

Vicepresidencia de Asuntos Administrativos



PO Box 21345
San Juan, PR 00928-1345
(787) 751-0178 ext. 7130

20 de marzo de 2024

“REQUEST FOR PROPOSAL”

**RFP: UAGM Carolina Campus Broadband
Digital Project 2024**

Reciba un cordial saludo. La Universidad Ana G. Méndez (UAGM) en su continuo interés de brindar un servicio de calidad a sus estudiantes y comunidad universitaria dentro de un ambiente sano, seguro y saludable, le extiende una invitación para que participe en el proceso del “*Request for Proposal*” para **UAGM Carolina Campus Broadband Digital Project 2024**.

Los documentos del “*Request for Proposal*” que se incluyen contiene la información requerida y las especificaciones con todos los detalles de la subasta.

La subasta debe ser entregada personalmente el viernes, 25 de abril 2024 en:

Dirección: Universidad Ana G. Méndez, Recinto de Cupey
Carr 176, km 9.3, Calle Isidoro Colón.
VP Asuntos Administrativos
Edificio-VP de Telecomunicaciones y Tecnologías Académicas.

Hora: 9:00am a 2:00 PM

Cualquier información adicional, puede comunicarse al e-mail de la Sra. Norma Doñé, Directora de Compras al nodone@uagm.edu . Agradecemos nos confirme su participación para la referida subasta.

Cordialmente,

Sr. Walid El Hage Arocho
Vicepresidente Asuntos Administrativos

c. Sra. Lizzette Dávila Serrano
VP Asociada Compras y Contratos.



UNIVERSIDAD
ANA G. MÉNDEZ

UAGM

REQUEST FOR PROPOSAL

UAGM Carolina Campus Broadband Digital Project

**PREPARED BY: LIZZETTE DÁVILA SERRANO
AVP CONTRACT AND PROCUREMENT UAGM
MARCH 20, 2024**

CONTROL #: 2022-03202024

ADMINISTRATIVE PROCEDURES AND PROCUREMENT PROCESS

1.1 Purpose of Request for Proposal

The purpose of this Request for Proposal (RFP) is to seek proposals that meet the needs of the **UAGM Carolina Campus Broadband Digital Project**, with the goal of improving or upgrading the fiber infrastructure throughout the campus.

1.2 Objective of the RFP

UAGM Purchasing Office is issuing this RFP to provide detailed information necessary for the preparation of competitive proposals by qualified vendors to supply **UAGM Carolina Campus Broadband Digital Project**.

1.3 RFP Coordinator

The RFP Coordinator, identified below, is the sole point of contact regarding the RFP from the date of issuance until selection of the successful vendor.

Sr. William Vazquez
Network Specialist
wivazquez@uagm.edu
787-751-0178, ext 5972

or

Sr. Moises Lora García
Network Analyst and Designer
molora@uagm.edu
787-751-0178, ext 5970

or

Sr. Raymond A. Arce Bosque
OCIT Manager
raarce@uagm.edu

787-751-0178, ext 5977

1.4 Restriction on Communication

From the date of issuance of this RFP until announcement of the successful vendor, vendors may contact only the RFP Coordinator. The RFP Coordinator will respond only to questions regarding the procurement process. Questions concerning the interpretation of this RFP must be submitted in writing to the RFP Coordinator in accordance with this RFP. If a vendor or someone acting on the vendor's behalf attempt to discuss this RFP orally or in writing, with any employee of UAGM, other than the RFP Coordinator designated above, or any employee or elected official of the UAGM, the vendor may be disqualified.

1.5 Procurement Timetable

The following dates set forth below are for informational planning purposes only. UAGM reserves the right to change the dates.

<i>Event</i>	<i>Date</i>
RFP Issued	March 20, 2024
Tour Date Carolina Campus	April 3, 2024, at 9:00 am
Question	April 4 at 9, 2024
Answers	April 11 at 12, 2024
Submission of Proposals	April 25, 2024
Opening of Proposals	April 30, 2024
Issue Notice of Award	May 2, 2024

1.6 Amendment to the Request for Proposal

UAGM reserves the right to amend the RFP at any time. In the event it becomes necessary to amend, add to, or delete any part of the RFP, an amendment will be provided to all vendors who received the original RFP. A vendor's response must include acknowledgment of all addendums.

1.7 Submission of Proposals

Proposals must be received by the RFP Coordinator no later than **April 25, 2024, at 2:00 pm**. Any proposal received after this deadline will be rejected and returned to the vendor. Vendors mailing proposals must allow ample mail delivery time to ensure timely receipt of their proposals. It is the vendor's responsibility to ensure that the proposal is received prior to the deadline. Postmarking by the due date will not substitute for actual receipt of the proposal by UAGM. Electronic mail and faxed proposals **will not be accepted**.

1.8 Rejection of Proposals

1.8.1 At any time prior to the execution of the written contract, UAGM reserves the right to reject any or all proposals, in whole or in part, to advertise for new proposals, to abandon the need for such products or services, and to cancel this RFP if it is in the best interest of UAGM.

1.8.2 A proposal shall be rejected outright and not evaluated if a vendor fails to deliver its proposal by 2:00 pm on the due date or fails to include the required transmittal letter, proposal certification, and certification of independence and no conflict of interest.

1.9 Costs of Preparing the Proposal

The costs of preparing the proposal are the sole responsibility of the vendor. UAGM is not responsible for any costs incurred by vendor which are related to the preparation or delivery of the proposal, or any other activities carried out by the vendor related to this RFP.

1.10 Waiver of Deficiencies and Nonmaterial Variations

UAGM reserves the right to waive or permit cure of nonmaterial variances in a proposal if such waiver is in their best interest. Nonmaterial variances include minor informalities that do not affect responsiveness, variances that are merely a matter of form or format, variances that do not change the relative standing of other vendors, variances that do not prejudice other vendors, variances that do not change the meaning or scope of the RFP, or variances that do not reflect a material change in the proposal. Failure to provide any mandatory information, or to comply with mandatory requirements of the RFP, shall not be considered a nonmaterial variation that UAGM can waive or permit cure. In the event UAGM waives or permits cure of nonmaterial variances, such waiver or cure will not modify the RFP requirements or excuse the vendor from full compliance with RFP specifications or other contract requirements if the vendor is awarded the contract. The determination of whether a particular matter constitutes a material or nonmaterial variation from the RFP is within the sole discretion of UAGM.

1.11 Opening of Proposals

The proposals will be opened at **April 30, 2024**, at the Purchasing & Contract Office. The proposals will remain confidential until all the proposals submitted in response to this RFP and a notice of award is announced in accordance with UAGM Policies and Procedures.

1.12 Public Records and Requests for Confidentiality

1.12.1 All information submitted by a vendor may be treated as a public record by UAGM unless the vendor properly requests that the information be treated as confidential information at the time its proposal is submitted.

1.12.2 Any request for confidential treatment of information must be included in the transmittal letter with the vendor's proposal. In any such request, the vendor must enumerate the specific grounds that support treatment of the materials as confidential and must also explain why disclosure of the information is not in the best interest of the public. The request for confidential treatment must also include the name, address, and telephone number of the person authorized by the vendor to respond to any inquiries by UAGM concerning the confidential status of the materials.

1.12.3 Any documents submitted which contain confidential information must be marked on the outside as containing confidential information, and each page upon which confidential information appears must be marked as containing confidential information. The confidential

information must be clearly identifiable to the reader where it appears. All copies of the proposal submitted, as well as the original proposal, must be marked in this manner. Identification of the entire proposal as confidential shall be deemed as non-responsive and disqualify the vendor.

1.12.4 In addition to marking the material as confidential material where it appears, the vendor must submit one copy of the relevant pages of the proposal from which the confidential information has been excised. The confidential material must be excised in such a way as to allow the public to determine the general nature of the material removed and to retain as much of the documents as possible. These pages must be submitted with the transmittal letter and will be made available for public inspection.

1.12.5 The information marked confidential shall be treated as confidential information to the extent such information is determined to be confidential under or other provisions of law by a court of competent jurisdiction.

1.12.6 In the event, UAGM receives a request for information marked confidential, written notice shall be given to the vendor.

1.12.7 A vendor's failure to request confidential treatment of material pursuant to this section and the relevant laws will be deemed by UAGM as a waiver of any right to confidentiality that a vendor may have had.

1.13 Copyrights

By submitting a proposal, the vendor agrees that UAGM may copy the proposal for purposes of facilitating the evaluation of the proposal or to respond to requests for public records. By submitting a proposal, the vendor consents to such copying and warrants and represents that such copying will not violate the rights of any third party. UAGM will have the right to use ideas or adaptations of ideas that are presented in the proposals.

1.14 Proposals Property of UAGM

All proposals become the property of UAGM and shall not be returned to the vendor unless all proposals are rejected, and no award is made.

1.15 Restrictions on Gifts and Activities

UAGM Policies and Procedures prohibit officials and employees of UAGM from receiving gifts from certain donors. Vendors are responsible for determining the applicability of this rule to their activities and for complying with it.

1.16 Construction of RFP with Laws and Rules

This RFP is to be construed in light of pertinent legal requirements. Changes in applicable laws and rules may affect the award process or the resulting contract. Vendors are responsible for ascertaining pertinent legal requirements and restrictions.

1.17 Release of Claims

By submitting a proposal, each vendor agrees that it will not bring any claim or have any cause of action against UAGM based on any misunderstanding concerning the information provided in this RFP or concerning UAGM failure, negligent or otherwise, to provide the vendor with pertinent information intended by this RFP.

1.18 Content of RFP

1.18.1 This RFP is designed to provide vendors with information necessary for the preparation of competitive proposals. Each vendor is responsible for determining all factors necessary for the submission of a comprehensive and compliant proposal.

1.18.2 Proposals should be based solely on the material contained in the RFP. Vendors are to disregard any draft materials they may have received, newspaper articles they may have read, and any other previous oral or written representations.

1.19 Sources of Information Use by UAGM

1.19.1 UAGM reserves the right to contact vendors after the submission of proposals for the purpose of clarifying a proposal and to ensure mutual understanding. A vendor will not be permitted to modify or amend its proposal if contacted by UAGM for this reason. All contact with vendor for clarification purposes shall be in writing. All responses shall be in writing. UAGM will be bound only by written responses.

1.19.2 UAGM assumes no responsibility for representations made by its employees prior to the execution of a legal contract unless such representations are specifically incorporated into this RFP as written addendum to the RFP. Oral discussions pertaining to modifications or clarifications of the RFP shall not be considered part of the RFP unless confirmed in writing.

1.19.3 UAGM reserves the right to obtain from all sources, information concerning a vendor or a vendor's product, services, personnel, or subcontractors. UAGM also reserves the right to obtain and consider information from other sources such as the vendor's performance of other contracts. UAGM may use any of this information to evaluate a vendor's proposal.

1.20 Proposals Valid for 60 Days

All proposals shall be firm for a period of for sixty (60) days following the date on which proposals are due.

1.21 Proposal Evaluation and Award

Proposals that are timely submitted and comply with the mandatory requirements of the RFP will be evaluated in accordance with the terms of the RFP. Any contract resulting from this RFP will not necessarily be awarded to the vendor with the lowest price. Instead, the contract shall be awarded to the complaint vendor whose proposal received is recommended by UAGM Bid committee in accordance with evaluation criteria set forth in the RFP.

1.22 Award Notice

Notice of award of the contract to the successful vendor will be sent by mail or electronic mail, to all vendors submitting proposals. Negotiation and execution of contract with the successful vendor shall be completed no later than five working days after awarded. If the apparent successful vendor fails to negotiate and deliver an executed contract by that date, UAGM may, in its sole discretion, cancel the award and award the contract to the next highest ranked vendor.

CHAPTER 2 GENERAL TERMS AND CONDITIONS OF THE CONTRACT

The contract that will be awarded because of this RFP will be based upon the proposal submitted by the successful Vendor and this solicitation. UAGM reserves the right to either award a contract without further negotiation with the successful vendor or to negotiate contract terms with the selected vendor if the best interests of UAGM would be served. The contract terms contained in this Chapter are not intended to be a complete listing of all contract terms but are provided only to enable the vendor to better evaluate the vendor's costs associated with the RFP and resulting contract. Vendors should plan on the following terms being included in any contract awarded as a result of this RFP. All costs associated with complying with these requirements should be included in the prices quoted by the vendor.

The vendor to offer their services would be complying with following regulations, as applicable:

1. Executive Order 11246 - Equal Opportunity Employment (EEO) supplemented by regulation of the U.S. Department of Labor (41 CRR chapter 60)
2. Contract Work Hour and Safety Standards Act (40 USC 327 – 333)
3. Copeland Anti-Kickback Act (18 USC 874 and 40 USC 276)
4. Executive Order 12459, 34 CFR Part 85, section 85.510 Certification of Non-Debarment, Suspension or Exclusion
5. Byrd Anti-Lobbing Amendments (31 USC, sec. 1352)
6. Clean Air Act – (42 USC 7401), Federal Pollution Control Act (33 USC 1251)
7. Other federal regulation applicable to performing jobs on a federal facilities site or other regulations established by U.S. Environmental Protection Agency (EPA)
8. All regulations applicable to companies operating under the Laws of the Commonwealth of Puerto Rico.
9. Build America, Buy America Act ("the Act"). Pub. L. No. 117-58, §§ 70901-52

The proposal will be accepted and considered with the presentation of a "Bid Bond" of 5% of the construction cost of the project. In addition, the construction costs of the project are required to be presented in detail.

Likewise, the proposal must consider the following:

- Performance Bond – 100%
- Payment Bond – 100%
- Hold Harmless Agreement
- Workmen’s Compensation Insurance Policy
- Employer’s Liability - \$100,000 each person
- Comprehensive General and Automobile Liability Insurance - \$2,000,000
- Builder’s Risk
- Installation Floater Policy

CHAPTER 3 SERVICE REQUIREMENTS

3.1 Objectives

The Purchasing and Contract Office is issuing this RFP to provide detailed information necessary for the preparation of competitive proposals by qualified vendors to supply the service for **UAGM Carolina Campus Broadband Digital Project**.

3.2 UAGM Carolina Campus Broadband Digital Project

Refer to addendum number 3.

CHAPTER 4 CONTENT OF PROPOSAL

These instructions prescribe the format and content of the proposal and are designed to facilitate the submission of a proposal that is easy to understand and evaluate. Failure to adhere the proposal format shall result in the disqualification of the proposal.

4.1 Instructions

4.1.1 All proposals should be prepared simply and economically providing a direct, concise delineation of the vendor's proposal and qualifications. Proposals must meet the criteria set forth in this Chapter.

4.1.2 Proposals shall be typewritten.

4.1.3 Proposals should be printed or typed on 8.5” x 11” paper (one side only).

4.1.4 All pages of proposals must have consecutive page numbers.

4.1.5 It will deliver the initiated proposal on all its pages.

4.1.6 One original and two (2) copies of a proposal must accompany the submission.

4.1.7 The vendor must also submit one copy of the proposal from which confidential information has been excised. The confidential material must be excised in such a way as to allow the public

to determine the general nature of the material removed and to retain as much of the proposals possible.

4.1.8 Proposals must respond to RFP requirements by restating the number and text of the requirement in sequence and writing the response immediately after the restated requirement.

4.2 Transmittal Letter

4.2.1 The transmittal letter shall be signed by an individual authorized to legally bind the vendor. The letter shall include the vendor's mailing address, telephone number, and fax number.

4.2.2 A request for confidential treatment of information shall be included in the transmittal. Any request for confidential treatment must comply with all requirements for such requests as required by Chapter 1 of the RFP.

4.3 Proposal Certification

Each vendor shall submit with the proposal certification, stating that the contents of the proposal are true and accurate. The substance and form of the proposal certification is included as Addendum **Number 1**. The proposal certification must be on vendor's letterhead and signed by an individual with authority to bind the vendor. Failure to provide the certification required by this section shall result in the rejection of the proposal as noncompliant.

4.4 Acceptance of Terms and Conditions

Each vendor shall specifically stipulate that the proposal is predicated upon the acceptance of all terms and conditions stated in the RFP. If the vendor objects to any term or condition, it shall make specific reference to the RFP page, section, and line number(s) at issue. Objections or responses that materially alter the RFP shall be deemed non-responsive and disqualify the vendor.

4.5 Certification of Independence and No Conflict of Interest

Vendor shall sign and submit with the proposal a certification stating that the proposal was developed independently, and that no relationship exists or will exist in the contract period between vendor and the UAGM that interferes with fair competition or is a conflict of interest. The substance and form of the certification of independence and no conflict of interest is included as Addendum **Number 2**.

This certification must be on vendor's letterhead and signed by an individual with authority to bind the vendor in contract. Failure to provide the certification required by this section shall result in the rejection of the proposal as noncompliant.

CHAPTER 5 EVALUATION OF PROPOSALS

5.1 Award Process

Proposals will be reviewed by an evaluation committee appointed by UAGM.

5.2 Tie Bids

UAGM shall resolve ties among proposals which are equal in all respects by drawing lots, unless only one of the tied vendors is a UAGM business. If only one of the vendors is a UAGM business, the UAGM business shall be given preference over all tied out of state vendors. If it is necessary to draw lots, the drawing shall be held in the presence of the vendors who submitted the tied proposals, if practical. If the tied vendors are not present, the drawing shall be held in front of at least two persons.

5.3 Verification of Proposal and Contract Negotiation

All applicable contracting requirements imposed by this RFP shall be met by the vendors. The successful vendor must, in a timely manner, enter the contract with the UAGM, to implement the programs contemplated by this RFP. It is expected that all such documentation will be executed within forty-five (45) days after the date of notification of the award. Failure of the successful vendor to agree to the terms of the contract within that time period may be grounds for UAGM to award the contract the next highest ranked compliant vendor.

5.4 Insurance

In all the following insurance requirements, vendor must show proof of insurance before the commencement of work.

The contractor shall obtain and maintain in force, at its own expense, from the date of Contract until completion and final acceptance of the Work, with "Sistema Universitario Ana G. Méndez" appearing as "Additional Insured" insurance coverage against claims, regardless of when asserted, that may arise out of, or result from, the Contractor's operations, the operations of the Contractor's, Sub-Contractors and any other entity directly or indirectly engaged by the Contractors connection with the Work. This insurance shall include the following.

- Worker's Compensation and Employer's Liability Insurance – Workmen's Compensation and Employer's Liability Insurance covering the Contractor's employees and the employees of all Sub-Contractors, in accordance with the requirements of applicable state and federal law.
- Public Liability Insurance- Public Liability Insurance safeguarding the Contractor against liability for injuries to persons (including death), and damage to, or destruction of, property, shall be maintained in an amount not less than \$1,000,000 to cover injury or death of any one person, in an amount not less than \$1,000,000 to cover injury or death to two or more persons in any one accident, and in an amount not less than \$1,000,000 to cover property damage.
- Automobile Liability Insurance- Automobile Liability Insurance safeguarding the Contractor against liability for injuries (including death) to persons, and damage to, or destruction of, property, arising out of the ownership, maintenance or use of automobiles shall be maintained in an amount not less than \$500,000 for injuries to one person, in an amount not less than \$500,000 for injuries to two or more persons in any one accident, and in an amount not less than \$500,000 to cover property damage.

ADDENDUM NUMBER 1

_____, 2024

Mr. Walid El Hage Arocho
Administrative Affairs Vice-president
Sistema Universitario Ana G. Méndez
PO Box 21345
San Juan, PR 00928-1345

Re: Invitation to Bid: UAGM Carolina Campus Broadband Digital Project

Dear Mr. El Hage:

I certify that I have the authority to bind ____ (Company Name) _____. Below to the specific terms, conditions and technical specifications required in the Invitation to Bid for **Carolina Campus Broadband Digital Project** for UAGM and offered in our proposal. I understand that, by submitting this proposal, _____ services that meets or exceeds the requirements of the RFP unless noted in the proposal.

I also certify that the contents of the proposal are true and accurate and that ____ (Company Name) ____ has not made any knowingly false statements in the proposal.

Sincerely,

ADDENDUM NUMBER 2

_____, 2024

Mr. Walid El Hage Arocho
Administrative Affairs Vice-president
Sistema Universitario Ana G. Méndez
PO Box 21345
San Juan, PR 00928-1345

Re: Invitation to Bid: UAGM Carolina Campus Broadband Digital Project

CERTIFICATION OF INDEPENDENCE AND NO CONFLICT OF INTEREST

Dear Mr. El Hage:

By submitting a proposal in response to the UAGM (RFP) **Carolina Campus Broadband Digital Project** the undersigned certifies the following:

1. The proposal has been developed independently, without consultation, communication or agreement with any employee or consultant to UAGM who has worked on the development of this RFP, or with any person serving as a member of the evaluation committee.
2. The proposal has been developed independently, without consultation, communication or agreement with any other vendor or parties for the purpose of restricting competition.
3. Unless otherwise required by law, the information found in the proposal has not been knowingly disclosed and will not be knowingly disclosed prior to the award of the contract, directly or indirectly, to any other vendor.
4. No attempt has been made or will be made by (Company Name) to induce any other vendor to submit or not to submit a proposal for the purpose restricting competition.
5. No relationship exists or will exist during the contract period between (Company Name) and UAGM that interferes with fair competition or as a conflict of interest.

Sincerely,

ADDENDUM 3a

**SISTEMA UNIVERSITARIO ANA G. MENDEZ
PROPOSAL SUBMITTAL FORM**

Important Notes:

THIS RFP IS REGULATED BY (Details) – U.S. FEDERAL FUND

1. For details of items see attachment in **email**.
2. The equipment is required on or before first week of semester 2024-25 (August 2024).
3. We will not accept proposals that don't comply with the specific description established in this proposal. **All delivery date is including in Addendum # 3a & 3.**
4. The RFP must include 11.5% from Taxes on services (*Sales and Use Taxes*), as applicable.
5. The delivery will not be subject to **pending balances** with UAGM.
6. Advance requests **payment** will not be accepted with the purchase order.
7. **PAYMENT TERMS OF UAGM IS: 60 DAYS**

UNIVERSIDAD ANA G. MENDEZ
Vicepresidencia de Telecomunicaciones y Tecnologías Académicas
Oficina Central de Informática y Telecomunicaciones (OCIT)

Información General:

La visita al Recinto de Carolina en la fecha establecida en el RFP estará a cargo por el personal de la Oficina Central de Informática y Telecomunicaciones (OCIT).

Requisitos:

• **Cotización para la Instalación de Fibra Óptica:**

- Los trabajos de todas las fases deben cotizarse en su totalidad y debe presentar costos de cada fase en su propuesta.
- Se establece que el contratista asume la responsabilidad de las medidas de la fibra óptica. Es importante señalar que la UAGM no realizará cambios en los pedidos debido a estimaciones incorrectas en la longitud de la fibra óptica.
- Las Bandejas y Casetes sugeridos o equivalentes deben ser los siguientes:
 - Cuartos de Comunicaciones
 - <https://www.leviton.com/en/products/splcs-24l>
 - <https://www.leviton.com/en/products/5r4uh-s12>
 - Multilinguaje
 - <https://www.leviton.com/en/products/splcs-12l>
 - <https://www.leviton.com/en/products/5r1uh-s03>
 - Gabinetes
 - <https://www.panduit.com/en/products/fiber-optic-systems/fiber-optic-panels-cassettes-enclosures/fiber-optic-enclosures/frme1u.html>
 - <https://www.panduit.com/en/products/fiber-optic-systems/fiber-optic-panels-cassettes-enclosures/fiber-optic-panels/fap3wbudlcz.html>
 - <https://www.panduit.com/en/products/fiber-optic-systems/fiber-optic-cable-assemblies/fiber-optic-interconnects-patch-cords-pigtails/f91bn1nnnsnm001.html>
- Se sugiere utilizar solo 2 modelos de fibra Óptica para:
 - Fibra para distribuciones de 140 hilos
 - Fibra de 24 hilos para cumplir las demás instalaciones. Fusionar solo lo requerido

- **Cumplimiento con la Ley BABAA:**

- Todos los materiales utilizados en la ejecución de los trabajos deben cumplir completamente con la Ley BABAA. El contratista es responsable de garantizar que todos los productos y componentes utilizados cumplan con las disposiciones y estándares establecidos por la Ley BABAA, asegurando así la conformidad con las regulaciones vigentes. Se proporciona información adicional sobre la Ley BABAA en el siguiente enlace:
- Link: <https://www.rd.usda.gov/es/construir-america-comprar-america>
- Si el contratista identifica retos para el cumplimiento de los requisitos de la Ley BABA, debe presentar una justificación por escrito. En esta justificación, el contratista debe explicar detalladamente las razones por las cuales no puede cumplir con los requisitos estándar y proporcionar toda la información necesaria.
- Los modelos o piezas sugeridas son un ejemplo. El proveedor es responsable de validar si cumplen con la ley BABA.

Fases 1

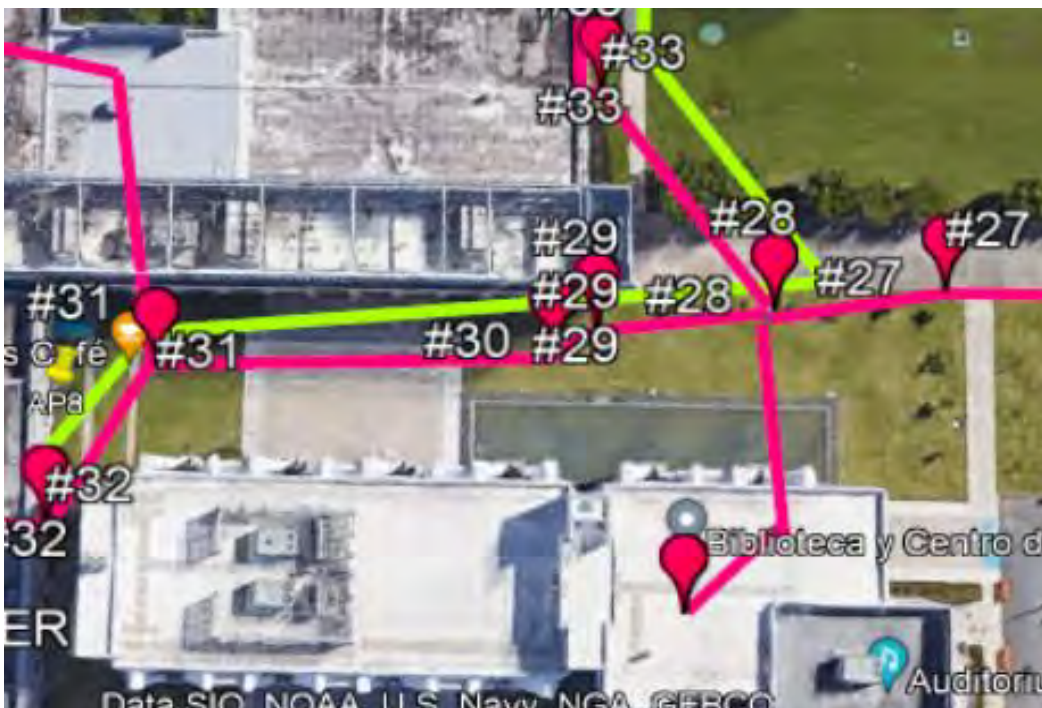
1. Cotizar Materiales para Datacenter Carolina

- 6 Cisco (originales) OEM QSFP-100G-AOC20M
- 4 FXE10-10M15Y

Fase 2 (Distribución de Fibra Óptica)

1. Reparar ruta de fibra (*Manhole*) cercano al *Datacenter*

- Instalar 2 tubos de 3" entre *manholes* (*manhole* 31-27)



2. Fibra Óptica Planta Física / Cafetería / Vagones H Cobre

- Proveer e instalar Gabinete exterior *Hoffman Single-Door Fan Package*. Se instalará en las afueras del área de la Cafetería. Se Sugiere **Part # PTRS242412G3** o equivalente
- Se debe instalar y proveer varilla de *Ground* en Cafetería y Vagones
- Se debe proveer e instalar *ground kit* para gabinete de Exterior e Interior en Cafetería y Vagones
- Se debe realizar vinculación de *Ground* a Gabinete de exterior e Interior y Gabinete de Vagón.
- Se debe llevar *ground* a poste del techo de Cafetería.
- Se debe llevar *Ground* a poste del techo de los vagones.
- Proveer e instalar 1 bandeja de fibra Levitown en gabinete de comunicaciones exterior de Cafetería. Se sugiere **Part # 5R1UH-011-S03** o equivalente
- Reinstalar fibra existente de Planta Física SM 24 hilos y fusionar fibra 24 hilos en 2 *adapter*. Sugerido o equivalente Levitown SDX de 12 posiciones. **5F100-2LL**
- Proveer e instalar fibra SM de 6 hilos para interconexión entre gabinete exterior de Cafetería y gabinete interior existente de la Cafetería.
- Proveer e instalar 2 *adapter* se sugiere Levitown SDX o equivalente de 12 posiciones para gabinete interior y exterior de Cafetería. **5F100-2LL**
- Proveer 2 *patchcord* SM de fibra *Panduit* para gabinete exterior e interior de Cafetería. **Part # F92ERLNLNSNM003**
- Proveer 1 patchcord SM de fibra *Panduit* para *Data Center* de Biblioteca. **Part # F92ERLNLNSNM005**
- Proveer 12 *patchcord LC to Pigtail SM Panduit* para gabinete exterior e interior de Cafetería. **Part # F91BN1NNSNM001**

3. Fibra Óptica para Distribución (Edificio Turismo)

Turismo 1er Piso

- Proveer e Instalar Fibra SM 140 hilos. La ruta seria desde el cuarto de comunicaciones del 1er Piso de Turismo hasta el *Data Center* de Biblioteca.



- Proveer e instalar 1 bandeja de fibra. Se sugiere o equivalente Levitown **Part # 5R4UH-S12** en el cuarto de comunicaciones de Turismo 1er Piso.
- Proveer e instalar 1 bandeja de fibra. Se sugiere o equivalente Levitown **Part # 5R4UH-S12** en el *Data Center* de Biblioteca.

- Proveer e instalar 6 *cassette*. Se sugiere o equivalente a Levitown **Part # SPLCS-24** de 24 posiciones para el cuarto de comunicaciones de Turismo 1er Piso.
- Proveer e instalar 6 *cassette*. Se sugiere o equivalente a Levitown **Part # SPLCS-24** de 24 posiciones para el *Data Center* de Biblioteca
- Se debe realizar vinculación de *Ground* del Rack de Cuarto de Comunicaciones de 1er Piso de Turismo con barra existente en el mismo cuarto. (incluir *ground Kits*)
- Se debe realizar vinculación de *Ground* de 2 Gabinetes del 2do Piso y 1 gabinete del 3er Piso. (incluir *ground Kits*)
- Se debe llevar 2 *ground* a poste del techo de Turismo
- Proveer 2 *patchcord SM* de fibra *Panduit* para 1er piso de Turismo.
Part # F92ERLNLNSNM003
- Proveer 2 *patchcord SM* de fibra *Panduit* para *Data Center* de Biblioteca.
Part # F92ERLNLNSNM005

Turismo 2do Piso

- Proveer e instalar fibra SM 6 hilos en el gabinete de comunicaciones del 2do piso de Turismo. Ruta debe ser desde el gabinete de comunicaciones del 2do piso de Turismo hasta bandeja del cuarto de comunicaciones del 1er piso de Turismo.
- Proveer e instalar *Mount Box* de 6 posiciones en el gabinete de comunicaciones el 2do piso de Turismo. Se sugiere o equivalente **Part # CBXF6IW-AY**
- Proveer e instalar 3 módulos de fibra SG para *mount box*. Se sugiere o equivalente **Part # CMDJLCZBU**
- Proveer 2 *patchcord SM* de fibra *Panduit* para 2do y 1er piso de Turismo.
Part # F92ERLNLNSNM003
- Proveer 1 *patchcord SM* de fibra *Panduit* para *Data Center* de Biblioteca.
Part # F92ERLNLNSNM005
- Proveer 6 *patchcord LC to Pigtail SM Panduit* para Gabinete del 2do piso de Turismo.
Part # F91BN1NNSNM001

Turismo 2do Piso Salón LT-201

- Proveer e instalar fibra SM 6 hilos en el gabinete de comunicaciones del salón LT-201 en el 2do piso de Turismo. Ruta debe ser desde el gabinete de comunicaciones del salón LT-201 en el 2do piso de Turismo hasta bandeja del cuarto de comunicaciones del 1er piso de Turismo.
- Proveer e instalar *Mount Box* de 6 posiciones en el gabinete de comunicaciones el 2do piso de Turismo. Se sugiere o equivalente **Part # CBXF6IW-AY**
- Proveer e instalar 3 módulos de fibra SG para *mount box*. Se sugiere o equivalente **Part # CMDJLCZBU**
- Proveer 2 *patchcord SM* de fibra *Panduit* para 2do y 1er piso de Turismo.
Part # F92ERLNLNSNM003
- Proveer 1 *patchcord SM* de fibra *Panduit* para *Data Center* de Biblioteca.
Part # F92ERLNLNSNM005
- Proveer 6 *patchcord LC to Pigtail SM Panduit* para Gabinete del 2do piso de Turismo.
Part # F91BN1NNSNM001

Turismo 3er Piso

- Proveer e instalar fibra SM 6 hilos en el gabinete de comunicaciones del 3er piso de Turismo. Ruta debe ser desde el gabinete de comunicaciones del 3er piso de Turismo hasta bandeja del cuarto de comunicaciones del 1er piso de Turismo.
- Proveer e instalar *Mount Box* de 6 posiciones en el gabinete de comunicaciones en el 3er piso de Turismo. Se sugiere o equivalente **Part # CBXF6IW-AY**
- Proveer e instalar 3 módulos de fibra SM para *mount box*. Se sugiere o equivalente **Part # CMDJLCZBU**
- Proveer 2 *patchcord SM* de fibra *Panduit* para 2do y 1er piso de Turismo. **Part # F92ERLNLNSNM003**
- Proveer 1 *patchcord SM* de fibra *Panduit* para *Data Center* de Biblioteca. **Part # F92ERLNLNSNM005**
- Proveer 6 *patchcord LC to Pigtail SM Panduit* para Gabinete del 2do piso de Turismo. **Part # F91BN1NNNSNM001**

4. Fibra Óptica para Distribución (Cuarto de Comunicaciones de Retención)

- Proveer e Instalar Fibra SM 140 hilos. La ruta seria desde el cuarto de comunicaciones de Retención hasta el *Data Center* de Biblioteca.



- Proveer e instalar 1 bandeja de fibra. Se sugiere o equivalente Levitown **Part # 5R4UH-S12** en el cuarto de comunicaciones de Retención.
- Proveer e instalar 1 bandeja de fibra Se sugiere o equivalente Levitown **Part # 5R4UH-S12** en el *Data Center* de Biblioteca.
- Proveer e instalar 6 *cassette* se sugiere o equivalente a Levitown **Part # SPLCS-24** de 24 posiciones para el cuarto de comunicaciones de Retención.
- Proveer e instalar 6 *cassette* se sugiere o equivalente a Levitown **Part # SPLCS-24** de 24 posiciones para el *Data Center* de Biblioteca
- Proveer 3 *patchcord SM* de fibra *Panduit* para cuarto de comunicaciones de Retención. **Part # F92ERLNLNSNM003**
- Proveer 3 *patchcord SM* de fibra *Panduit* para *Data Center* de Biblioteca. **Part # F92ERLNLNSNM005**

Fase 3

1. Fibra Caseta de entrada.

- Proveer e Instalar Fibra SM 12 hilos. La ruta seria desde el gabinete de comunicaciones de la Caseta de *Parking* hasta cuarto de comunicaciones de Turismo 1er Piso.



- Proveer e instalar gabinete de comunicación (*Wall Cabinet*) Mínimo 8 U en el área de Caseta de *Parking*.
- Proveer e instalar *Mount Box* de 6 posiciones en el gabinete de comunicaciones de la caseta de *parking*. Se sugiere o equivalente **Part # CBXF6IW-AY**
- Proveer e instalar 3 módulos de fibra SG para *mount box*. Se sugiere o equivalente **Part # CMDJLCZBU**

- Proveer e instalar 1 *adapter* se sugiere o equivalente a Levitown SDX de 12 # **5F100-2LL** posiciones para el cuarto de comunicaciones de Turismo.
- Proveer 2 *patchcord SM* de fibra *Panduit* para caseta de *parking* y 1er piso de Turismo. **Part # F92ERLNLNSNM003**
- Proveer 1 *patchcord SM* de fibra *Panduit* para *Data Center* de Biblioteca. **Part # F92ERLNLNSNM005**

2. Trabajos de terminación de Fibra entre 1er Piso de Kingbird (Antes Centro de Empleo) hacia la botella detrás de los SILOS (24 Hilos)

- Proveer e instalar Fibra SM 32 hilos (no plenum) y fusionar 24 hilos en botella existente en el *manhole* detrás de los SILOS hacia el *Data Center* de Biblioteca en bandeja de fibra existente en el *Data Center* de Biblioteca.
- Proveer e instalar fibra SM 6 hilos entre cuarto de comunicaciones del 1er piso de Kingbird y 2do piso de Kingbird
- Proveer y fusionar fibra en 2 *adapter*. Sugerido o equivalente Levitown SDX de 12 posiciones para cuarto de comunicaciones del 1er y 2do piso de Kingbird.

Part # 5F100-2LL.



- Proveer e instalar 1 *cassette* se sugiere o equivalente a Levitown **Part # SPLCS-24** de 24 posiciones para el *Data Center* de Biblioteca
- Proveer 2 *patchcord* SM de fibra *Panduit* para cuarto de comunicación del 1er piso de kingbird y otro para el 2do piso de Kingbird. **Part # F92ERLNLNSNM003**
- Proveer 1 *patchcord* SM de fibra *Panduit* para *Data Center* de Biblioteca. **Part # F92ERLNLNSNM005**

3. Fibra Edificio Monclova

- Proveer e instalar Fibra SM 6 hilos. La ruta seria desde el cuarto de comunicaciones de Monclova hasta el *Data Center* de Biblioteca.



- Proveer e instalar 1 bandeja de fibra Se sigue o equivalente Levitown **Part # 5R1UH-011-S03** en el cuarto de comunicaciones de Monclova.
- Proveer e instalar 1 *cassette*. Se sugiere o equivalente **Part # SPLCS-12L** Levitown de 12 posiciones para el cuarto de comunicaciones de Monclova.
- Proveer e instalar 1 *cassette*. Se sugiere o equivalente Levitown **Part # SPLCS-12L** de 12 posiciones para bandeja existente el cuarto de comunicaciones del *Data Center* de Biblioteca.
- Proveer 1 *patchcord SM* de fibra *Panduit* para cuarto de comunicación de Monclova. **Part # F92ERLNLNSNM003**
- Proveer 1 *patchcord SM* de fibra *Panduit* para *Data Center* de Biblioteca. **Part # F92ERLNLNSNM005**

4. Fibra para Pasillo Principal

- Proveer e instalar Fibra SM 12 hilos. La ruta seria desde el cuarto de comunicaciones de Multilenguaje hasta el cuarto de comunicaciones de Retención.



- Proveer e instalar 1 bandeja de fibra. Se sugiere o equivalente Levitown **Part # 5R1UH-011-S03** en el cuarto de comunicaciones de Multilenguaje.
- Proveer e instalar 1 *cassette* Se sugiere o equivalente a Levitown **Part # SPLCS-12L** de 12 posiciones para el cuarto de comunicaciones de Multilenguaje.
- Proveer e instalar 1 *cassette* Se sugiere o equivalente a Levitown **Part # SPLCS-12L** de 12 posiciones para el cuarto de comunicaciones del Retención.
- Proveer 2 *patchcord SM* de fibra *Panduit* para gabinete de comunicaciones de multilenguaje y cuarto de comunicaciones de Retención. **Part # F92ERLNLNSNM003**
- Proveer 1 *patchcord SM* de fibra *Panduit* para *Data Center* de Biblioteca. **Part # F92ERLNLNSNM005**

5. Gabinete Comunicación Mercadeo (Entre medio de Pasillo B y C):

- Proveer e instalar Fibra SG 6 hilos. La ruta seria desde el gabinete de comunicaciones de Mercadeo hasta el cuarto de comunicaciones de Retención.



- Proveer e instalar 1 bandeja de fibra. Se sugiere o equivalente Levitown **Part # 5R1UH-011-S03** en el cuarto de comunicaciones de Multilenguaje.
- Proveer e instalar 1 *cassette* Se sugiere o equivalente Levitown **Part # SPLCS-12L** de 12 posiciones para el cuarto de comunicaciones de Mercadeo.
- Proveer e instalar 1 *cassette* Se sugiere o equivalente a Levitown **Part # SPLCS-12L** de 12 posiciones para el cuarto de comunicaciones del Retención.
- Proveer 2 *patchcord SM* de fibra *Panduit* para gabinete de comunicaciones de Mercadeo y cuarto de comunicaciones de Retención. **Part # F92ERLNLNSNM003**
- Proveer 1 *patchcord SM* de fibra *Panduit* para *Data Center* de Biblioteca. **Part # F92ERLNLNSNM005**

6. Gabinete Salón L118 (Pasillo C):

- Proveer e instalar Fibra SM 6 hilos. La ruta sería desde el gabinete de comunicaciones del salón L-118 hasta el cuarto de comunicaciones de Retención.



- Proveer e instalar 1 bandeja de fibra. Se sugiere o equivalente Levitown **Part # 5R1UH-011-S03** en el gabinete de comunicaciones del L-118.
- Proveer e instalar 1 *cassette*. Se sugiere o equivalente Levitown **Part # SPLCS-12L** de 12 posiciones para el cuarto de gabinete de comunicaciones del L-118.
- Proveer e instalar 1 *cassette*. Se sugiere o equivalente Levitown **PART # SPLCS-12L** de 12 posiciones para el cuarto de comunicaciones de Retención.
- Proveer 2 *patchcord SM* de fibra *Panduit* para gabinete de comunicaciones del salón L-118 y cuarto de comunicaciones de Retención. **Part # F92ERLNLNSNM003**
- Proveer 1 *patchcord SM* de fibra *Panduit* para *Data Center* de Biblioteca. **Part # F92ERLNLNSNM005**

7. Gabinete Salón L137 (Pasillo F):

- Proveer e instalar Fibra SM 12 hilos. La ruta sería desde el gabinete de comunicaciones del salón C-137 hasta el cuarto de comunicaciones de Retención.



- Proveer e instalar 1 bandeja de fibra. Se sugiere o equivalente a Levitown **Part # 5R1UH-011-S03** en el cuarto de comunicaciones de Retención.
- Proveer e instalar 1 *cassette*. Se sugiere o equivalente Levitown **Part # SPLCS-12L** de 12 posiciones para el gabinete de comunicaciones del salón C-137.
- Proveer e instalar 1 *cassette*. Se sugiere o equivalente Levitown **Part # SPLCS-12L** de 12 posiciones para el cuarto de comunicaciones del Retención. **Part # SPLCS-12L**
- Proveer 3 *patchcord SM* de fibra *Panduit* para gabinete de comunicaciones del salón C-137 y cuarto de comunicaciones de Retención. **Part # F92ERLNLNSNM003**
- Proveer 1 *patchcord SM* de fibra *Panduit* para *Data Center* de Biblioteca. **Part # F92ERLNLNSNM005**