



Montclair, NJ 07043

ADDENDUM NO. 2

Issue Date: September 10, 2008

**Request for Proposal # 790
Campus Telecommunication Services**

Date of Original Bidding Documents: July 24, 2008

INTENT: This Addendum forms a part of the Contract Documents and modifies the Original Bidding Documents and Prior Addenda, if any, as identified above. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject Bidder to disqualification.

I. Points of Information:

I. QUESTION: In reference to Proposal #790, the project summary mentions certifications from different companies, does this apply to the contractor only or will he and his technicians have to be certified to meet the requirements for the bid?

RESPONSE: Please refer to Revised Page 59, Section 1 and 2.5.1.

II. Special Notice of Bid Extension:

Bid due date has been extended to Wednesday, September 24, 2008 by 2:00P.M.

III. Changes to Prior Addenda:

NOT USED

IV. Changes to Bidding Requirements:

Page 59 – Added a requirement for Intuity Certification

Revised Pricing Pages

V. Changes to Agreement and Other Contract Forms:

NOT USED

VI. Changes to Conditions of the Contract:

NOT USED

VII. Changes to Specifications:

Page 59 – Section 1 – Added first paragraph and Certification for Intuity Systems

Page 60 – Section 2.5.1 and 2.5.2 have been revised.

Page 61 – Section 2.5.2, 3, 6 revised, and Section 5 added.

Page 62 – Section 7 and 10 has been revised.

Page 63 – Deleted paragraph on Section 10 and added new Bullet points on Section 11.

VIII. Changes to Drawings:

NOT USED

Please acknowledge receipt of this Addendum No. 2 via fax. The fax number is 973-655-5468.

Company Name (please print)

Date

Signature

Title

Contact Name (please print)

Attachments:

1. Revised Page 59-63, and Pricing Pages 65-71

Distribution:

All Bidders
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Project File

1. INTENT

Montclair State is New Jersey's second largest and fastest growing university, offering the advantages of a large university, a broad undergraduate curriculum with a global focus, a wide variety of graduate programs, and a diverse faculty and student body, combined with a small college's attention to students. The University's main campus spans through three municipalities and two counties.

This Request for Proposal is to establish a term contract with a responsive/responsible contractor to provide two (2) full-time Telecommunication technicians, who must be certified to work on Commscope/Systimax, Avaya G3r, Partner and *Intuity systems*. In addition, the University is also seeking contractor(s) to install cabling (copper & fiber) and related components in new construction/ renovation projects. The successful contractor(s) for construction/renovation projects must be Commscope/Systimax and Corning certified.

2. TECHNICAL SPECIFICATIONS/REQUIREMENTS

Telecommunication Technician Services

- 2.1. Contractor shall provide all equipment, tools, labor, supervision, transportation and all effort necessary to carry out the specifications herein.
- 2.2. Service shall be made available to Montclair State University (*hereafter known as MSU*) 365 days per year.
- 2.3. The labor rates bid shall include all direct labor and burden, equipment, tools, transportation and common expendables. Labor rates shall be divided into the following categories:
 - Regular Business Hours* - Monday - Friday, 6:00 A.M. - 6:00 P.M.
 - After Hours* - Monday - Friday, 6:00 P.M. - 6:00 A.M
 - Weekends* - Saturday and Sunday, all hours
 - Holidays* - All Hours
- 2.4. Due to the nature of MSU operations, **response time** for a requested 24x7 emergency service shall be within **four (4) hours** (on-site) after contractor receives a request from MSU.
- 2.5. As a minimum, Contractor will provide the following services for:

2.5.1 Telecommunication Technician Services

- Services of (1) Class B System Software Technician to be Avaya certified on G3r and Partner and Intuity Systems for **35 hours** per week (8am - 4pm with 1 hour lunch). Activities include but are not limited to software translations and upgrades, moves/adds/changes for voice and data networks and small project support.
- Services of (1) Class C System Support Technician to be Avaya trained and familiar with G3r and Partner System for **35 hours** per week (8am - 4pm with 1 hour lunch). Activities include but not limited to moves/adds/changes for voice and data network, minor station related software changes and small project support.
- Contractor will have an air cable specialist on staff for campus voice infrastructure support
- Technicians will work directly under Montclair supervision and direction and be

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on call 24/7 if requested

- Contractor will provide laptop and printer for technicians use
- Each technician will require a vehicle
- Travel will be necessary to support remote sites at the same technician rate
- Each technician will have cellular phone and pager for communications
- All tools will be provided by contractor, but Montclair will provide all materials unless otherwise noted in the project
- Contractor will provide staff coverage during time off as well as additional staff during peak periods, all at the same rate

2.5.2 Telecommunication Technician Services and New Construction/Renovation Projects:

- Billing will be set rate for each technician
- Technicians installing Commscope/Systimax materials and/or Corning Fiber Optic Cable Systems must be certified by the respective manufacturer.
- All materials for the Horizontal Cable System must be Commscope/Systimax unless otherwise indicated.
- All support hardware including but not limited to racks, cabinets, conduits and sleeves must be approved by the University
- Contractor will also have access to cable locating company and necessary vehicles/equipment to support campus cable infrastructure, both on and off campus sites.
- Contractor will be responsible at their expense for complete campus wide inventory, labeling and documentation. Also provide infrastructure as-builts of all data/voice locations, including but not limited to voice terminal, MDF and IDF locations.
- Contractor shall ensure that all designs, work, equipment and installations are in compliance with the applicable local, state, and federal codes, the NJ Uniform Building Code, the National Electrical and Uniform Fire Prevention. In addition including but not limited to EIA/TIA Standard 568A, Commercial Building Standards for Telecommunications Cabling, EIA/TIA Standard 606, Labeling and Administration Standards for Telecommunications Cabling in Commercial Buildings, EIA/TIA Standard 607, Bonding and Grounding for Telecommunications Cabling and Equipment in Commercial Buildings, TIA/EIA Standard - Optical Fiber Cabling Component Standard.

- Contractor shall abide by the BOCA National Building code
- All cabling installations and attached components must be installed in accordance with the manufacturer's specifications and documentation
- The Contractor must label and test all cable runs and provide the University with as built drawings and an electronic media record of the location of all cable runs. This will include the description of the test(s) and how the results meet the industry standard.

3. COST PROPOSAL

This is two (2) part RFP, Part A is for two full-time Telecommunication Technicians (Avaya G3r, Partner and Intuity systems, for adds/moves/changes for voice and data networks) and Part B is for Construction/ Renovation Projects. Contractor can bid on either or both of these parts on Attachment B (Pricing Schedule) of this RFP.

4. EMPLOYEES OF THE CONTRACTOR

No one except authorized employees of the Contractor are allowed on the premises of MSU, its buildings or complexes. Contractor's employees are NOT to be accompanied in their work area by acquaintances, family members, assistants, or any other person unless said person is an authorized employee of the Contractor or an authorized subcontractor.

5. REMOVAL OF CONTRACTOR'S EMPLOYEES

The contractor agrees to utilize only experienced, responsible and capable people in the performance of the work. MSU may require that the contractor remove from the job covered by this contract, employees who endanger persons or property or whose continued employment under this contract is inconsistent with the best interests of MSU.

6. INVOICING

All work must be approved by the Networking and Telecommunication department prior to delivering any goods and services. After completion of services, the contractor shall submit itemized detailed invoice to project owner and a duplicate copy to *Telecommunications, Montclair State University, One Normal Avenue, Montclair, NJ 07043.*

6.1. All invoicing MUST include:

- 6.1.1. Purchase Order Number
- 6.1.2. Job site name and address
- 6.1.3. Detailed description of work performed
- 6.1.4. Overhead expenses including but not limited to project management, trash removal and site restoration, insurance, bonding, and shipping & handling
- 6.1.5. Detailed description of any other miscellaneous expenses
- 6.1.6. Total labor hours
- 6.1.7. Labor rate as bid
- 6.1.8. Cost of all material as bid
- 6.1.9. Grand Total of Invoice
- 6.1.10. Project Owner/Department

Invoicing that does not have all the required information as listed above, will be returned for corrections, which will delay payment to the Contractor.

7. REQUIRED SUBMITTALS

Each bidder **MUST** submit with the bid package the following required submittals. Failure to provide **ALL** the required submittals shall render the bid non-responsive.

- 7.1. Provide years of experience the firm has installed structured cabling.
- 7.2. Provide copies of all certification and training requirements.

- 7.3 Provide years of experience the firm has with servicing the Avaya equipment.
- 7.4 Provide years of experience the firm has been certified in Corning fiber installation
- 7.5 Provide years of experience the firm has been certified in installation of Commscope/Systimax cabling and components.
- 7.6. Provide three (3) references with similar contracts.
- 7.7. Provide resumes of the contractor's employees that will be assigned to MSU.
- 7.8 Bidder should provide a detailed resume for each contract manager and supervisor(s) to be assigned to this contract.

8. SPECIAL CONTRACT REQUIREMENTS

- 8.1. Contractor(s) shall be certified by Commscope/Systimax and Corning for the new construction/renovation type projects. Copies of licenses/certificates must accompany bid package. Contractor must have at minimum seven (7) years experience in installation of Commscope/Systimax Horizontal Cabling and structured cabling systems.
 - 8.1.1 Contractor shall be certified by Commscope/Systimax and Avaya to provide campus phone technician services. Contractor must have at minimum seven (7) years experience in installation of the Commscope/Systimax Horizontal Cabling System.
- 8.2. Contractor must comply with all applicable federal and state laws, rules, and regulations in areas where work is to be performed
- 8.3. The contractor shall perform the work in a way to minimize disruption to the normal operation of building tenants. Upon completion all debris, materials, and equipment associated with the work performed.
- 8.4. The contractor shall make necessary repairs in such a manner that does not damage MSU property. In the event damage occurs to MSU property, or any adjacent property by reason of any repairs or installations performed under this contract, the contractor shall replace or repair the same at no cost to MSU. If damage caused by the contractor has to be repaired or replaced by MSU, the cost of such work shall be deducted from the monies due the contractor.
- 8.5. In the event the work performance of the contractor is unsatisfactory, the contractor will be notified by MSU and be given one day to correct the work. Labor for all rework will be at no cost to MSU.
- 8.6 Contractor must complete and submit all requisites/permits required by the NJUCC from NJDCA (New Jersey Department of Community Affairs) to the MSU Design & Construction project manager. All permit fees will be paid by the University. No work shall commence without DCA approval.

9. DELIVERY

It shall be the contractor's responsibility to meet MSU's delivery requirements, as called for in the Technical Specifications. MSU reserves the right to obtain services on the open market in the event the contractor fails to make delivery and any price differential will be charged against the contractor.

10. SPECIAL TERMS & CONDITIONS

The term of this contract will be for two (2) years effective **October 1, 2008**. Montclair State University shall have the right, at its sole discretion to renew the agreement for one (1) additional

year period. A successful bidder shall be notified of renewal thirty (30) days prior to expiration of the existing agreement.

11. Award

- Award of Work Units is subject to availability of funds.
- The University reserves the right to purchase equipment, materials or services directly from the manufacturers or authorized vendor.
- The University reserves the right to secure bids on the open market for any construction/renovation project deemed appropriate.
- Telecommunication Technician Services (Avaya G3r, Partner and Intuity systems) portion of the award is not to exceed price of Four Hundred Thousand Dollars (\$400,000.00) for each year of the contract.
- The new construction/renovation portion of the award is not to exceed price of One Million Dollars (\$1,000,000.00) for each year of the contract.
- The University's obligation for this project is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. The dollar figure provided herein in no way represents a guarantee or commitment by the University for these Services. This estimate is provided for bidding purposes only.

Company Name: _____

This RFP can be awarded in whole or in part. Please fill in pricing for all three years.

Part A – Telecommunication Technician Services:

Category	LABOR RATES (\$/HR)		
	Year 1	Year 2	Optional Year 3
System Software Technician / Avaya & Systimax Certified			
Business Hours			
After Hours			
Weekends			
Holidays			
System Support Technician/ Avaya & Systimax trained:			
Business Hours			
After Hours			
Weekends			
Holidays			

Provide a definition of business and after hours, list holidays on a separate sheet.

Mark up on Supplies (if needed): (%)			
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Mark up shall be applied to the Supplier's invoice amount to the Contractor, with all the manufacturer's discounts passed through to the University.

Part B – New Construction / Renovations Projects:

Telecommunication technicians provided by the contractor shall be certified by Commscope/Sytimax and Corning for the new construction/ renovation type projects.

The University reserves the right to award the New Construction/ Renovation project services to a primary and/ or secondary vendor. If it is determined that the primary vendor cannot accommodate a specific project, the request shall then be forwarded to the secondary vendor.

TASK	PRICE YEAR 1	PRICE YEAR 2	PRICE OPTIONAL YEAR 3
1) Install two Category 6 wires 100 meters through a plenum ceiling to a flush mount outlet mounted in drywall. Hangers must be installed in the ceiling and the wire will be terminated in a telecommunications closet on an existing patch panel. Both ends must be tested and labeled.			
2) Install two Category 6 wires as in situation #1, with a standard cinder block wall with a fire stop and sleeve.			
3) Core drill a 4" hole in a 6" cement floor with reinforcement bars, install a sleeve with fire stop. Provide specific pricing for the core hole drilling.			
4) Repair a 100 pair aerial air cable and test the 2,000' run from end to end.			
5) Install a 12" ladder rack in a plenum ceiling. Supply pricing per foot installed.			
6) Replace and test four Category 6 ends, and confirm labeling or label as necessary.			
7) Install a 100 pair plenum cable in a suspended ceiling. Hangers must be installed in the ceiling. The wire must be terminated on a fuse block on both ends and both ends must be tested and labeled.			
8) Install two new 24 port Systimax patch panels for 24 Category 6 wires previously installed. The wires are approximately 300 meters apart and must be tested and labeled.			
9) Install a 200 pair riser cable between 4 floors in an existing air shaft. The cable must be plenum rated and must be supported every 15'. The wire must be terminated on 110-type termination blocks on each ends and both ends must be tested and labeled.			
10) Install a rack (provide pricing for wall mount racks and for floor mount racks).			
11) Install a wall phone utilizing a single Category 3 wire in drywall.			
12) Splice 12 strands of Corning FREEDM ribbon fiber.			
13) Terminate 12 strands of fiber provide pricing for: a) single			
b) multi-mode fiber			

NOTE:
All Category 6 cables shall be tested and certified for compliance with the EIA/TIA Category-6 cabling for the following tests to be included:

- 1 Wire Map
- 2 Length
- 3 Impedance
- 4 Attenuation
- 5 Resistance
- 6 Near End Cross-talk
- 7 Far End Cross-talk
- 8 Propagation Delay

Signature

Date

Print Name

Title

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Part B – New Construction/ Renovation Projects – Material List Pricing

In the event of unforeseen significant industry- wide price fluctuations during the Contract term, including optional year 3, an adjustment(s) to the price bid can be requested by the contractor. Such request should be sent to the attention of the Director of Procurement Services and shall include detailed documentation evidencing the need for the requested price adjustment(s). The contractor is limited to one price adjustment request each year of the contract. The decision whether or not to grant the requested price adjustment(s) will be in MSU's sole discretion, which shall not be unreasonably withheld.

Manufacturer	Model Number	Description	Price – Year 1	Price – Year 2	Price – Optional Year 3
Horizontal					
Systimax	107509036	2061 (Wht,Gray or Blue), 1000ft			
Systimax	108079369	2071 (Wht,Gray or Blue), 1000ft			
Systimax	700210164	2071 green, 1000ft			
Systimax	2275V	RG6 CMP rated, 1000'			
Systimax	107984007	M101SMB-246			
Systimax	107658442	M104SMB-246			
Systimax	106622160	M105FR1-246			
Systimax	106622160	M105FR1-246			
Systimax	106622277	M106FR4-246			
Systimax	106658149	M112SMB-246			
Systimax	107431546	M106SMB-246			
Systimax	108258401	M10L-003 faceplate, black			
Systimax	108258427	M10L-262 faceplate, white			
Systimax	108168469	M12L-262 faceplate, white			
Systimax	108168501	M13L-262 faceplate, white			
Systimax	108168543	M14L-262 faceplate, white			
Systimax	108333212	M16L-262 faceplate, white			
Systimax	107067928	M20AP-262 dust/blank Pk/100			
Systimax	108168477	M12L-246 faceplate, El. Ivory			
Systimax	108168519	M13L-246 faceplate, El. Ivory			
Systimax	108168550	M14L-246 faceplate, El. Ivory			
Wiremold	CM2-U2ATT-W	Dplx FP for Wiremold 5500 raceway			
Wiremold	CM2-BL-W	Blank			
Systimax	104206701	Outlet			
Systimax	108482845	M36 Zone box			
Erico	MPLS	Dplx LV wall bracket			
Erico	MPLS-2	Dbl Dplx LV Mtg bracket			
Systimax	108232695	MPS100E-003, black			
Systimax	700206709	MGS400BH-226, grn			
Systimax	108208919	1100PS-CAT5E-24			
Systimax	108208935	1100PS-CAT5E-48			
Systimax	108006198	MultiMAX distribution panel, 24P			
Systimax	108320029	PM2150PSE24 PATCHMAX KIT 24P			
Systimax	108320045	PM2150PSE48 PATCHMAX KIT 48P			
Systimax	760062372	1100GS3-24, patch panel			

Manufacturer	Model Number	Description	Price – Year 1	Price – Year 2	Price – Optional Year 3
Systimax	760062380	1100GS3-48, patch panel			
Systimax	760062356	PM-GS3-24, patch panel			
Systimax	760062364	PM-GS3-48, patch panel			
Systimax	106830623	1100D2-19 PC Org., 4 ring			
Systimax	106830615	1100D1-19 PC Org. w/v clips			
Systimax	107132664	1100D3-19 PC Org., 4 ring frt&rear			
Systimax	107535585	110RD2-200-19, mtg plate			
Systimax	107059909	110DW2-100			
Systimax	107059917	110AW2-300 block w/legs			
Systimax	107059891	110AW2-100			
Systimax	107831133	110A3 trough w/legs			
Systimax	103801254	110C5, pk/10			
Systimax	103801247	110C4, pk/10			
Systimax	106657174	110BB2-4500L, Label insert 90/pk			
Systimax	103895504	188UT1-50, 6/pk			
Systimax	107058919	110AB2-100FT			
Systimax	107058943	110AB2-300FT			
Systimax	107831133	TROUGH-110A3 PLASTICS			
Systimax	CPC6642-03F003	D8PS-3', grey, C5e PC			
Systimax	CPC6642-03F004	D8PS-4', grey			
Systimax	CPC6642-03F005	D8PS-5', grey			
Systimax	CPC6642-03F007	D8PS-7', grey			
Systimax	CPC6642-03F009	D8PS-9', grey			
Systimax	CPC6642-03F014	D8PS-14', grey			
Systimax	CPC3312-04F004	GS8E-GR-4, C6 PC			
Systimax	CPC3312-04F006	GS8E-GR-6'			
Systimax	CPC3312-04F010	GS8E-GR-10'			
Systimax	CPC3312-04F015	GS8E-GR-15'			
Fiber Riser					
LazrSPEED 150, 300 & 550 armored fiber cables					
Systimax	760018689-APAQ	24/50um, LazrSPEED 300, CMP rated, alum. armor			
Systimax	700211147-APAQ	48/50um, LazrSPEED 300, CMP rated, alum. armor			
TeraSPEED armored cables					
Systimax	760018630-APYL	24/8.3 ZWP TeraSPEED, CMP rated, alum. armor			
Systimax	760004382-APYL	48/8.3 ZWP TeraSPEED, CMP rated alum. armor			
Systimax	760028324	600G2-1U-MOD-SD, shelf, 48LC			
Systimax	760039867	1U fusion RoboSplice, 2 tray 32F			

Manufacturer	Model Number	Description	Price – Year 1	Price – Year 2	Price – Optional Year 3
Systimax	760032086	600G2-2U-MOD-SD, shelf, 96LC			
Systimax	760031856	2U fusion RoboSplice, 4 tray 64F			
Systimax	760023200	1000G2-4U-MOD-SD, shelf, 144LC			
Systimax	760031054	4U fusion spli wallet, 6 tray 96F			
Systimax	700006257	1AF1-16 LG organizer			
Systimax	760031039	MODG2-12LC-SM-PT, pnl w/pigtail			
Systimax	760027748	MODG2-12LC-LS-PT, pnl w/pigtail			
Systimax	700007230	LSS1U-072/5, splice shelf			
Systimax	700007222	LSS1U-144/7, splice shelf			
Systimax	700025588	LT1A-F/F, 32F fusion tray			
STI	SSAMW	Firestop wool, 2x4'x1.5"			
STI	SB100	Firestop sealant tube			
STI	SSP100	FS Putty 36ci tube (8, 2" @40%)			
Racks					
CPI	55053-703	19"x7"x3" DS, alum., blk, Standard			
CPI	12096-703	3"x7' DS Cbl mgt pnl, blk			
CPI	11729-703	6"x7' DS Cbl mgt pnl, blk			
CPI	10595-712	3" runway mtg plate, blk			
CPI	10250-112	12"x10' Tubular runway, blk			
CPI	11421-112	12" Wall Angle			
CPI	11302-001	T Junction kt			
CPI	11700-112	End closing kt			
CPI	10596-706	6" Cable post			
CPI	13075-719	2U Horiz. Mgt pnl.			
CPI	CR-93S-4B	2x4"ring			
Hubbell	REKR42	42hx24wx10d wall cabinet			
CTCI	Misc	Kindorf			
Hubbell	REKFF	Fan filter kit			
Hubbell	REKF	Fan kit			
Raceway					
Wiremold	G4000B-10	G4000B10, 10' gray			
Wiremold	G4000C	G4000C, 5' gray			
Wiremold	G4001	Base cplr, ea			
Wiremold	G4000WC	Wire clip, ea			
Wiremold	G4010B	Blank end ftg			
Wiremold	G4017	Inside corner			
Wiremold	G4011	Right Angle			
Wiremold	G4010B	Blank end ftg			
Wiremold	2600-10	2600 Pancake Raceway, 10' galv.			

Manufacturer	Model Number	Description	Price – Year 1	Price – Year 2	Price – Optional Year 3
Wiremold	2186	Adj Offset Connector, galv.			
Wiremold	1546T	Telephone outlet box, galv.			
Panduit	T70BIW10	T-70 base, 10'			
Panduit	T70CIW10	T-70 cover, 10'			
Panduit	T70DW10	Divider wall, 10'			
Panduit	T70BCIW-X	Base cplr, pk/10			
Panduit	T70CCIW-X	Cover cplr			
Panduit	T70ICIW	Inside corner			
Panduit	T70OCIW	Outside corner			
Panduit	T70RAIW	Right Angle			
Panduit	T70ECIW	End cap			
Panduit	T70EEIW	Entrance end ftg			
Panduit	T70WR-X	Wire retainer, Bx/10			
Panduit	T70DB-X	NEMA dplx device bracket, LV			
Panduit	T70HB-X	NEMA dplx hanging box, pk/10			
Panduit	T70PSIW	NEMA dplx snap-on faceplate			
Systimax	108265455	3P mtg frame for Decora faceplates			
Panduit	LD5IW10-A	LD10x10' Elec. Ivory			
Panduit	LD10IW10-A	LD10x10' Elec. Ivory			
Panduit	DCF10IW-X	Drop clg			
Panduit	CFX10IW-X	Cplr			
Panduit	ICFC10IW-X	Inside corner			
Panduit	OCFX10-X	Outside corner			
Panduit	RAFC10IW-X	Right Angle			
Panduit	ECF10IW-X	End cap			
Panduit	TFC10IW-X	Tee			
Panduit	RAEFIW-X	RA Entrance end ftg			
Panduit	JB1DIW-A	Sgl gang deep box, elec. ivory			
Panduit	LD5IW6-A	Dbt gang junction box, elec. ivory			
Indoor Fiber - MIC Riser Cable					
Corning	006E81-31131-24	06 strand Corning SM Inside fiber			
Corning	012E81-31131-24	12 strand Corning SM Inside fiber			
Corning	024E81-31131-24	24 strand Corning SM Inside fiber			
Corning	048E81-61131-24	48 strand Corning SM Inside fiber			
Corning	096E81-T3131-24	96 strand Corning SM Inside fiber			
Corning	006S81-31180-24	06 strand Corning MM Inside fiber			
Corning	012S81-31180-24	12 strand Corning MM Inside fiber			

Manufacturer	Model Number	Description	Price – Year 1	Price – Year 2	Price – Optional Year 3
Corning	024S81-31180-24	24 strand Corning MM Inside fiber			
Corning	006S81-61180-24	48 strand Corning MM Inside fiber			
Corning	006S81-T3180-24	96 strand Corning MM Inside fiber			
Outdoor Fiber - FreedM Ribbob Riser Cable					
Corning	012ECF-14101-20	12 strand Corning SM Outdoor fiber			
Corning	024ECF-14101-20	24 strand Corning SM Outdoor fiber			
Corning	048ECF-14101-20	48 strand Corning SM Outdoor fiber			
Corning	096ECF-14101-20	96 strand Corning SM Outdoor fiber			
Corning	144ECF-14101-20	144 strand Corning SM Outdoor fiber			
Corning	012SCF-14180-20	12 strand Corning MM Outdoor fiber			
Corning	024SCF-14180-20	24 strand Corning MM Outdoor fiber			
Corning	048SCF-14180-20	48 strand Corning MM Outdoor fiber			
Corning	096SCF-14180-20	96 strand Corning MM Outdoor fiber			
Corning	144SCF-14180-20	144 strand Corning MM Outdoor fiber			
Data Cabinets					
CPI	M1050-141	Chattsworth Mseries Megaframe Cab			
CPI	46353-x03	Chattsworth Uni Rack			
Fiber Panel					
Corning	CC4E41612D3CCF001B				
Patch Cords - Fiber					
Corning	05 50 02 C5120 010F	LC/ST dplx 50 micron MM 10'			
Corning	05 57 02 C5120 010F	LC/SC dplx 50 micron MM 10'			
Corning	05 05 02 C5120 020F	LC/LC dplx 50 micron MM 20'			
Inside Copper Patch Panel					
Systimax	760062372	24 Port 1100 GS3 Panel with Term. Mgr.			
Systimax	760062380	48 Port 1100 GS3 Panel with Term. Mgr.			
Inside Copper Cable					
	700210164	Plenum 071 004E GR Green W1000 Foot WE-TOT Box			
	700212061	Non-Plenum 1071 004E GR Green W1000 Foot WE-TOT Box			