and financial responsibility of the organization whose financial statement is provided (e.g., parent-subsidiary).

5.2 Will the organization whose financial statement is attached act as guarantor of the contract for construction?

SIGNATURE						
6.1	As required by Section 287.133, Florida Statutes, a contractor may not submit a bid for this project if it is on the convicted vendor list for a public entity crime committed within the past 36 months. Signature below certifies that the applicant will neither utilize the services of, nor contract with, any supplier, subcontractor, or consultant in excess of \$10,000 in connection with this project for a period of 36 months from the date of their being placed on the convicted vendor list.					
6.2	Dated at	this	day of,	2020.		
	Name of Organization:					
	Ву:					
	Title:					
				(SIGNATURE)		
	uly sworn, deposes and says that the information probe misleading.	ovided herein i	s true and suff	iciently complete so		
Subscrib	oed and sworn before me this day of	, 2020.				
	Notary Public:					

6.

My Commission Expires: