

EXHIBIT A



Notification of Commitment Adjustment Letter

Funding Year 2004: July 1, 2004 - June 30, 2005

March 16, 2011

Oswaldo A Galarza
OAKLAND UNIFIED SCHOOL DIST
314 E. 10th Street, Room 211
OAKLAND, CA 94606 2212

Re: Form 471 Application Number: 414000
Funding Year: 2004
Applicant's Form Identifier: OUSDY7-WI
Billed Entity Number: 144227
FCC Registration Number: 0012236949
SPIN: 143004549
Service Provider Name: JDL Technologies, Inc.

Service Provider Contact Person: Melissa Johnson

Our routine review of Schools and Libraries Program (Program) funding commitments has revealed certain applications where funds were committed in violation of Program rules.

In order to be sure that no funds are used in violation of Program rules, the Universal Service Administrative Company (USAC) must now adjust your overall funding commitment. The purpose of this letter is to make the required adjustments to your funding commitment, and to give you an opportunity to appeal this decision. USAC has determined the applicant is responsible for all or some of the violations. Therefore, the applicant is responsible to repay all or some of the funds disbursed in error (if any).

This is NOT a bill. If recovery of disbursed funds is required, the next step in the recovery process is for USAC to issue you a Demand Payment Letter. The balance of the debt will be due within 30 days of that letter. Failure to pay the debt within 30 days from the date of the Demand Payment Letter could result in interest, late payment fees, administrative charges and implementation of the "Red Light Rule." The FCC's Red Light Rule requires USAC to dismiss pending FCC Form 471 applications if the entity responsible for paying the outstanding debt has not paid the debt, or otherwise made satisfactory arrangements to pay the debt within 30 days of the notice provided by USAC. For more information on the Red Light Rule, please see "Red Light Frequently Asked Questions (FAQs)" posted on the FCC website at http://www.fcc.gov/debt_collection/faq.html.

TO APPEAL THIS DECISION:

You have the option of filing an appeal with USAC or directly with the Federal Communications Commission (FCC).

If you wish to appeal the Commitment Adjustment Decision indicated in this letter to USAC your appeal must be received or postmarked within 60 days of the date of this letter. Failure to meet this requirement will result in automatic dismissal of your appeal. In your letter of appeal:

1. Include the name, address, telephone number, fax number, and email address (if available) for the person who can most readily discuss this appeal with us.
2. State outright that your letter is an appeal. Identify the date of the Notification of Commitment Adjustment Letter and the Funding Request Number(s) (FRN) you are appealing. Your letter of appeal must include the
 - Billed Entity Name,
 - Form 471 Application Number,
 - Billed Entity Number, and
 - FCC Registration Number (FCC RN) from the top of your letter.
3. When explaining your appeal, copy the language or text from the Notification of Commitment Adjustment Letter that is the subject of your appeal to allow USAC to more readily understand your appeal and respond appropriately. Please keep your letter to the point, and provide documentation to support your appeal. Be sure to keep a copy of your entire appeal including any correspondence and documentation.
4. If you are an applicant, please provide a copy of your appeal to the service provider(s) affected by USAC's decision. If you are a service provider, please provide a copy of your appeal to the applicant(s) affected by USAC's decision.
5. Provide an authorized signature on your letter of appeal.

To submit your appeal to us on paper, send your appeal to:

Letter of Appeal
Schools and Libraries Division - Correspondence Unit
100 S. Jefferson Rd.
P. O. Box 902
Whippany, NJ 07981

For more information on submitting an appeal to USAC, please see the "Appeals Procedure" posted on our website.

If you wish to appeal a decision in this letter to the FCC, you should refer to CC Docket No. 02-6 on the first page of your appeal to the FCC. Your appeal must be received by the FCC or postmarked within 60 days of the date of this letter. Failure to meet this requirement will result in automatic dismissal of your appeal. We strongly recommend that you use the electronic filing options described in the "Appeals Procedure" posted on our website. If you are submitting your appeal via United States Postal Service, send to: FCC, Office of the Secretary, 445 12th Street SW, Washington, DC 20554.

FUNDING COMMITMENT ADJUSTMENT REPORT

On the pages following this letter, we have provided a Funding Commitment Adjustment Report (Report) for the Form 471 application cited above. The enclosed Report includes the Funding Request Number(s) from your application for which adjustments are necessary. See the "Guide to USAC Letter Reports" posted at <http://usac.org/sl/tools/reference/guide-usac-letter-reports.aspx> for more information on each of the fields in the Report. USAC is also sending this information to your service provider(s) for informational purposes. If USAC has determined the service provider is also responsible for any rule violation on the FRN(s), a separate letter will be sent to the service provider detailing the necessary service provider action.

Note that if the Funds Disbursed to Date amount is less than the Adjusted Funding Commitment amount, USAC will continue to process properly filed invoices up to the Adjusted Funding Commitment amount. Review the Funding Commitment Adjustment Explanation in the attached Report for an explanation of the reduction to the commitment(s). Please ensure that any invoices that you or your service provider(s) submits to USAC are consistent with Program rules as indicated in the Funding Commitment Adjustment Explanation. If the Funds Disbursed to Date amount exceeds your Adjusted Funding Commitment amount, USAC will have to recover some or all of the disbursed funds. The Report explains the exact amount (if any) the applicant is responsible for repaying.

Schools and Libraries Division
Universal Services Administrative Company

cc: Melissa Johnson
JDL Technologies, Inc.

Funding Commitment Adjustment Report for
Form 471 Application Number: 414000

Funding Request Number:	1138904
Services Ordered:	INTERNAL CONNECTIONS
SPIN:	143004549
Service Provider Name:	JDL Technologies, Inc.
Contract Number:	N/A
Billing Account Number:	
Site Identifier:	144227
Original Funding Commitment:	\$6,243,632.76
Commitment Adjustment Amount:	\$6,243,632.76
Adjusted Funding Commitment:	\$0.00
Funds Disbursed to Date	\$6,228,536.53
Funds to be Recovered from Applicant:	\$6,223,428.11

After a thorough investigation, it has been determined that this funding commitment must be rescinded in full. On your FY 2004 FCC Form 470, you certified that you reviewed and complied with all FCC, state and local procurement/competitive bidding requirements. During an audit, it was determined that you failed to comply with all state procurement requirements. Specifically, California public contract law requires (in contracts using federal funding) that at the time the contract is awarded, the contractor shall be properly licensed in accordance with the laws of this state. California public contract law also requires that the contract shall not be awarded unless the state agency has verified that the contractor has a valid license in the appropriate classification for the work performed. Additionally, the first payment may not be made until it is verified with the Registrar of Contractors, that the contractor was properly licensed at the time the contract was awarded. Further, the failure of the contractor to be licensed at the time the contract is awarded will constitute a failure to execute the contract.

At the time the contract was awarded, the service provider was not licensed in the State of California to perform the work that was bid upon. Since you failed to comply with all California state procurement laws, you violated the Commissions rules requiring compliance with all FCC and state and local competitive bidding or procurement laws during the competitive bidding process. Accordingly, your funding commitment will be rescinded in full and USAC will seek recovery of any disbursed funds from the applicant.

Also, after a thorough investigation, it has been determined that funds were improperly disbursed on this funding request. During the audit it was determined that the following equipment purchased with the Universal Service funds for FY 2004, FRN 1138904, could not be located: switches and GBICs. FCC rules require that the equipment purchased with program discounts be located at an eligible entity and be utilized effectively for educational purposes. The rules require that applicants retain asset and inventory records of equipment purchased and components of supported internal connections services sufficient to verify the location of such equipment for five years. Since the equipment purchased with Universal Service funds could not be located, the above FCC rules were violated. USAC will seek recovery of \$24,162.61 of improperly disbursed funds from the applicant.

EXHIBIT B

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Request for Review by)	
Oakland Unified School District)	
Oakland, California, of)	
)	
Decision of Universal Service Administrator)	CC Docket No. 02-6
)	
Schools and Libraries Universal Service)	
Support Mechanism)	

DECLARATION OF PAUL HOY

I, Paul Hoy, declare as follows:

I. INTRODUCTION

1. I am an employee of, and the Director, Enterprise Network Services for, the Oakland Unified School District ("OUSD").
2. I submit this declaration in support of OUSD's Request for Review of the Decision of the Universal Service Administrator.
3. Upon information and belief, OUSD began participating in the E-Rate program in 1998 and since then has received discounts for telecommunications and Internet services averaging over 80 percent and totaling, to date, over approximately \$55,000,000.

II. E-RATE FUNDING FOR THE JULY 1, 2004 TO JUNE 30, 2005 FUNDING YEAR

4. On December 14, 2003, OUSD posted a Request for Proposals ("RFP") on its website.

5. Upon information and belief, on December 14 and 22, 2003, OUSD advertised the RFP in the Oakland Tribune.
6. Upon information and belief, responses to the RFP were due January 14, 2004 but a one week extension for submission of additional information relating to pricing extended the selection process to January 21, 2004.
7. Upon information and belief, on January 21 and 22, 2004, OUSD staff evaluated the bids and considered price as the primary evaluation factor.
8. On January 22, 2004, OUSD staff selected JDL Technologies ("JDL") as the most cost-effective vendor of the services requested.
9. Upon information and belief, on January 28, 2004, OUSD's State Administrator accepted the OUSD staff's recommendation to submit the FCC Form 471 application.
10. Upon information and belief, on February 2, 2004, the FCC Form 471 application was due and OUSD submitted its FCC Form 471 with the January 29, 2004 Agreement (Exhibit C) attached.
11. Upon information and belief, on July 20, 2004, the Universal Service Administrative Company ("USAC") approved OUSD's FCC Form 471 application.
12. Upon information and belief, on April 14, 2005, OUSD completed its negotiations with JDL to provide services.
13. Upon information and belief, OUSD did not pay JDL and JDL did not perform any services for OUSD until after April 14, 2005.

III. USAC'S E-RATE AUDIT OF OUSD

14. In 2008, an independent auditor audited OUSD's use of E-Rate funding.
15. From July 1, 2009 to December 7, 2010, USAC withheld E-Rate funding from OUSD.
16. Upon information and belief, from July 1, 2009 to December 7, 2010, OUSD had to borrow funds to pay for its telephone and Internet charges because USAC withheld funding.
17. From December 2009 to December 7, 2010, OUSD could not make repairs to its broadband network because USAC withheld funding.

I declare under penalty of perjury that the foregoing is true and correct. Executed on May 13, 2011, at Oakland, California.

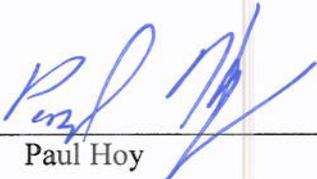
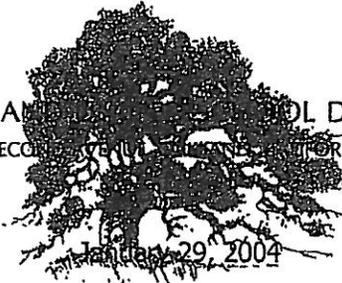
By: 
Paul Hoy

EXHIBIT C

OAKLAND UNIFIED SCHOOL DISTRICT
1025 SECOND STREET, OAKLAND, CALIFORNIA 94606



Mr. Jon Ebert
Vice President, Business Development
JDL Technologies
5555 West 78th Street
Edina, MN 55439-2702

RE: Binding Agreement Preparatory to Signed Contract: # _____
E-Rate Application Number: 839430000471190
Applicant Name: JDL Technologies
Authorized Signature: _____
Purchase Order Number: _____

Dear Mr. Ebert:

Congratulations on your selection and approval by the State Administrator of the Oakland Unified School District on January 28, 2004 as a successful E-Rate vendor to support the District's E-Rate application. The District is proceeding to establish Purchase Orders for the scope of services described in your application. This letter along with the Purchase Orders constitutes a binding agreement between you and the District preparatory to a formal signed contract between you and the District.

However, it is imperative that you get your proposed contract language to the District as soon as possible so that it can be reviewed, revised if needed, approved and a formal contract entered into. Please send the proposed contract language to Oswaldo Galarza by either e-mail (Oswaldo.Galarza@secmail.ousd.k12.ca.us) or facsimile (510) 879-1848 and forward a copy to Roy Combs, General Counsel of the District by either e-mail (Roy.Combs@secmail.ousd.k12.ca.us) or facsimile (510) 870-1833 as soon as possible.

Again, congratulations and we look forward to working with you upon approval of your E-Rate applications.

Sincerely,

Randolph Ward, Ed.D., State Administrator
Oakland Unified School District

RW:GH:OG:wg
Cc: Roy Combs, General Counsel
Sadiq Ikharo, Purchasing

OAKLAND UNIFIED SCHOOL DISTRICT
1025 SECOND STREET, OAKLAND, CALIFORNIA 94606

January 29, 2004

Mr. Jon Ebert
Vice President, Business Development
JDL Technologies
5555 West 78th Street
Edina, MN 55439-2702

RE: Binding Agreement Preparatory to Signed Contract: # _____
E-Rate Application Number: 839430000471190
Applicant Name: JDL Technologies
Authorized Signature: [Signature]
Purchase Order Number: _____

Dear Mr. Ebert:

Congratulations on your selection and approval by the Governing Board of the Oakland Unified School District on January 28, 2004 as a successful E-Rate vendor to support the District's E-Rate application. The District is proceeding to establish Purchase Orders for the scope of services described in your application. This letter along with the Purchase Orders constitutes a binding agreement between you and the District preparatory to a formal signed contract between you and the District.

However, it is imperative that you get your proposed contract language to the District as soon as possible so that it can be reviewed, revised if needed, approved and a formal contract entered into. Please send the proposed contract language to Oswaldo Galarza by either e-mail (Oswaldo.Galarza@secmail.ousd.k12.ca.us) or facsimile (510) 879-1848 and forward a copy to Roy Combs, General Counsel of the District by either e-mail (Roy.Combs@secmail.ousd.k12.ca.us) or facsimile (510) 870-1833 as soon as possible.

Again, congratulations and we look forward to working with you upon approval of your E-Rate applications.

Sincerely,

Randolph Ward, Ed.D., State Administrator
Oakland Unified School District

Gregory Hodge, President, Governing Board
Oakland Unified School District

RW:GH:OG:wg
Cc: Roy Combs, General Counsel
Sadiq Ikharo, Purchasing

EXHIBIT D

Department of Consumer Affairs Contractors State License Board

Contractor's License Detail - License # 847855

⚠️ DISCLAIMER: A license status check provides information taken from the CSLB license database. Before relying on this information, you should be aware of the following limitations.

- CSLB complaint disclosure is restricted by law (B&P 7124.6). If this entity is subject to public complaint disclosure, a link for complaint disclosure will appear below. Click on the link or button to obtain complaint and/or legal action information.
- Per B&P 7071.17, only construction related civil judgments reported to the CSLB are disclosed.
- Arbitrations are not listed unless the contractor fails to comply with the terms of the arbitration.
- Due to workload, there may be relevant information that has not yet been entered onto the Board's license database.

License Number:	847855	Extract Date: 08/03/2009
Business Information:	J D L TECHNOLOGIES INCORPORATED 5555 WEST 78TH STREET EDINA, MN 55439 Business Phone Number: (952) 946-1810	
Entity:	Corporation	
Issue Date:	10/05/2004	
Expire Date:	10/31/2006	
License Status:	This license is expired and not able to contract at this time. The license will need to replace the qualifying person to renew active or reactivate.	
Additional Status:	The license will need a contractors bond to renew active or reactivate. The license will need to meet the workers compensation requirements to renew active or reactivate.	
Classifications:	CLASS	DESCRIPTION
	C-7	LOW VOLTAGE SYSTEMS
Bonding:	CONTRACTOR'S BOND This license filed Contractor's Bond number 104635603 in the amount of \$12,500 with the bonding company TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA. Effective Date: 03/01/2007 Cancellation Date: 03/06/2008 Contractor's Bonding History	
Workers' Compensation:	This license has workers compensation insurance with the FEDERAL INSURANCE COMPANY. Policy Number: 71646612 Effective Date: 07/01/2005 Expire Date: 07/01/2008 Workers' Compensation History	

Personnel listed on this license (current or disassociated) are listed on other licenses.

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EXHIBIT E

**MASTER AGREEMENT
for the Supply of
EQUIPMENT and SERVICES**

Master Agreement #: CA-04-1001

Master Agreement Effective Date: April 4, 2005

Customer Name and Address:

Oakland Unified School District
1025 Second Avenue
Oakland, CA 94606

Customer Billing Address:

Oakland Unified School District
1025 Second Avenue
Oakland, CA 94606

The parties contemplate that from time to time the Customer identified above (**Customer**), will order products and services from **JDL Technologies Inc. (JDL)**, a Minnesota corporation with its principal place of business at 5555 West 78th Street, Edina, Minnesota 55439, pursuant to JDL Statements of Work (SOW). In an effort to facilitate the placement and processing of SOWs, the parties agree that the terms and conditions of this Master Agreement (which may be referred to herein as Agreement) shall apply to products and services ordered pursuant to any SOW which states it is subject to the terms and conditions of this Master Agreement and which is signed by the parties. Neither this Master Agreement nor any Statement of Work shall be binding upon JDL unless and until accepted below in writing by both an authorized representative of JDL and of the Customer.

1. TERMS AND CONDITIONS APPLICABLE TO THE SALE OF EQUIPMENT

- a. **EQUIPMENT:** Equipment shall mean the products set forth on the applicable Statement of Work or such other authorized JDL SOW.
- b. **PURCHASE AND SALE:** JDL shall sell and the Customer shall purchase the Equipment in the quantities and at the prices indicated on the applicable SOW.
- c. **DELIVERY AND INSTALLATION**
 - i. **DELIVERY:** Unless otherwise specified by the Customer, JDL shall arrange for shipment of the Equipment to the Customer's premises. For the Erate Year 7 Internal Wiring and Configuration project, Equipment will be delivered to a JDL facility prior to Installation. Title and risk of loss of and damage to the Equipment shall pass to the Customer upon installation of the Equipment on the Customer premises.
 - ii. **DELIVERY SCHEDULE:** The Equipment shall be delivered on or about the dates set forth on the SOW. All orders of Equipment are firm; however, Customer and JDL shall each have the right to delay originally scheduled delivery dates by up to thirty (30) days provided that the party desiring delay gives the other party written notice of such delay not later than thirty (30) days prior to the originally scheduled delivery date.
 - iii. **SUBSTITUTIONS:** JDL may make Equipment substitutions and modifications provided that such substitutions and modifications are substantially equivalent or better in performance and capabilities to the Equipment originally ordered; provided however, that JDL will not make any Equipment substitutions or modifications without the prior written approval of Technology Services and the Schools and Libraries Division (SLD).
 - iv. **INSTALLATION:** Installations of Equipment performed by JDL shall be at the designated locations and at the rates and times set forth on the SOW. Standard installations are performed between the hours of 8:00

a.m. and 5:00 p.m. local time, Monday through Friday (excluding JDL designated holidays). The "Equipment Installation Date" shall be deemed to be the day after JDL installs the unit of Equipment in question and the unit passes JDL installation tests. In the event the Equipment is not installed by JDL, the Equipment Installation Date shall be deemed to be fifteen (15) days after the unit of Equipment is shipped to the Customer.

d. **EQUIPMENT WARRANTY**

- i. **WARRANTY:** JDL warrants each unit of Equipment to be free from defects in material and workmanship under normal use and operating conditions for a period of ninety (90) days, or such other warranty period as may be indicated on the SOW, after the applicable Equipment Installation Date. During such warranty period, JDL shall repair or replace any defective parts and make any necessary adjustments.
- ii. **EQUIPMENT WARRANTY SERVICE:** Equipment Warranty Service ("Warranty Service") consists of repairs, replacements, and adjustment as are necessary to maintain the Equipment in good working order under normal use and operating conditions. If the Customer has contracted for on-site Equipment Maintenance for the Equipment, then Warranty Services shall also be performed on-site. Otherwise, Warranty Services shall be performed at JDL'S depot; in which case the Customer shall, at its expense, deliver the Equipment to JDL'S depot, properly packed and with an explanation in reasonable detail of the need for service. Upon receipt of the Equipment, JDL will evaluate the need for service. If JDL determines the need for service is not covered by Warranty Service, JDL shall promptly notify Customer to verify if Customer desires JDL to perform services. If Customer does not desire that JDL perform non-warranty repairs, JDL will return the unrepaired Equipment to Customer at Customer's expense. JDL shall return repaired Equipment to the Customer at JDL'S expense. Customer assumes the risk of loss of and damage to the Equipment while in transit. To facilitate on-site Warranty Service, Customer must promptly notify JDL of any changes in site location of Equipment under warranty.
- iii. **EXCLUSIONS TO EQUIPMENT WARRANTY SERVICE:** The exclusions to Equipment Maintenance Service that are set forth in paragraph M3 hereof apply not only to Equipment Maintenance Service but also to Equipment Warranty Service and are therefore incorporated herein by reference.
- iv. **GENERAL TERMS:** The provisions of JDL's Master Agreement General Terms and Conditions ("General Terms") are applicable to the Sale of Equipment.

2. **TERMS AND CONDITIONS APPLICABLE TO EQUIPMENT MAINTENANCE SERVICE**

- a. **EQUIPMENT MAINTENANCE SERVICE:** In consideration of Customer paying in advance the Equipment Maintenance Service Charges set forth on the applicable Equipment Purchase and Equipment Maintenance Service SOW or such other authorized JDL order form, JDL shall render maintenance service for the covered Equipment ("Equipment Maintenance Service") during the Principal Period of Maintenance ("PPM"). Equipment Maintenance Service consists of repairs, replacements, and adjustments in the United States as are necessary to maintain the Equipment in good working order under normal use and operating conditions. The SOW, which may incorporate or alternatively be identified as a Statement of Work, Service Level Agreement or Performance Level Agreement, shall be mutually agreed in writing, signed by the authorized representatives of the parties and may include expanded terms or details relative to Equipment Maintenance Service.
 - **REPLACEMENT PARTS:** Replacement parts provided in connection with Equipment Maintenance Service shall be provided by JDL without charge and shall be either new or reconditioned or reassembled parts which are equivalent to new in performance. All replaced parts originally paid for by Customer shall become the property of JDL; all replaced parts originally funded by E-Rate shall remain the property of CUSTOMER. JDL will maintain a detailed log (by model, part and serial number of both the replaced and replacement parts) of all parts replaced under the Equipment Maintenance Service. JDL will not use reconditioned or reassembled parts during the installation of new Equipment of the Year 7 Internal Wiring and Network Configuration project.
- b. **EXCLUSIONS:** Equipment Maintenance Service does not include repairs, replacements or adjustments or increased service time required as a result of improper installation (unless installation is made by JDL or its authorized representatives); failure to operate the Equipment in accordance with the applicable operator's manual; misuse; abuse; negligence; accident; failure to maintain environmental requirements for the Equipment; modifications, alterations or attachments made by persons other than JDL personnel; use of Equipment, programs or accessories that have not been approved by JDL or the Equipment manufacturer; failure to use supplies or materials meeting JDL'S or the Equipment manufacturer's approval; service rendered by persons other than JDL or JDL'S authorized representatives; third party manufacturer design flaws or errors; de-installations or installations; help desk support; software maintenance or preventive maintenance; or the repair

or replacement of cables. Equipment added to this Agreement may be subject to prior inspection and certification by JDL at its then current rates. JDL reserves the right to charge Customer at JDL'S then-current rates for expendable parts required by Customer (e.g. paper, ink cartridges, etc.)

c. MAINTENANCE TERM; TERMINATION:

- i. **TERM:** The Commencement Date of Equipment Maintenance Service for each unit of Equipment shall be the day immediately following the expiration of any applicable JDL warranty for such Equipment or, for previously installed or third party Equipment, the effective date indicated on the applicable SOW and/or JDL authorized order form. The initial Equipment Maintenance Service term for the Equipment shall be thirty-six (36) months. Customer acknowledges that prepaid Equipment Maintenance Service Charges are non-refundable except as otherwise set forth in Paragraphs d.ii, d.iv, and d.v below.
- ii. **END OF LIFE** In the event JDL elects to discontinue Equipment Maintenance Service for any or all item(s) of Equipment, JDL may terminate Equipment Maintenance Service for such Equipment provided Customer receives six (6) months' prior written notice. In such an event Customer shall be provided with a pro-rated refund of the applicable pre-paid Equipment Maintenance Service Charges.
- iii. **ADDITIONAL UNITS OF EQUIPMENT:** Additional units of Equipment may be added to Equipment Maintenance Service coverage subject to reasonable written notice to JDL. Service coverage for such additional units of Equipment shall be at the then-current Equipment Maintenance Service Charges. The term of coverage for such additional units of Equipment shall be coterminous with Customer's then-existing Equipment Maintenance Service term.
- iv. **SCHOOL SITE CLOSURE:** Customer may terminate Equipment Maintenance Service coverage for the units of Equipment at one or more school sites in the event Customer elects to close such sites and does not relocate the units of Equipment to its other sites, provided Customer gives JDL at least ninety (90) days prior written notice. In such an event Customer shall be provided with a pro-rated refund of the applicable pre-paid Maintenance Service Charges. Customer is solely responsible for notifying the SLD of any school closing where Equipment funded under the E-Rate program is installed and for complying with all E-Rate program rules relating to closed facilities and discontinued use of E-Rate funded Equipment.
- v. **REDUCTION IN UNITS OF EQUIPMENT:** After the first twelve (12) months of Equipment Maintenance Service coverage for a given unit of Equipment, Customer may terminate Equipment Maintenance Service coverage for such unit of Equipment if it is de-installed at a particular school site, and not relocated to another school site or replaced with other Equipment, provided Customer gives JDL at least sixty (60) days prior written notice. In such an event Customer shall be provided with a pro-rated refund of the applicable pre-paid Maintenance Service Charges. Customer is solely responsible for notifying the SLD of the discontinued use of E-Rate funded Equipment.
- d. **EQUIPMENT RELOCATION:** During the Equipment Maintenance Service term, Customer may relocate covered units of Equipment to different Customer school sites at Customer's sole cost, risk and expense; provided however, Customer shall comply with the E-Rate rules governing Equipment transfers and shall notify the SLD of all Equipment transfers as required by the program rules. Customer must provide JDL with at least sixty (60) days prior written notice advising JDL of any such relocation.
- e. **EXTENSION OF TERM:** Equipment Maintenance Service shall automatically renew for successive one (1) year periods unless a party provides written notice to the other party at least ninety (90) days prior to the end of the then-current term of its intention not to renew. If, prior to the start of a renewal period, adequate funding is not approved to cover Equipment Maintenance Service for the renewal period, Customer will not have an obligation to acquire such service and JDL will not be obligated to provide such service.
- **RETURN FOR REPAIR:** In the event the Equipment Maintenance Service is designated as Return for Repair, the Equipment Maintenance Service shall be performed at JDL'S depot; in which case the Customer shall, at its expense, deliver the Equipment to JDL'S depot, properly packed and with an explanation in reasonable detail of the need for service. JDL, at its expense, shall return the repaired Equipment to the Customer. Customer assumes the risk of loss and damage to the Equipment while in transit. The Customer will use all reasonable care when dismantling or reassembling the Equipment by following the Return for Repair instructions given by JDL and having due regard for safety procedures. JDL will maintain a detailed log of all Equipment designated as Return for Repair. Return for Repair does not apply to the new Equipment installed for the implementation of Year 7 Internal Wiring and Network Configuration.
- f. **TIME AND MATERIALS:** In the event JDL performs services which are not covered hereunder, the

Customer shall pay for such services at JDL'S then-current Time and Materials rates, unless otherwise agreed in writing by the authorized representatives of the parties.

- g. **GENERAL TERMS:** The provisions of JDL's Master Agreement General Terms and Conditions ("General Terms") are applicable to Equipment Maintenance Services.

3. TERMS AND CONDITIONS APPLICABLE TO SOFTWARE MAINTENANCE

- a. **SOFTWARE MAINTENANCE:** In consideration of Customer paying in advance the Software Maintenance charges set forth on the applicable Software License and Software Maintenance SOW or such other authorized JDL order form, JDL shall provide Customer with Software Maintenance for the applicable Software subject to the terms and conditions of this Agreement. During Software Maintenance coverage, JDL shall use every commercially reasonable effort to remedy any Customer reported Software incidents or intrinsic errors which are confirmed by JDL. Such remedy shall be in the form of error correction or avoidance action. Customer understands and acknowledges that due to the nature of software, no guarantee is given of uninterrupted or error free running or that all errors will be rectified by error correction or avoidance action. Software Maintenance shall include:
 - i. corrections;
 - ii. periodic updates which JDL may, in its sole discretion, elect to issue as part of Software Maintenance;
 - iii. remote assistance with installation of corrections and updates;
 - iv. preventive maintenance consisting of general systems level fixes;
 - v. remote assistance with execution problem resolution;
 - vi. providing incident reporting and action follow-up; and
 - vii. access to JDL's Customer Support Center Toll Free number.
- b. **SOFTWARE MAINTENANCE EXCLUSIONS:**
 - i. Upgrades; new releases; enhancements; installation; custom programming; training; data recovery services; or Equipment and related supplies;
 - ii. Error correction, fixes or support necessitated as a result of service rendered by persons other than JDL, use of the Software in combination with unauthorized Equipment or software, or use of the Software in a manner other than in accordance with its product description; and
 - iii. Maintenance of Software which has been discontinued pursuant to Paragraph SM10 below.
- c. **COMMENCEMENT; TERM:** Software Maintenance shall commence on the date immediately following the expiration of any JDL warranty for such Software or the commencement date indicated on the applicable Order Form. The initial Software Maintenance term for the Software shall be twelve (12) months, unless otherwise specified on the applicable SOW. Software Maintenance shall automatically renew for successive one (1) year periods unless a party provides written notice to the other party at least ninety (90) days prior to the end of the then-current term of its intention not to renew. If, prior to the start of a renewal period, adequate funding is not approved to cover Equipment Maintenance Service for the renewal period, Customer will not have an obligation to acquire such service and JDL will not be obligated to provide such service.
- d. **REMOTE ACCESS:** Software Maintenance shall be provided by JDL via telephone or remote access to Customer's system. Customer shall make such telephone or remote access available to JDL at Customer's sole cost and expense. In the event JDL, in its sole discretion, determines that on-site support is required, JDL, in such instances, shall bear the cost of any expenses incurred by JDL in connection with such on-site support. Any other on-site support performed by JDL at Customer's request shall be at JDL's then-current professional services rates, charged on a portal-to-portal basis and any travel costs connected with such on-site support shall be charged to Customer. Software Maintenance Remote Access does not apply to the new Equipment installed for the implementation of the Year 7 Internal Wiring and Network Configuration project.
- e. **ADDITIONAL CHARGES:** Shipping charges associated with providing any corrections or updates, charges for any media (diskettes/tapes/cds), training materials and related documentation will be charged to Customer. In the event JDL performs services, which are not covered by Software Maintenance (including without limitation services connected with the Software Maintenance Exclusions described in Paragraph 3.b above), Customer shall pay for such services at JDL's then-current Time and Materials rates, unless otherwise agreed in writing by the authorized representatives of the parties. All services out of scope or not called for in the RFP will be covered by change orders to be mutually agreed upon by the District and JDL. Any additional work

outside the scope of this SOW will require written approval from the Customer's Information Technology Officer and a Purchase Order (PO) from the District, prior to the start of any change order actions required.

- f. **CUSTOMER OBLIGATIONS:** In order for JDL to perform its Software Maintenance obligations, Customer, in addition to any other obligations set forth in this Agreement, is required and agrees to do the following:
- i. Install all corrections and updates issued by JDL for a specific release of Software;
 - ii. Provide all reasonable assistance as requested by JDL to resolve the reported Software incident or intrinsic error successfully. Such assistance shall include, without limitation, providing copies to JDL of Customer's current software, operator instructions, report formats and related parameter files, as appropriate; taking reasonable actions to document or record the form, nature, apparent cause or symptoms of the Software incident or intrinsic error; and designating a technically qualified point of contact from Customer's organization to interface with JDL;
 - iii. Ensure that only adequately trained and authorized personnel are allowed to operate the Software and the Equipment upon which the Software is installed;
 - iv. Make reasonable determination that the cause of the incident is attributable to the Software; and
 - v. Migrate to the latest Software release, at Customer's cost and expense, if the Software release then currently utilized by Customer is discontinued pursuant to SM10 below, and Customer desires continued Software Maintenance.
- g. **SOFTWARE MAINTENANCE WARRANTY:** JDL warrants the Software Maintenance shall be provided in a professional and workmanlike manner.
- h. **CHANGES IN SOFTWARE MAINTENANCE CHARGES:** From time to time, JDL may increase Software Maintenance Charges provided that JDL gives the Customer at least sixty (60) days prior written notice of each such increase. Any such increase in Software Maintenance Charges shall not be effective until the expiration of twelve (12) months from the date a particular version of the Software was first installed for Customer.
- i. **CUSTOMER SYSTEMS:** Customer acknowledges that it may have to upgrade its systems software components, software libraries, and/or source code compilers in order to receive Software corrections and/or updates if such are made available. Customer acknowledges that any such upgrade of its systems components, libraries and compilers will be its responsibility and cost and is not covered by the terms and conditions of this Agreement. Migration of Customer's Software to the then-currently supported Software release shall be subject to JDL's then-current rates and the Terms and Conditions Applicable to Software License.
- j. **DISCONTINUANCE OF SOFTWARE MAINTENANCE:** JDL shall have the right at any time to discontinue Software Maintenance:
- i. in the event support for specific products and/or a specific release of the Software is generally withdrawn, so long as JDL provides Customer with at least three (3) months prior written notice. In the event support is discontinued in accordance with this subparagraph, and no later supported release is available, JDL shall refund to Customer a prorata portion of any applicable prepaid Software Maintenance charges.
 - ii. if a third party software provider to JDL withdraws support of Software which is under Software Maintenance or software which is utilized by JDL in providing such Software Maintenance. In such an event, JDL shall provide Customer with written notice consistent with the notice issued by such third party provider to JDL. In the event of discontinuance in accordance with this subparagraph, JDL shall refund to Customer a prorata portion of any applicable prepaid Software Maintenance charges.
 - iii. if software not supplied or validated by JDL is used with the Software or if the Software is modified or merged by Customer or by a third party on behalf of Customer.
- k. **REINSTATEMENT FEE:** In the event Customer discontinues and then subsequently seeks to reinstate Software Maintenance, Customer shall pay to JDL a reinstatement fee equal to the Software Maintenance Charges that would otherwise have been due for the period of discontinuance. Customer shall also be responsible for any costs associated with migrating Customer to the then-currently supported version of the Software in question, which costs include without limitation License Charges for the latest Software release and/or upgrades, and any related installation, integration or customization fees.
- l. **GENERAL TERMS:** The provisions of JDL's Master Agreement General Terms and Conditions ("General Terms") are applicable to Software Maintenance.

4. TERMS AND CONDITIONS APPLICABLE TO PROFESSIONAL SERVICES

- a. **PROFESSIONAL SERVICES:** In consideration of the payment by Customer of the Professional Services rates and charges specified on the Professional Services SOW or such other authorized JDL order form, JDL shall provide the Professional Services which are described on the SOW or the Statement of Work (as defined in paragraph PS2 below). Such Professional Services may include, but shall not be limited to, network design, professional development, staging and integration, cabling and wiring, project management, on-site technical support, telephone support, network operation support, testing, training, and consulting.
- b. **STATEMENT OF WORK:** The Statement of Work constitutes the complete and exclusive definition and description of the Professional Services to be performed by JDL and may include, without limitation, the following elements: Professional Services description (including specifications, if applicable); description of any Deliverables (as defined in PS3 below); performance schedule; completion and acceptance criteria for Deliverables; pricing and payment; special or other terms (if any); and signature of authorized representatives of both parties.
- c. **DELIVERABLE:** "Deliverable" shall mean any product to be designed, created, produced, manufactured or otherwise developed by JDL for Customer pursuant to this Agreement and shall be fully described in the applicable Statement of Work. A Deliverable may include, without limitation, custom designed software; software modifications, enhancements, updates and/or corrections; derivative works; supporting documentation; training materials; manuals; and/or requirement studies.
- d. **RATES/EXPENSES**
- i. **FIXED PRICE:** For Professional Services provided to Customer on a fixed price basis, JDL shall provide such services based on a standard work day defined as an eight (8) hour working day of 8:00 AM to 5:00 PM, local time where the Professional Services are being performed for Customer, Monday through Friday, excluding JDL and Customer-designated holidays. In the event Customer requests and JDL agrees to provide Professional Services at times outside of or in excess of the foregoing standard workday, such agreement by JDL may be subject to an increase in the fixed price. All services out of scope or not called for in the RFP will be covered by change orders to be mutually agreed upon by the District and JDL. Any additional work outside the scope of this SOW will require written approval from the CUSTOMER'S Information Technology Officer and a PO from the District, prior to the start of any change order actions required.
- ii. **TIME AND MATERIALS:** Professional Services provided to Customer on a Time & Materials (T&M) basis are subject to the following conditions:
1. For T&M daily rates, a "Day" is defined as an eight (8) hour working day of 8:00 AM to 5:00 PM, at the location where the Professional Services are being performed for Customer, Monday through Friday, excluding JDL and Customer-designated holidays. Professional Services performed in excess of eight (8) hours in a given Day, or Professional Services performed on Saturday, Sunday or on a JDL or Customer-designated holiday, shall be performed at JDL's then-current overtime or holiday T&M rates.
 2. JDL personnel working on a T&M basis for Customer will complete a weekly time sheet, which will be provided to Customer's project manager. JDL's monthly invoice to Customer for T&M tasks will be based upon such time sheets.
 3. Customer will reimburse JDL for T&M tasks on a monthly basis, not later than thirty (30) days from the date of JDL's invoice.
 4. T&M rates shall be those in effect when the Professional Services are rendered.
 5. All services out of scope or not called for in the RFP will be covered by change orders to be mutually agreed upon by the District and JDL. Any additional work outside the scope of the SOW will require written approval from the CUSTOMER'S Information Technology Officer and a PO from the District, prior to the start of any change order actions required.
- iii. **EXPENSES:** Any expenses incurred by JDL which are directly attributable to such Professional Services and are not expressly included within the stated price for services set forth in a SOW, including without limitation out of town travel, lodging and meals, will be charged to Customer and invoiced monthly in arrears. JDL shall provide supporting documentation with any invoice(s) submitted for expense reimbursement.
- e. **CHANGE CONTROL:** Customer may at any time request and JDL may at any time recommend changes to the Statement of Work. Neither party will be obligated to agree to any requested or recommended change, but neither party will unreasonably withhold its agreement to such request or recommendation. Each party's

requested or recommended change shall be addressed in writing to the other party's project manager. JDL will advise Customer in writing of the likely impact of any requested or recommended change to the price or schedule. Until such time as any change is formally agreed to in writing and signed by authorized representatives of both parties, JDL will continue to perform and to be paid for the Professional Services as if such change had not been requested or recommended. Change orders which have been fully executed by the parties shall become supplements to the applicable Statement of Work.

- f. **INTELLECTUAL PROPERTY RIGHTS:** Unless otherwise specified in the applicable Statement of Work, all intellectual property rights including, without limitation, patent rights and copyrights in design arising out of the Deliverables shall be the property of JDL, who shall have the sole rights to seek patent, copyright, registered design or other intellectual property rights protection in connection therewith. Customer acknowledges that all such materials created, developed or prepared by JDL or its personnel under this Agreement are not "works made for hire" for copyright purposes. Customer shall not seek patent, registered design or other intellectual property rights protection for the Deliverables. Customer shall, at JDL's expense, do all things and execute all such documents as JDL may reasonably require to vest in JDL the rights and protection herein referred to. The restrictions, rights and protections herein referred to shall apply regardless of whether the Deliverables were created solely by JDL or by JDL in connection with Customer or any other third party.
- g. **LICENSING:** In the event a Deliverable includes Software, Customer shall receive a license to use such Software subject to JDL's Terms and Conditions Applicable to Software License or in the case of third party software, subject to the applicable third party end user license agreement. Software maintenance of the Deliverables shall be subject to JDL's Terms and Conditions Applicable to Software Maintenance.
- h. **APPROVAL AND ACCEPTANCE:** For Deliverables specifically identified in writing as requiring Customer's written approval or acceptance, such written approval or acceptance shall not be unreasonably withheld or delayed. For such Deliverables, where no acceptance test(s) are specified in writing said Deliverables will be deemed accepted or approved by Customer if JDL has not received written notification of non-acceptance or rejection, which notice shall also specify the reason for non-acceptance or rejection, within ten (10) days after delivery by JDL. In the event of written non-acceptance or rejection, JDL will have a reasonable period of time to address the reasons for such non-acceptance or rejection and then redeliver the Deliverables to Customer, in which event this paragraph shall continue to apply.
 - i. Upon the completion of each deliverable for a school, the JDL Project Manager will schedule a Deliverable Review Meeting or School Walk-through with Customer and complete a Deliverable Acceptance Form (Sign-off Sheet) for a Customer signature representing acceptance of the completed deliverable. Customer shall schedule the Deliverable Review Meeting or School Walk-through within 10 working days of the completed school deliverable.
 - ii. The project deliverable shall be deemed accepted by Customer, in the event Customer fails to schedule a Deliverable Review Meeting or School Walk-through with JDL or provide JDL with a list of unfinished deliverables within the timeframe specified in the preceding paragraph.
- i. **LIMITED WARRANTY:** JDL represents that:
 - i. The Professional Services provided to Customer pursuant to this Agreement shall be performed in a professional and workmanlike manner.
 - ii. The Deliverable shall conform in all material respects to the mutually agreed upon written specifications.
- j. **CUSTOMER OBLIGATIONS:** JDL's ability to perform its obligations (which may include delivery schedules) as set forth in the Agreement or the Statement of Work is contingent upon JDL receiving timely, accurate and complete data, information, Equipment, software, assistance, specifications and payments to the extent that Customer is obligated to provide such to JDL. In the event JDL reasonably determines that any of the foregoing are delayed, inaccurate or incomplete, JDL shall immediately notify Customer and the parties shall work in good faith to rectify any delays, inaccuracies or other discrepancies which may also include written modifications to the Agreement or the Statement of Work. In the event that JDL reasonably determines that the matter is not being resolved to its reasonable satisfaction, JDL reserves the right to stop work pending agreement with Customer on suitable modifications to the Agreement or the Statements of Work, which may include changes to the delivery schedule and pricing. Customer shall promptly notify JDL of anticipated delays in the delivery of items, which are Customer's responsibility and shall provide prompt assistance in resolving any such delays or any problems related to defects in such items reported by JDL. Customer shall dedicate appropriate staff to enable JDL to perform the Professional Services. Customer agrees to assign a project manager or single

point of contact for JDL on a full-time basis, or as mutually agreed otherwise if less than full-time, during the performance of JDL's Professional Services tasks. Customer shall ensure that valid software licenses are in effect for any third party software, which Customer has the responsibility to provide to JDL. JDL agrees that CUSTOMER will not assign a full time Project Manager to the Year 7 Internal Wiring and Network Configuration. However, to avoid project delays, CUSTOMER must provide adequate staff access for regular review meetings, design review, deliverable signoff, schedule changes, school access, and potential security issues.

- k. **CUSTOMER CONTENT:** JDL shall have no liability for any claims, actions, damages or other costs arising out of or in connection with any content, material or other information (including without limitation trademarks, copyrighted material, product information, etc.) provided to JDL by Customer ("Customer Content"). Further, Customer shall defend, indemnify and hold JDL, its officers, directors, employees, parent and affiliate companies, independent contractors, representatives and consultants harmless from any against all claims, demands, actions, causes of action, judgments, costs and reasonable attorney's fees and expenses arising out of or related to the Customer Content. JDL will take steps necessary to protect confidential information, passwords, and system security, when working with CUSTOMER network Equipment during Implementation and Testing.
- l. **ADDITIONAL PROFESSIONAL SERVICES:** Any Professional Services requested by Customer and not included in the Statement of Work may be provided by mutual written agreement of the parties.
- m. **GENERAL TERMS.** The provisions of JDL's Master Agreement General Terms and Conditions ("General Terms") are applicable to Professional Services.

5. MASTER AGREEMENT GENERAL TERMS AND CONDITIONS

a. PAYMENT TERMS

- i. **PAYMENT:** Unless otherwise provided herein, payments are due in United States Dollars not later than thirty (30) days from the date of JDL's invoice. For those products and services eligible and approved for funding under the E-rate program, JDL will invoice both the Schools and Libraries Division (SLD) of the USAC and Customer based on JDL's understanding of the agreement between Customer and SLD regarding the portion of the expenses to be paid by each. Both Customer and JDL agree to comply with all E-Rate program rules pertaining to the eligibility, design, configuration and installation of E-Rate funded Equipment and services. Customer agrees to cooperate fully and actively assist JDL with appealing any payment denial decision issued by the SLD for approved Equipment and/or services. JDL reserves the right to revoke any credit extended to Customer at any time for good cause. If Customer fails to make payments when due and such failure continues for a period of ten (10) days after JDL notifies Customer in writing of such failure, JDL may refuse to perform any further obligations and the supply of all Equipment, Software, warranty, maintenance and professional services may be terminated or suspended by JDL. JDL may charge Customer interest on overdue amounts from the date such amount became due at the lesser of the rate of one and one-half percent (1-1/2%) per month or the maximum interest rate permitted by applicable law. Customer agrees to assist
- ii. **TAXES; DUTIES; FREIGHT:** Customer shall pay all applicable taxes (including Value Added Tax, sales taxes, use taxes, duties and other taxes of all kinds), rates or governmental levies, which are payable in connection with the sale or supply of products and/or services under this Agreement, excluding taxes on JDL'S income. In the event that any tax withholding is due on payments under this Agreement, such tax shall be an additional cost for the Customer who shall promptly provide JDL with a certificate of all tax paid. Customer shall pay all transportation, customs, duties and freight charges from JDL'S point of shipment.
- iii. **RETENTION OF SECURITY INTEREST:** As collateral for the payment by Customer of all amounts owing by Customer to JDL for a given unit of Equipment, Customer hereby conveys and grants to JDL a purchase money security interest in all of Customer's right, title and interest in and to such unit of Equipment and in any proceeds (including accounts receivable) thereof. Upon request of JDL, Customer shall execute any instrument required to perfect such security interest. JDL is authorized to file or record, without Customer's signature, this Agreement, or copy thereof, or any applicable financing statement showing JDL's interest in such unit of Equipment. Upon the default by Customer of any of its payment obligations to JDL under this Agreement or any SOW with respect to such unit of Equipment, JDL shall be entitled to exercise all rights of a secured creditor with respect to such unit of Equipment under the Uniform Commercial Code or under any other applicable law.

b. INDEMNIFICATION:

- i. **INDEMNIFICATION:** JDL will, at its sole expense, defend any action brought against Customer based on a claim that Equipment sold or Software licensed by JDL infringes a United States patent or copyright and will pay all costs and damages finally awarded against Customer in any such action which are attributable to such claim provided that:
 1. Customer promptly notifies JDL of any such claim or allegation of infringement; and
 2. JDL shall have sole control of the defense and settlement of any such claim; and
 3. Customer will provide JDL with such assistance in such defense as JDL may reasonably request; and
 4. Customer shall not incur any cost or expense for JDL'S account without JDL'S prior written consent.
- ii. **LIMITATION:** JDL shall have no liability to Customer under paragraph 4.b.i to the extent such infringement is based upon (i) the use of such Equipment or Software in combination with Equipment, software or services not supplied by JDL; (ii) the use of such Equipment or Software in a manner other than in accordance with its product description and the terms of this Agreement; (iii) modifications to such Equipment or Software made by persons other than JDL personnel; (iv) third party software or Equipment; or (v) the Customer's design or specifications.
- iii. **THE FOREGOING STATES JDL'S ENTIRE LIABILITY HEREUNDER OR OTHERWISE WITH RESPECT TO INFRINGEMENT OF COPYRIGHTS, PATENTS AND ALL OTHER INTELLECTUAL PROPERTY RIGHTS.**
- c. **INTELLECTUAL PROPERTY RIGHTS:** Copyright, patent rights, database rights, trademarks, service marks and any other intellectual property rights in any Equipment, Software or Professional Services, or any other items supplied by JDL pursuant to this Agreement, will remain the property of JDL or its licensors unless otherwise explicitly agreed to in writing by the parties. Customer shall follow all reasonable instructions that JDL gives from time to time with regard to the use of the intellectual property of JDL and JDL's licensors, which instructions may include, without limitation, instructions pertaining to notice of ownership rights.
- d. **DISCLAIMER:** THE WARRANTIES SET FORTH IN ANY SECTION OF THIS MASTER AGREEMENT ARE IN LIEU OF, AND JDL EXPRESSLY DISCLAIMS, ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF NONINFRINGEMENT, MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE; AND THOSE ARISING BY STATUTE OR OTHERWISE IN LAW FROM A COURSE OF DEALING OR USE OR TRADE.
- e. **LIMITATION OF LIABILITY:**
 - i. JDL'S liability for any and all claims, including, without limitation, claims based in contract, in tort (including, but not limited to, negligence and strict liability), at law or in equity shall not exceed the following as applicable:
 1. the fees paid by Customer for the applicable unit of Equipment or Professional Services to which the claim relates; OR
 2. the license fees paid by Customer for the applicable Software to which the claim relates; OR
 3. the fees paid by Customer for Maintenance Services on the applicable unit of Equipment or Software for the twelve (12) months preceding the occurrence to which the claim relates.
 - ii. In the event that a court of competent jurisdiction determines JDL to be liable for bodily injury, death or damage to tangible property, the foregoing limits of liability shall not apply to such bodily injury, death or damage to tangible property; provided, however, that in no event shall JDL'S liability for damage to tangible property exceed \$500,000 (US). JDL shall have no responsibility or liability for Equipment, software or services supplied by persons other than JDL or for modifications to any Equipment or Software which are made by persons other than JDL personnel.
 - iii. **IN NO EVENT SHALL JDL BE LIABLE FOR ANY PUNITIVE, INCIDENTAL, SPECIAL, INDIRECT, ECONOMIC OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, LOSS OF USE, LOSS OF DATA, LOSS OF BUSINESS AND LOSS OF PROFITS) ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT, EVEN IF JDL HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE LIMITATION OF DAMAGES AND REMEDIES AS PROVIDED IN THIS SECTION G6 CONSTITUTE CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES AND MEASURE OF DAMAGES.**
- f. **EMPLOYEES:** JDL and Customer agree that during the time JDL renders Equipment Maintenance Service for a period of six (6) months thereafter, each of the respective parties shall refrain from employing any of the other party's employees who provided services to the other party pursuant to this Agreement unless such employee is

released to the other in writing prior to the commencement of employment. The parties agree that they do not have an adequate remedy at law in the enforcement of the provisions of this paragraph, and therefore agree that, in addition to any other remedies to which the non-breaching party may be legally entitled, the provisions of this paragraph may be enforced by injunctive relief.

- g. **CONFIDENTIAL INFORMATION:** Each party agrees not to use or disclose to any third party, except for the purpose of performing this Agreement, any business and technical information of the other party which, in the exercise of reasonable judgment, should be recognized by such party as confidential ("Confidential Information"). The obligation of confidentiality shall not apply to information which: (a) is or becomes part of the public domain through no fault of the receiving party; (b) is furnished by the disclosing party to others without restrictions on use and disclosure; (c) becomes known or available to the receiving party without restriction from a source other than the disclosing party without breach of any agreement with the disclosing party; (d) is disclosed with prior written approval of the disclosing party; (e) is independently developed by the receiving party without the use of any Confidential Information; (f) is previously known to the receiving party on a non-confidential basis; or (g) is required by court order or government agency to be disclosed, in which case, the receiving party shall give the disclosing party as much notice as is reasonably practical so that the disclosing party may seek a protective order or other confidential protection as the disclosing party, in its sole discretion, may elect and the receiving party shall reasonably cooperate with the disclosing party in disclosing party's efforts to obtain such order or protection.
- h. **NOTICES:** All notices and other communications hereunder shall be in writing and shall be deemed effective when delivered by hand or by facsimile transmission or upon receipt when mailed by registered or certified mail (return receipt requested), postage prepaid, to the respective parties at the addresses listed below. Additionally, all such notices may be electronically transmitted via e-mail.

JDL Technologies, Inc.
5555 W. 78th St.
Edina, MN 55439

Customer:

Attn: Contracts Department
Fax: 952-946-1835

Attn:

- i. **COMPLIANCE WITH LAWS:** (a) JDL shall obtain all licenses, permits and approvals required by any government and shall comply with all applicable laws, rules, policies and procedures including E-Rate and other requirements applicable to the provision of Services under telecommunications and other laws and regulations, of any government where the Services are being provided (collectively "Applicable Laws"). JDL will indemnify and hold Customer harmless for any violation of any Applicable Laws. JDL hereby represents and warrants that: (a) it shall comply with all Applicable Laws; and (b) it shall not act in any fashion or take any action or permit or authorize any action which will render Customer liable for a violation of the U.S. Foreign Corrupt Practices Act, which prohibits the offering, giving or promising to offer or give, directly or indirectly, money or anything of value to any official of a government, political party or instrumentality thereof in order to assist it or Customer in obtaining or retaining business and (i) it will not violate or cause Customer to violate such act in connection with the Services provided hereunder; and (ii) it will notify Customer in writing if any of its owners, partners, principals, officers, and employees are or become, during the term of this Agreement, officials, officers or representatives of any government or political party or candidates for political office. JDL shall use its best efforts to regularly and continuously inform Customer of any requirements of laws, statutes, ordinances, governmental authorities directly or indirectly affecting this Agreement, the provisioning of the Services, or commercial, industrial or intellectual property interests, including, but not limited to, certification of any products provided by JDL hereunder from the proper authorities.

Customer hereby represents and warrants that it will comply with all Applicable Laws, including E-Rate, and will indemnify and hold JDL harmless for any violation arising out of Customer's breach of any Applicable Laws.

j. **GENERAL:**

- i. **INDEPENDENT CONTRACTOR:** JDL is, and shall act as, an independent contractor and not as an agent or employee of Customer. Neither this Agreement, nor any terms and conditions contained herein, shall be construed as creating a partnership, joint venture, agency or franchise relationship.
- ii. **DIAGNOSTIC MATERIALS:** From time to time JDL may lend to Customer "Diagnostic Materials" which may include diagnostic and test routines, software, manuals, documentation and data. These Diagnostic Materials are not the subject of any license granted to the Customer for its own use but shall be held at the Customer's site as an aid to the carrying out of services by JDL. The Customer shall use the Diagnostic Materials solely in the manner and for the purposes specified by JDL and will follow JDL'S advice concerning their use. The Customer shall keep the Diagnostic Materials, including the results obtained by their use, confidential and will not disclose the same to any third party. The Customer shall permit JDL at all reasonable times to audit the use of Diagnostic Materials and to remove the Diagnostic Materials.
- iii. **ASSIGNMENT:** Customer may not assign or transfer this Agreement or the rights and obligations set forth herein, even in connection with or as a result of any merger, sale or acquisition and including processing a SPIN change with the SLD, without the prior written consent of JDL.
- iv. **NOTICES:** All notices hereunder shall be in writing and sent by certified mail, postage prepaid, return receipt requested or commercially acceptable overnight delivery service. Notices shall be addressed to the parties at their respective addresses set forth on the face hereof or at such other address as specified in writing by either party from time to time and shall be deemed given upon receipt or refusal.
- v. **INTEGRATION; ENTIRE AGREEMENT:** This Agreement together with any pertinent exhibits, SOWs and addenda shall be the complete agreement between the parties with respect to its subject matter and supersedes all representations, promises, quotes and proposals, whether they be oral or written, between the parties. Any terms and conditions set forth in any order or letter from Customer shall be without effect. Unless otherwise explicitly agreed in writing by the parties, all orders placed by Customer are subject to the terms and conditions set forth in this Agreement irrespective of the means by which the orders are placed or the form used. This Agreement may be modified only by written instrument.
- vi. **WAIVER:** No terms or conditions hereof shall be deemed waived and no breach or default excused unless such waiver or excuse is in writing and signed by the party to be charged.
- vii. **THIRD PARTY SERVICE:** JDL reserves the right to provide the services that are set forth in this Agreement through authorized JDL agents.

- viii. **ACCESS; FACILITIES:** Customer shall provide JDL with reasonable access to Customer facilities, network, Equipment and software at all reasonable times in order to provide the applicable services. Customer, at its own expense, shall make available to JDL appropriate staff who are familiar with the Customer's Equipment, network, software and/or applications, and shall provide suitable working space, reasonable telephone use privileges and facilities for JDL as reasonably needed. The Customer will, at its expense, provide such on-site telecommunication facilities, data line access and cabling as are reasonably required by JDL to provide the applicable services. Customer shall keep at its premises for use by JDL the latest issue of software used by the Customer.
- ix. **DATA TRANSMISSION:** The ability of any unit of Equipment to meet its data transmission speed specifications, if any, is subject to limitations imposed on the use of telecommunications lines by the agency furnishing such lines and to the availability of telecommunications Equipment and lines.
- x. **CARE AND USE:** Customer shall use the Equipment in the manner contemplated by any applicable product description and operator's manual. Customer shall supervise, manage and control the proper use of the Equipment (including routine Customer maintenance that JDL may reasonably specify from time to time) according to the terms and conditions of this Agreement. Customer shall ensure that properly trained staff use the Equipment and follow the advice and recommendations from JDL. Customer is responsible for adequate backup plans, restart procedures, checks for accuracy and security of data.
- xi. **THIRD PARTY SOFTWARE:** Certain software supplied by JDL may be licensed by third parties. Customer's use of such third party software may be subject to the terms and conditions of a separate sublicense agreement or the licensor's end user license agreement. Such terms and conditions shall govern Customer's use of any such third party software.
- xii. **HIGH RISK USES:** JDL products are designed, developed and manufactured as contemplated for general use, including without limitation, general office use, commercial use, and ordinary industrial use, but JDL products are not designed for use in circumstances that require extremely high-level safety precautions that may involve catastrophic property damage or that could lead directly to death or severe personal injury ("High Risk Uses") including, without limitation, uses in connection with control of nuclear reactions, aircraft and satellite flight and traffic control, mass transport control, medical treatment and life support systems, and aerospace and missile launch control in weapon systems. Customer shall not use JDL products for High Risk Uses. JDL disclaims liability for the use of JDL products in High Risk Use applications. JDL expressly excludes High Risk Uses of JDL products from coverage under corresponding JDL warranties, express and implied. Parties using or selling JDL products for use in High Risk Use applications do so at their own risk and agree to fully indemnify and hold harmless JDL for any damages resulting from such improper use.
- xiii. **REFERENCES/MARKETING:** Upon reasonable request by JDL, Customer shall cooperate and provide JDL with reasonable assistance with marketing activities undertaken by JDL in connection with the products and services provided to Customer under this Agreement. Such marketing assistance may include providing references and cooperating in the issuance of press releases. It is understood that JDL shall obtain Customer's prior approval, which approval shall not be unreasonably withheld, before using Customer's name in any marketing material.
- xiv. **FORCE MAJEURE:** JDL will not be liable for any delay or for failure to perform its obligations hereunder resulting from any cause beyond JDL'S reasonable control, including, but not limited to: Customer's failure to timely supply JDL with necessary data, information or specifications if in fact Customer has agreed to supply any such data, information or specifications to JDL; any changes in any such data, information or specifications made by Customer; third party Equipment manufacturer design defects, flaws or errors; acts of God; Internet blackouts or brownouts; severe weather; fire; explosions; floods; strikes; work stoppages; slowdowns or other industrial disputes; accidents; riots or civil disturbances; acts of war, sabotage or terrorism; dangerous conditions which present a threat to the safety or health of JDL personnel; acts of government; inability to obtain any license or consent necessary in respect of any third party software; and delays by suppliers or material shortages. Scheduled performance dates shall be extended by any such causes.
- xv. **GOVERNING LAW:** The laws of the Minnesota shall govern this Agreement, including all disputes arising out of or related hereto, without regards to principles on conflicts of law. To the extent any provision herein is inconsistent with Minnesota Law, the terms of this Agreement shall prevail. The parties agree to exclude, in its entirety, the application of the United Nations Convention on Contracts for the International Sale of Goods.

- xvi. **SEVERABILITY:** In the event that any one or more provisions contained in this Agreement should be held to be unenforceable, its unenforceability shall not affect any other provisions of this Agreement.
- xvii. **SURVIVAL:** The expiration or earlier termination of this Agreement or any part thereof for any reason shall not affect the coming into force or the continuation in force of any provision hereof which is expressly or by implication intended to come into force or continue in force on or after such expiration or earlier termination.
- xviii. **HEADINGS:** The headings in this Agreement are for convenience only, and shall not constitute a part of or be referred to in interpreting this Agreement.

IN WITNESS WHEREOF, AND INTENDING TO BE LEGALLY BOUND, THE PARTIES HAVE CAUSED THIS AGREEMENT TO BE EXECUTED BY THEIR DULY AUTHORIZED REPRESENTATIVES, EFFECTIVE AS OF THE DATE FIRST SET FORTH ABOVE.

JDL Technologies, Inc.

Oakland Unified School District

By: 

By: 

Print Name: THOMAS J. LAPRADE

Print Name: Randolph E. Ward, Ed. D

Title: PRESIDENT; CEO

Title: State Administrator

Date: 4/19/2005

Date: 4/14/2005

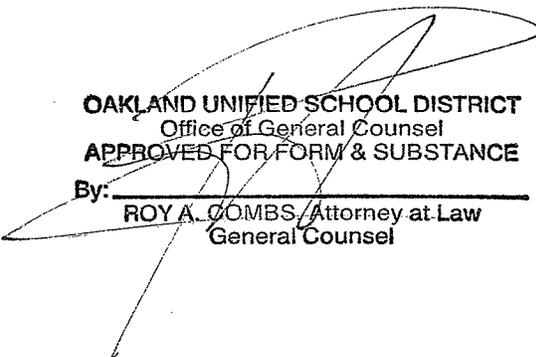
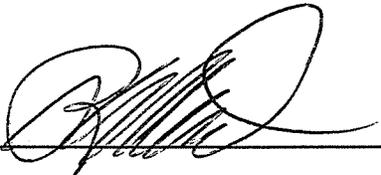

OAKLAND UNIFIED SCHOOL DISTRICT
 Office of General Counsel
APPROVED FOR FORM & SUBSTANCE
 By: _____
 ROY A. COMBS, Attorney at Law
 General Counsel

EXHIBIT F

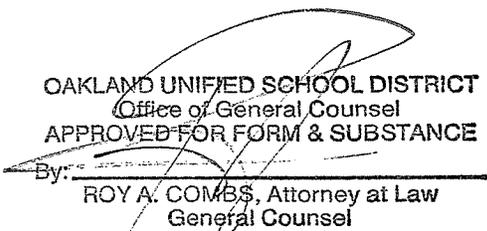


JDL Technologies (JDL)
Statement of Work (SOW)
Addendum to Master Agreement # CA-04-1001
For
Oakland Unified School District (OUSD)
For
E-rate Year 7 Internal Wiring and Network Configuration for
Modernization for School Groups 3, 4, 5, 6, and 7

The Parties acknowledge that they have read this statement of work, understand it, and agree to be bound by its terms and conditions:

OUSD
Signature: 
Name: Randolph E. Ward, Ed. D
Title: State Administrator
Date: 4/14/2005

JDL Technologies
Signature: 
Name: THOMAS J. LAPPING
Title: PRESIDENT / CEO
Date: 4/19/05

OAKLAND UNIFIED SCHOOL DISTRICT
Office of General Counsel
APPROVED FOR FORM & SUBSTANCE
By: 
ROY A. COMBS, Attorney at Law
General Counsel

General Objectives

This SOW provides product performance requirements, general design considerations, and installation guidelines. JDL will furnish all labor, project management and field supervision, tooling, miscellaneous mounting hardware, and consumables for work described in this SOW. In addition, JDL will provide design-build, integration services, and certification/testing documentation for individual schools to achieve LAN connectivity for all classrooms, computer laboratories, libraries, instructional areas and work areas, as specified in this SOW.

Materials and Interoperability - JDL will furnish, install, connect, and test the networking system, including all components, cabinets, terminals, and cabling systems in accordance with design services provided under this SOW. JDL will be using armored fiber as an OUSD Internal Wiring Year 7 approved alternative to 1" corrugated conduit.

2. Scope

Section 2.0 details the services JDL Technologies and partners will provide Oakland Unified School District:

2.1 LAN Design for each school: JDL will provide the following documentation.

- 2.1.1 Drawing of logical network configuration both in hard and soft copy format which includes:
 - 2.1.1.1.1 All SNMP managed devices
 - 2.1.1.1.2 IP addresses of all network Equipment
 - 2.1.1.1.3 Location of Equipment
 - 2.1.1.1.4 Riser diagram to include cable types and counts
 - 2.1.1.1.5 Drop types and counts
- 2.1.2 A material list specifying quantity and part/specification and serial numbers on an IDF and MDF room-by-room basis.
- 2.1.3 JDL must coordinate cable runs, rack Equipment locations with the OUSD Technology Services Department during the initial design of the cable installation. JDL and Technology Services must agree to the final location of all devices and the cable plant design.
- 2.1.4 Complete set of floor plans indicating entire system configuration, both in hard copy and in soft copy format. Floor plans have to include existing and new installation.
- 2.1.5 Cable Management Program that will operate on a MS Windows platform, including:
 - 2.1.5.1.1 Circuit identifications and locations.
 - 2.1.5.1.2 Cable schedule and routing.
 - 2.1.5.1.3 Cross-connect table for electronics to patch panel interconnections.

- 2.1.5.1.4 Cable test forms and test results.
- 2.1.5.1.5 Cable labels.
- 2.1.5.1.6 Networking Planning Charts.
- 2.1.5.1.7 Diskettes containing design database.

2.2 Installation of all Racks and Hardware in MDFs (1 per school) including:

- 2.2.1 Install 84" high by 19" wide, floor-mounted, double-sided aluminum rack in MDF. Minimum of one rack per MDF.
- 2.2.2 Properly mount and ground all racks.
- 2.2.3 Install (4) 19" rack-mounted horizontal patch cord/cable organizers for cable management in MDF.
- 2.2.4 Install (2) vertical jumper retainer cable organizers mounted to front of rack, on sides of rack frame (two per rack), running the full height of rack.
- 2.2.5 Install 18" wide ladder rack between the top of rack and backboard with associated hanger supports and seismic bracing.
- 2.2.6 Install one 48-port 19" rack mountable, one unit high Fiber Optic Distribution Panel (FODP). FODP shall contain rear fiber entry slots, wire retainers, fiber storage drum, slide out rails for front access, and jumper trough for cable management in MDF.
- 2.2.7 Install (4) SC 6-pak duplex adapter panel.
- 2.2.8 Subject to confirmation in the final design for each school, JDL plans to install (1) 48-port Cat 6 patch panel to each MDF. JDL understands that the actual number of patch panels installed in the MDF's will be determined by drop counts terminating at the MDF for that particular school.
- 2.2.9 Install one 19" surge protected rack-mounted 3-wire electrical power strip with a minimum of 12-single outlets, mounted horizontally in MDF. One power strip per rack.
- 2.2.10 Install center weighted shelves for district supplied servers, keypads and monitor with associated seismic straps. Minimum of one shelf per rack.

2.3 Installation of all Racks and Hardware in DDCDFs including:

- 2.3.1 Install one 24" high x 36" wide x 24" deep wall mount cabinet with dual hinged lockable swinging door, vented side panels, and 100 cfm exhaust fan, drilled EIA-310-D compliant.

- 2.3.2 Install one 48-port 19" rack mountable, two unit high Fiber Optic Distribution Panel (FODP). FODP shall contain rear fiber entry slots, wire retainers, fiber storage drum, slide out rails for front access, and jumper trough for cable management in DDCDF.
- 2.3.3 Install (4 each) 19" rack-mounted horizontal patch cord/cable organizers for cable management in MDF.
- 2.3.4 Install 40 Cat 6 patch cables
- 2.3.5 Install 2 Fiber Optic patch cables
- 2.3.6 Properly mount and ground all cabinets.
- 2.3.7 Install a minimum of one 19" surge protected rack-mounted 3-wire electrical power strip with a minimum of 12-single outlets, mounted horizontally in CDF.
- 2.3.8 Install and paint (1) 4 x 4 x 3/4" Plywood backboard for cabinet mounting.

2.4 Cabling (Fiber)

- 2.4.1 Install 6-strand plenum multi-mode Armored, MIC Fiber Optic cable from the MDF to each DDCDF.
- 2.4.2 Fiber Optic cable shall have continuous sheath continuity.
- 2.4.3 Each Fiber Optic cable shall be identified with a pre-established uniform numbering system. Identification will be securely attached to the cable at each end, whenever it enters or leaves a conduit, and at the MDF and DDCDF.
- 2.4.4 Terminate all 6 fiber strands at each end of the cable with SC type connectors.
- 2.4.5 Labeling of all terminations will be done to industry standards.

2.5 Cabling (Cat 6)

- 2.5.1 Install 10 new Plenum rated Category 6 cables for each classroom. All cables will route through newly installed pathways.
- 2.5.2 8 data cables are for student use and 2 data cables are for teacher use.
- 2.5.3 The CAT 6 4-pair cable will meet EIA/TIA Commercial Building Telecommunications Wiring Standards.
- 2.5.4 Terminate the new Category 6 station cable on jacks at the station end and at the patch panel at the IDF/DDCDF.

- 2.5.5 Maintain the outer jacket of all Category 6 cables up to the leading edge of the wiring block at both ends of the cable.
 - 2.5.6 All jacks will use the EIA/TIA-568B wiring configuration.
 - 2.5.7 Maintain twists on all Category 6 cables up to the edge of the termination point of the data jack.
 - 2.5.8 Labeling of all terminations will be done to industry standards.
 - 2.5.9 Furnish Category 6 patch cords in varying lengths as needed. Provide one patch cord for each switch port.
 - 2.5.10 Install two new Category 6 cables for each auditorium/multi-purpose room access points. Data jacks for access points are to be installed to industry standards. All cables will be routed and secured in accordance with EIA/TIA 568B.
 - 2.5.11 Install three new Category 6 cables for each computer laboratory. Data jacks for access points are to be installed to industry standards. Two cables are for access points and one cable for network printer. All cables will be routed and secured in accordance with EIA/TIA 568B.
 - 2.5.12 Install a minimum of two new Category 6 cables in each private administrative office.
 - 2.5.13 Install a minimum of one Category 6 cable per workstation in shared administrative work area.
 - 2.5.14 Install a minimum of one Category 6 cable for network printers.
 - 2.5.15 Install a minimum of one Category 6 cable for network copiers.
- 2.6 Networking Hardware in MDF: Specific models for Network Electronics described in this section of the SOW are detailed in the section 7 chart labeled “Cisco Network Electronics cost breakdown”.
- 2.6.1 Install one Cisco Router with the minimum of two 1-port T1/Fractional T1 DSU/TSU WAN Interface Card in MDF and 2 10/100 Ethernet ports.
 - 2.6.2 Install minimum of one switch with the following capabilities:
 - 2.6.2.1 10 GBIC-based Gigabit Ethernet ports and 2 10/100/1000 ports
 - 2.6.2.2 1.5 rack unit (RU) stackable, multilayer Gigabit Ethernet switch
 - 2.6.2.3 Power-over-Ethernet
 - 2.6.2.4 Layer III Capabilities

- 2.6.3 Install minimum of one switch with the following capabilities:
 - 2.6.3.1 24 10/100 ports and 2 GBIC-based Gigabit Ethernet ports
 - 2.6.3.2 1 rack unit (RU) stackable; multilayer switch upgradeable to full dynamic IP routing
 - 2.6.3.3 Power-over-Ethernet
 - 2.6.3.4 Layer III Capabilities
- 2.6.4 Install GBICs as required by OUSD approved network design.
- 2.6.5 Install 2 meter SC to SC Multimode Fiber Patch Cables in all fiber ports.
- 2.6.6 To adhere to an OUSD requested modification from the original RFP, JDL will not install one rack-mounted UPS for all switches and servers 1 hour minimum up time and appropriately rated for Equipment in the MDF. UPS units were not approved by the Schools and Library Division. JDL will leave at a minimum 2U of clear rack space for future installation of a UPS unit.

2.7 Networking Hardware in DDCDF: Specific models for Network Electronics described in this section of the SOW are detailed in the section 7 chart labeled “Cisco Network Electronics cost breakdown”.

- 2.7.1 Install minimum of one switch with the following capabilities:
 - 2.7.1.1 24 10/100 ports and 2 GBIC-based Gigabit Ethernet ports
 - 2.7.1.2 1 rack unit (RU) stackable, multilayer switch upgradeable to full dynamic IP routing
 - 2.7.1.3 Power-over-Ethernet
 - 2.7.1.4 Layer III Capabilities
- 2.7.2 Install minimum of one switch with the following capabilities:
 - 2.7.2.1 24 10/100 ports and 2 GBIC-based Gigabit Ethernet ports
 - 2.7.2.2 1 rack unit (RU) stackable, multilayer switch upgradeable to full dynamic IP routing
 - 2.7.2.3 Layer III Capabilities
- 2.7.3 Install GBICs as required by OUSD approved network design
- 2.7.4 Install 2 meter SC to SC Multimode Fiber Patch Cable in all fiber ports.

- 2.7.5 To adhere to an OUSD requested modification from the original RFP, JDL will not install one rack-mounted UPS for all switches and servers in the DDCDF. UPS units were not approved by the Schools and Library Division. JDL will leave at a minimum 2U of clear rack space for future installation of a UPS unit.
- 2.8 Wireless Hardware in Auditoriums and Multi-purpose Rooms: Specific models for Network Electronics described in this section of the SOW are detailed in the section 7 chart labeled “Cisco Network Electronics cost breakdown”.
- 2.8.1 Install minimum of two access points in auditoriums/multi-purpose rooms.
- 2.8.2 Install Power-over-Ethernet modules as needed.
- 2.8.3 Access points shall support both 802.11a and 802.11b clients simultaneously.
- 2.8.4 Access points shall support IEEE 802.3af Power-over-Ethernet.
- 2.8.5 Access points shall be installed to industry standards.
- 2.8.6 Access points that support only 802.11a or 802.11b exclusively can be installed with approval by the Technology Services Department at OUSD.
- 2.9 Wireless Hardware in Computer Laboratories
- 2.9.1 Install minimum of two access points in each computer laboratory.
- 2.9.2 Install Power-over-Ethernet modules as needed.
- 2.9.3 Access points shall support both 802.11a and 802.11b clients simultaneously.
- 2.9.4 Access points shall support IEEE 802.3af Power-over-Ethernet.
- 2.9.5 Access points shall be installed to industry standards.
- 2.9.6 Access points that support only 802.11a or 802.11b exclusively can be installed with approval by the Technology Services Department at OUSD.
- 2.10 Testing
- 2.10.1 Testing of all new copper and fiber cable.
- 2.10.2 Testing for copper cables will include continuity, shorts, crosses, grounds, attenuation, impedance, near-end-cross talk (NEXT) and distance.
- 2.10.3 Testing all fibers, using a Power Meter and light source, at 850 nm and 1300 nm.
- 2.10.4 Pre-testing of all fibers prior to removing the cable from the reel to install.

- 2.10.5 Ping connectivity testing of all newly installed switches and routers.
- 2.10.6 These test results will be provided to OUSD Technology Services Department in soft (cd-rom) and hard copy form when testing is completed.
- 2.11 Completion of Installation: Each school installation will be considered complete after the following have been accomplished:
 - 2.11.1 All cable-plan system testing has been completed
 - 2.11.2 All electronic Equipment testing has been completed
 - 2.11.3 Installer assures that entire system is in working order
 - 2.11.4 All Cable Test Forms have been submitted to the District in both hard and soft copy.
 - 2.11.5 All ceiling panels previously removed have been put back in place.
 - 2.11.6 All system labels have been put in place.
 - 2.11.7 All construction debris and scrap materials have been removed from project site.
 - 2.11.8 All marked up, project record documents have been returned to the District.
 - 2.11.9 All unused customer material has been returned to the District.
 - 2.11.10 The District has successfully completed acceptance testing of the network installation.
 - 2.11.11 The District's Technology Services Department-Office of Technology Support Coordinator has inspected and accepted the installation.
 - 2.11.12 Documentation, to include as-builts, along with required soft copies and completed cable management database has been turned over to the District.
 - 2.11.13 Upon the completion of each deliverable for a school (Survey/design and Testing), the JDL Project Manager will schedule a Deliverable Review Meeting or School Walk-through with OUSD and complete a Deliverable Acceptance Form (Sign-off Sheet) for an OUSD signature representing acceptance of the completed deliverable. OUSD shall schedule the Deliverable Review Meeting or School Walk-through within 10 working days of the completed school deliverable. The project deliverable shall be deemed accepted by OUSD, in the event OUSD fails to schedule a Deliverable Review Meeting or School Walk-through with JDL or provide JDL with a list of unfinished deliverables within the 10 working day timeframe.

2.11.14 Upon the completion of daily Equipment installation activity, OUSD will sign a Product Acceptance Form listing equipment installed on the OUSD Premises. The OUSD signature on the Customer Acceptance Form represents acceptance of title and risk of loss of and damage to the Equipment.

2.12 Additional Notes for Installation

2.12.1 Each DDCDF will support 4 classrooms unless the need to feed additional classrooms is required. If additional classrooms are added to DDCDF:

2.12.1.1 Install additional switches as needed.

2.12.1.2 Install additional GBICs (Multimode Only) in each GBIC fiber port.

2.12.1.3 Install additional 2 meter SC to SC Multimode Fiber Patch Cables in each fiber port.

2.12.1.4 Install additional Category 6 patch cords as needed. Provide sufficient quantities to match switch ports.

2.12.2 No copper, fiber, or coaxial cable shall be installed aerially.

2.12.3 Conduit - JDL will be utilizing armored fiber, which is stated as an OUSD Internal Wiring Year 7 alternative to 1" corrugated conduit. Where and if needed, a 2" conduit will be used building to building.

2.12.4 Substitutions will only be allowed with the prior written approval from the Technology Services Department and the Schools and Libraries Division.

2.12.5 Work will be scheduled and completed during the hours of 7:00am and 11:00pm Monday through Friday, to allow for work to be completed without disturbing class sessions.

2.12.6 Design and implementation services have to be in accordance with applicable TIA and EIA Standards.

3 Summary of Services

Site Name	Total CAT6 Drops to be installed	MDFs For Buildout	DDCDFs For Buildout	Fiber Cables to be Installed	LAN Designs	Wireless Access Points to be Installed	Cable to be Tested
GROUP 3 SCHOOLS							
Westlake	480	1	12	12	1	4	492
Bella Vista	375	1	9	9	1	4	384
Think College Now (Materials Only)	0	1	8	0	1	2	0
College Preparatory and Architecture	100	1	3	3	1	2	103
Mandela Schools	195	1	5	5	1	2	200
Totals Group 3	1150	5	37	29	5	14	1179

Site Name	Total CAT6 Drops to be installed	MDFs For Buildout	DDCDFs For Buildout	Fiber Cables to be Installed	LAN Designs	Wireless Access Points to be Installed	Cables to be Tested
GROUP 4 SCHOOLS							
Brewer	425	1	11	11	1	4	436
Manzanita	500	1	12	12	1	4	512
Roosevelt	485	1	12	12	1	4	497
International Community (Materials Only)	0	1	6	0	1	2	0
Urban Promise Schools (Materials Only)	0	1	2	0	1	2	0
Totals Group 4	1410	5	43	35	5	16	1445

Site Name	Total CAT6 Drops to be installed	MDFs For Buildout	DDCDFs For Buildout	Fiber Cables to be Installed	LAN Designs	Wireless Access Points to be Installed	Cable to be Tested
GROUP 5 SCHOOLS							
Simmons	520	1	13	13	1	4	533
Horace Mann	245	1	6	6	1	2	251
Hawthorne Schools	365	1	9	9	1	4	375
Totals Group 5	1130	3	28	28	3	10	1159

Site Name	Total CAT6 Drops to be installed	MDFs For Build out	DDCDFs For Buildout	Fiber Cables to be Installed	LAN Designs	Wireless Access Points to be Installed	Cable to be Tested
GROUP 6 SCHOO							
Burckhalter (Materials Only)	0	1	3	0	1	2	0
Frick	480	1	12	12	1	4	492
Whittier	305	1	8	8	1	2	313
Lockwood	455	1	11	11	1	4	466
Havencourt Schools	415	1	10	10	1	4	425
Totals Group 6	1655	5	44	41	5	16	1696

Site Name	Total CAT6 Drops to be installed	MDFs For Buildout	DDCDFs For Buildout	Fiber Cables to be Installed	LAN Designs	Wireless Access Points to be Installed	Cables to be Tested
GROUP 7 SCHOOLS							
Cox	640	1	16	16	1	4	656
Elmhurst	355	1	9	9	1	2	364
Brookfield	365	1	9	9	1	2	374
Sobrante Park	215	1	5	5	1	2	220
Madison Schools	345	1	9	9	1	2	354
Totals Group 7	1920	5	48	48	5	12	1968

Schools Highlighted in Blue are Materials Only Schools – CAT 6 and Fiber Drops are not included in the pricing.

4 Terms and Conditions

4.1 We assume there will be adequate station grounds in all MDF/IDF/CDF locations.

- 4.2 All though not specifically called for, our proposal includes plenum Cat 6 and fiber to meet all EIA/TIA codes and standards.
- 4.3 At school locations where usable existing aluminum wire mold is already installed, the District will be credited according to unused quantities.
- 4.4 All areas will be restored to pre-installation condition
- 4.5 All services out of scope or not called for in the RFP will be covered by change orders to be mutually agreed upon by the District and JDL. Any additional work outside the scope of this SOW will require written approval from the OUSD Information Technology Officer and a PO from the District, prior to the start of any change order actions required.
- 4.6 A complete installation and work schedule will be mutually agreed upon by the District and the JDL consortium after award
- 4.7 Proposal is valid 90 days from the date of submission
- 4.8 The following schools have been removed from the original Year 7 list: Foster, Ascend, Burbank, and Acorn Woodland
- 4.9 The following schools in this SOW are Equipment only: Think College Now, International Community, Urban Promise, and Burckalter. Design Fees, Materials, Network Electronics, buildout of racks, and installation of Network Electronics are included in the pricing. Installation of copper and fiber cable runs are not included in the pricing.
- 4.10 JDL understands and will comply with the District's desire to continue to utilize, where applicable, the IDF model in the schools supported by e-rate year 7 funding. JDL also realizes that using this model must be determined on a school by school basis and will depend on the following criteria:
- 4.10.1 JDL agrees that it will first survey an elementary school, a middle school, and high school to get the information necessary to develop a Distribution Frame Model (DFM) for each school. The three (3) models will be presented to OUSD along with JDL's assumptions. The DFM's will become the models for the JDL survey teams and used during the site survey process. After schools are surveyed the JDL survey team will present to the District their survey data and any variation to the DFM. The survey data will include additional assumptions, intended reuse of cable pathways and free standing racks, the number of active devices per cabinet, and a cost estimate for electrical circuits that includes a ROM comparison to implement the MDF/DDCDF model vs. the new Distribution Frame Model (DFM). The survey data will also include a detailed cost analysis of the IDF/MDF model versus the DDCDF model. The detailed cost analysis will include a total count of network electronics and materials, as well as installation and configuration costs for each deliverable. It is understood that JDL will only use currently approved SLD part numbers to create a DFM within each of the schools.
- 4.10.2 Existing IDF space must be adequate for any network augmentation

- 4.10.3 The IDF solution must remain within the dollar amounts currently allocated for that individual facility
- 4.10.4 Any facility where the District deems the IDF model imperative but does not fall within the above criteria will be evaluated by JDL with the option to give a modified cost quote to the District or provide an alternative solution that will meet the criteria.
- 4.10.5 Where the IDF model is applicable based on meeting the criteria stated in, 4.10.2, 4.10.3, and 4.10.4, a 12 strand fiber will be run.
- 4.10.6 Where the IDF model is applicable based on meeting the criteria stated in 4.10.2, 4.10.3, and 4.10.4, OUSD Internal Wiring IDF dimension RFP standards will be used.

5 JDL Responsibilities:

- 5.1 JDL will assign a Project Manager to coordinate and manage OUSD E-Rate Year 7 Service deliverables as defined in this SOW.
- 5.2 Project Management and Technical Supervision: Project Management and Technical Supervision: JDL will provide the Project Management Team and all technical supervision necessary to design and install a complete and operational system.
- 5.3 JDL will propose any and all items required for a complete and operational system.
- 5.4 JDL will furnish, install, connect, and test the networking system, including components described in this SOW, in accordance with design services provided under this SOW.

6 Customer Responsibilities

- 6.1 OUSD must define lead functional personnel or an overall OUSD Project Manager to work with JDL to review the final project plan, documentation, schedules, sign-off procedures, etc.

7 Cost

Section 7.0 details the costs of Year 7 E-Rate Services by school group.

**OUSD SERVICE SUBSTITUTION REQUEST
SUMMARY**

REVISED DESIGN		
GROUP 3	No. of Schools	5
	Services	\$696,492.37
	Materials	\$197,273.24
	Electronics	\$313,212.96
	Taxes	\$44,667.54
	TOTALS	\$1,251,646.12
GROUP 4	No. of Schools	5
	Services	\$806,868.81
	Materials	\$238,564.55
	Electronics	\$363,153.11
	Taxes	\$52,650.30
	TOTALS	\$1,461,236.77
GROUP 5	No. of Schools	3
	Services	\$545,903.96
	Materials	\$216,028.84
	Electronics	\$225,038.04
	Taxes	\$38,593.35
	TOTALS	\$1,025,564.18
GROUP 6	No. of Schools	5
	Services	\$847,890.33
	Materials	\$318,708.47
	Electronics	\$361,721.32
	Taxes	\$59,537.61
	TOTALS	\$1,587,857.72
GROUP 7	No. of Schools	5
	Services	\$924,963.97
	Materials	\$315,039.42
	Electronics	\$372,889.25
	Taxes	\$60,193.76
	TOTALS	\$1,673,086.40
TOTAL COSTS		\$6,999,391.20

Services cost breakdown	Materials Cost Breakdown	Cisco Electronics cost breakdown	Subtotal Services, Materials, Electronics cost
\$ 3,822,119.44	\$ 1,285,614.52	\$ 1,636,014.68	\$6,743,748.65
	TAX @ 3/4 percent	TAX @ 3/4 percent	
	\$112,491.27	\$143,151.28	
Total Services	Total Materials	Total Cisco and HP Electronics Costs	Total Services, Material, and Electronics Costs
\$3,822,119.44	\$1,398,105.79	\$1,779,165.96	\$6,999,391.20

Site Name	CAT6 Drops to be Installed	MDFs For Buildout	DCCDFs For Buildout	Fiber Cables to be Installed	LAI Designs	Wireless Access Points to be Installed	Services cost breakdown	Materials Cost Breakdown	Cisco Network Electronics cost breakdown	Total Services, Materials, Electronics cost
GROUP 3										
Westlake	480	1	12	12	1	4	\$ 229,500.60	\$ 71,394.51	\$ 95,405.11	\$ 396,300.22
Belle Vista	375	1	9	9	1	4	\$ 179,185.73	\$ 57,110.71	\$ 71,499.04	\$ 307,795.48
Think College	0	1	8	0	1	2	\$ 121,429.54	\$ 19,072.75	\$ 63,752.46	\$ 204,254.76
College Preparatory and Architecture	100	1	3	3	1	2	\$ 64,489.99	\$ 18,370.77	\$ 35,659.61	\$ 118,520.37
Mandela	195	1	5	5	1	2	\$ 101,886.51	\$ 31,324.49	\$ 46,896.75	\$ 160,107.76
Totals Group	1150	5	37	29	5	14	\$ 696,492.37	\$ 197,273.24	\$ 313,212.96	\$ 1,206,978.58

Site Name	CAT6 Drops to be Installed	MDFs For Buildout	DCCDFs For Buildout	Fiber Cables to be Installed	LAI Designs	Wireless Access Points to be Installed	Services cost breakdown	Materials Cost Breakdown	Cisco Network Electronics cost breakdown	Total Services, Materials, Electronics cost
GROUP 4										
Brewer	425	1	11	11	1	4	\$ 209,757.87	\$ 67,043.91	\$ 89,786.54	\$ 366,588.32
Manzanita	500	1	12	12	1	4	\$ 232,657.57	\$ 74,940.49	\$ 95,405.11	\$ 403,003.17
Roosevelt	485	1	12	12	1	4	\$ 230,568.63	\$ 73,523.15	\$ 95,405.11	\$ 399,496.89
International Co	0	1	6	0	1	2	\$ 94,649.53	\$ 15,689.93	\$ 52,515.32	\$ 162,854.78
Urban Promise	0	1	2	0	1	2	\$ 39,235.21	\$ 7,367.07	\$ 30,041.04	\$ 76,643.32
Totals Group 4	1410	5	43	35	5	16	\$ 806,868.81	\$ 238,564.55	\$ 363,153.11	\$ 1,408,586.48

Site Name	CAT6 Drops to be Installed	MDFs For Buildout	DCCDFs For Buildout	Fiber Cables to be Installed	LAI Designs	Wireless Access Points to be Installed	Services cost breakdown	Materials Cost Breakdown	Cisco Network Electronics cost breakdown	Total Services, Materials, Electronics cost
GROUP 5										
Simmons	520	1	13	13	1	4	\$ 247,154.40	\$ 95,768.69	\$ 101,023.68	\$ 443,946.77
Horace Mann	245	1	6	6	1	2	\$ 121,116.80	\$ 44,936.47	\$ 52,515.32	\$ 218,570.59
Hawthorne	365	1	9	9	1	4	\$ 177,630.76	\$ 75,323.68	\$ 71,499.04	\$ 324,453.47
Totals Group	1130	3	28	28	3	10	\$ 545,903.96	\$ 216,028.84	\$ 225,038.04	\$ 986,970.83

Site Name	CAT6 Drops to be installed	MDFs For Buildout	DDCDFs For Buildout	Fiber Cables to be Installed	LAII Designs	Wireless Access Points to be Installed	Services cost breakdown	Materials Cost Breakdown	Cisco Network Electronics cost breakdown	Total Services, Materials, Electronics cost
GROUP 6										
Burckhalter	0	1	3	0	1	2	\$ 53,740.41	\$ 14,062.04	\$ 35,659.61	\$ 103,462.06
Frick	480	1	12	12	1	4	\$ 229,500.60	\$ 85,330.37	\$ 95,405.11	\$ 410,236.08
Whittier	305	1	8	8	1	2	\$ 153,269.43	\$ 57,592.40	\$ 63,752.46	\$ 274,614.29
Lockwood	455	1	11	11	1	4	\$ 214,516.64	\$ 83,986.11	\$ 89,786.54	\$ 388,291.49
Havencourt	415	1	10	10	1	4	\$ 196,863.04	\$ 77,735.55	\$ 77,117.61	\$ 351,716.20
Totals Group 6	1655	5	44	41	5	16	\$ 847,890.33	\$ 318,708.47	\$ 361,721.32	\$ 1,528,320.12

Site Name	CAT6 Drops to be installed	MDFs For Buildout	DDCDFs For Buildout	Fiber Cables to be Installed	LAII Designs	Wireless Access Points to be Installed	Services cost breakdown	Materials Cost Breakdown	Cisco Network Electronics cost breakdown	Total Services, Materials, Electronics cost
GROUP 7										
Cox	640	1	16	16	1	4	\$ 299,558.20	\$ 117,427.20	\$ 117,379.39	\$ 534,864.80
Elmhurst	355	1	9	9	1	2	\$ 172,501.71	\$ 54,956.32	\$ 69,371.04	\$ 296,829.07
Brookfield	365	1	9	9	1	2	\$ 174,080.20	\$ 55,627.46	\$ 69,371.04	\$ 299,078.69
Sobrante Park	215	1	5	5	1	2	\$ 107,900.63	\$ 32,864.67	\$ 46,896.75	\$ 187,662.05
Madison	345	1	9	9	1	2	\$ 170,923.23	\$ 54,163.76	\$ 69,371.04	\$ 294,458.03
Totals Group 7	1920	5	48	48	5	12	\$ 924,963.97	\$ 315,039.42	\$ 372,889.25	\$ 1,612,892.64

Schools Highlighted in Blue are Materials Only Schools – CAT 6 and Fiber Drops are not included in the pricing.

Cisco Network Electronics cost breakdown		Qty	OUUSD Unit	OUUSD Ext
MDF EQUIPMENT				
CISCO2851-SRST/K9	2851 Voice Bundle w/ PVDM2-48,FL-SRST-72,SP_Srv,64F/256D	23	\$ 5,832.32	\$ 134,143.39
CAB-AC	Power Cord,110V	23	\$ -	\$ -
S28NUESK9-12308T	Cisco 2800 IOS SPSK9-ESK9 FEAT SET FACTORY UPG FOR BUND	23	\$ 475.00	\$ 10,925.00
WIC-1DSU-T1-V2	Updated 1-Port T1/Fractional T1 DSU/CSU WAN Interface Card	23	\$ 678.57	\$ 15,607.14
PWR-2821-51-AC	Cisco 2821/51 AC power supply	23	\$ -	\$ -
FL-SRST-MEDIUM	Feat Lic Survivable Remote Site Telephony up to 48 phones	23	\$ -	\$ -
FL-SRST-SMALL	Feat Lic Survivable Remote Site Telephony up to 24 phones	23	\$ -	\$ -
ROUTER-SDM	Device manager for routers	23	\$ -	\$ -
PVDM2-48	48-Channel Packet Voice/Fax DSP Module	23	\$ -	\$ -
MEM2800-256D-INC	256MB DDR DRAM Memory factory default for the Cisco 2800	23	\$ -	\$ -
MEM2800-64CF-INC	64MB CF default for Cisco 2800 Series	23	\$ -	\$ -
WS-C3550-12G	10 GBIC ports + 2-10/100/1000 ports: EMI	31	\$ 6,782.32	\$ 210,251.96
CAB-AC	Power Cord,110V	31	\$ -	\$ -
WS-G5484	1000BASE-SX Short Wavelength GBIC (Multimode only)	200	\$ 339.29	\$ 67,857.14
WS-G5483	1000BASE-T GBIC	31	\$ 268.04	\$ 8,309.11
WS-C3550-24PWR-SMI	24-10/100 inline power + 2 GBIC ports: SMI	23	\$ 2,371.61	\$ 54,546.96
CAB-AC	Power Cord,110V	23	\$ -	\$ -
WS-G5483	1000BASE-T GBIC	23	\$ 268.04	\$ 6,164.82
WS-C3550-24-SMI	24-10/100 + 2 GBIC ports: SMI	0	\$ 2,032.32	\$ -
CAB-AC	Power Cord,110V	0	\$ -	\$ -
WS-G5483=	1000BASE-T GBIC	0	\$ 268.04	\$ -
CON-SNT-C3550-24S	8x5xNBD Svc, 24-10/100 and 2 GBIC ports:Std Multilaye	0	\$ 140.46	\$ -
IDF EQUIPMENT				
WS-C3550-24PWR-SMI	24-10/100 inline power + 2 GBIC ports: SMI	200	\$ 2,371.61	\$ 474,321.43
CAB-AC	Power Cord,110V	200	\$ -	\$ -
WS-G5484	1000BASE-SX Short Wavelength GBIC (Multimode only)	200	\$ 339.29	\$ 67,857.14
WS-G5483	1000BASE-T GBIC	200	\$ 268.04	\$ 53,607.14
WS-C3550-24-SMI	24-10/100 + 2 GBIC ports: SMI	200	\$ 2,032.32	\$ 406,464.29
CAB-AC	Power Cord,110V	200	\$ -	\$ -
WS-G5483=	1000BASE-T GBIC	200	\$ 268.04	\$ 53,607.14
Wireless 1200 Access				
Point Product (802.11 G)	Description	QTY	\$	\$
AIR-AP1231G-A-K9	802.11g IOS AP w/Avail CBus Slot, FCC Cnfg	68	\$ 610.04	\$ 41,482.43
AIR-PWR-CORD-NA	AIR Line Cord North America	68	\$ -	\$ -
AIR-PWRINJ3	Power Injector for 1100, 1190AG, 1200 1230AG Series	68	\$ 40.04	\$ 2,722.43
S12W7K9-12302JA	Cisco 1200 Series IOS WIRELESS LAN	68	\$ -	\$ -
AIR-CONCAB1200	Console Cable for 1130AG, 1200, 1230AG Platform	68	\$ 6.79	\$ 461.43
AIR-CAB020LL-R	20 ft LOW LOSS CABLE ASSEMBLY W/RP-TNC CONNECTORS	68	\$ 87.54	\$ 5,952.43
AIR-ANT2012	2.4 GHz, 6.5 dBi Diversity Patch Ant w/RP-TNC Connector	68	\$ 270.75	\$ 18,411.00
CON-SNT-1231GAK9	SMARTNET 8X5XNBD 802.11b IOS AP w/Ava	68	\$ 48.86	\$ 3,322.29
Total of all Network Electronics for School				\$1,636,014.68

For One year after installation, SmartNet will be provided from Cisco at no additional charge.

ITEM	QTY	MATERIALS DESCRIPTION	UM	OUSD Unit	OUSD Ext
1	779	CAT 6 PLENUM WHITE 1000'	E	\$ 335.57	\$ 261,405.51
2	779	CAT 6 PLENUM BLUE 1000'	E	\$ 335.57	\$ 261,405.51
3	4215	CAT 6 568A-B JACK WHITE	E	\$ 3.04	\$ 12,795.54
4	4215	CAT 6 568A-B JACK BLUE	E	\$ 3.04	\$ 12,795.54
5	4215	MOS SINGLE GANG FACEPLATE IVORY	E	\$ 1.21	\$ 5,080.58
6	1045	MOS ANGLED INSERTS IVORY	E	\$ -	\$ -
7	4215	MOS BLANK INSERTS IVORY	E	\$ 0.45	\$ 1,881.70
8	226	CAT 6 48 PORT PATCH PANELS	E	\$ 148.81	\$ 33,630.95
9	46	VERTICAL DBL SIDED FRONT-REAR MGR	E	\$ 211.98	\$ 9,751.04
10	213	HORZ 19" FRONT WIRE MGR 1RU	E	\$ 35.94	\$ 7,654.69
11	448	HORZ 19" FRONT WIRE MGR 2RU	E	\$ 41.74	\$ 18,700.00
12	4220	CAT 6 PATCH CABLE 3'W WHITE	E	\$ 2.87	\$ 12,119.94
13	4220	CAT 6 PATCH CABLE 3'W BLUE	E	\$ 2.87	\$ 12,119.94
14	206	CUBIT WALL CABINET 24x36x24	E	\$ 653.13	\$ 134,543.75
15	206	FAH KIT FOR CUBIT WALL CABINET	E	\$ 108.13	\$ 22,273.75
16	23	84"x19" BLACK RELAY RACK	E	\$ 181.79	\$ 4,181.07
17	46	18" x 10" UNIVERSAL LADDER RACK	E	\$ 118.11	\$ 5,433.07
18	23	RACK TO RUIWAY MT. PLATE KIT	E	\$ 37.65	\$ 865.92
19	23	JUNCTION SPLICE KIT	E	\$ 9.64	\$ 221.79
20	23	BUTT SPLICE KIT	E	\$ 9.26	\$ 212.89
21	23	CTR. MT. SHELF SEISMIC STRAP	E	\$ 276.64	\$ 6,362.65
22	23	RUBBER END CAPS (PAIR)	E	\$ 6.96	\$ 160.18
23	23	GROUND TERMINAL BLOCK (10PK)	E	\$ 64.49	\$ 1,483.36
24	23	12" GROUND BUSBAR	E	\$ 100.67	\$ 2,315.40
25	92000	6 STRAND 62.5 MM PLENUM INNERLOCK ARMOR FIBER	FT	\$ 1.87	\$ 171,952.38
26	4255	COMB DUPLEX SURF MT BOXES	E	\$ 1.55	\$ 6,585.12
27	86500	RACEWAY BASE & COVER	FT	\$ 2.29	\$ 202,812.50
28	23	QUICK CURE CONSUMABLE KITS	E	\$ 17.08	\$ 392.92
29	5	Fiber Termination Kit	E	\$ 812.13	\$ 4,060.64
30	6900	THRU #6 GREEN STRIP GROUND	FT	\$ 0.63	\$ 4,353.57
31	3496	MM SC QUICK CURE CONNECTORS	E	\$ 5.48	\$ 19,144.76
32	23	FIBER CABINET 2RU 48 PORT	E	\$ 143.56	\$ 3,301.80
33	205	FIBER CABINET 1RU 36 PORT	E	\$ 140.28	\$ 28,757.96
34	118	SC 6 PACK ADAPTER PANEL	E	\$ 26.19	\$ 3,090.48
35	207	SC 6 PACK DUPLEX ADAPTER PANEL	E	\$ 43.38	\$ 8,979.24
36	117	BLANK ADAPTER PANEL	E	\$ 4.09	\$ 478.79
37	229	SC/SC MM 2 Meter Fiber Jumper	E	\$ 14.49	\$ 3,319.14
38	0	12 OUTLET 15 AMP SURGE PROTECT TRIP	E	\$ 55.65	\$ -
39	0	UPS Unit (15 minute Runtime)	E	\$ 572.92	\$ -
40	0	UPS Unit (60 minute Runtime)	E	\$ 1,453.57	\$ -
41	0	3 battery pack for 1 hour - (Tripp Lite p/n: BP48V212U)	E	\$ 536.90	\$ -
42	208	4' x 4' Plywood Backboard	E	\$ 4.76	\$ 990.48
				Total	\$ 1,285,614.52

Actual quantities of Network Electronics and Materials used during the implementation for each school will be determined during the design phase of the project. Total quantities and cost of Network Electronics and Materials will not exceed what is described in this SOW.

8.0 Additional Services

- a. Additional services not provided by the Scope of this E-Rate services SOW can be requested at the following time and material rates. All services out of scope or not called for in the RFP will be covered by change orders to be mutually agreed upon by the District and JDL. Any additional work outside the scope of this SOW will require written approval from the OUSD Information Technology Officer and a PO from the District, prior to the start of any change order actions required.

8.1 The rate for time and material services is \$187.50 per hour.

8.2 The daily rate for time and material services is \$1500.

8.3 Travel time is invoiced at the hourly rate

8.4 Additional materials are billed at then current product rates.

8.5 Actual Travel costs (i.e. flights, hotel, meals, car rental, and mileage for local travel) will be invoiced for each additional service request.

9.0 Payment

Upon delivery of services and products described in this SOW, JDL will invoice the OUSD and Schools and Libraries Division for eligible services and products in accordance with E-Rate discount billing procedures.

OUSD shall pay 100% of any Additional Services not provided by the Scope of this SOW within thirty (30) days of receipt of an invoice for such services.

10.0 TERM

The term of this SOW shall begin April 4, 2005 and end September 30th, 2006.

EXHIBIT G

**Comparison of Contract Terms from
JDL's January 2004 Response to Request for Information with
JDL's April 2005 Contract**

Row	Term found in JDL's January 2004 Response to Request for Information ("Response") (Exhibit H)	Term found in JDL's April 2005 Master Agreement ("MA") (Exhibit E) and/or Statement of Work ("SOW") (Exhibit F)
1	<p>Cost for services, materials, and electronics:</p> <p>Group 1: \$1,210,646.96;</p> <p>Group 2: \$1,352,320.26;</p> <p>Group 3: \$1,538,141.84;</p> <p>Group 4: \$1,456,716.40;</p> <p>Group 5: \$1,107,494.03;</p> <p>Group 6: \$1,702,423.38;</p> <p>Group 7: \$1,799,361</p> <hr/> <p>Total: \$10,167,103.86</p> <p>Response at p. 18-22.</p>	<p>Cost for services, materials, and electronics:</p> <p>--</p> <p>--</p> <p>Group 3: \$2,251,64.12;</p> <p>Group 4: \$1,461,236.77;</p> <p>Group 5: \$1,025,564.18;</p> <p>Group 6: \$1,587,857.72;</p> <p>Group 7: \$1,673,086.40</p> <hr/> <p>Total: \$6,999,391.20</p> <p>SOW at p. 14.</p>
2	<p>A complete installation and work schedule will be mutually agreed upon by the District and the JDL consortium after award. Response at p. 17.</p>	<p>Standard installations are performed between the hours of 8:00 a.m. and 5 p.m. local time, Monday through Friday (excluding JDL designated holidays). MA at pp. 1-2.</p> <p>Work will be scheduled and completed during the hours of 7:00 a.m. and 11:00 p.m. Monday through Friday, to allow for work to be completed without disturbing class sessions. SOW at p. 9.</p>
3	<p>Contractor will install racks, cabinets, and hardware in MDF and IDF. Response at pp. 9-13.</p>	<p>JDL will install racks and hardware in MDF and IDF, and cabinets in CDF, with certain numbers of adapter panels, cable organizers, types of cables, etc. according to the modified specifications recited in the SOW. SOW at pp. 3-7.</p>
4	<p>Proposal is for work under USAC's program for Funding Year 2004/ E-Rate Year 7. Response at pp. 3; 5.</p>	<p>The term of the SOW is April 4, 2005 through September 30, 2006. SOW at p. 19.</p>
5	<p>[No equivalent provision]</p>	<p>JDL warrants each unit of Equipment to be free from defects in material and workmanship under normal use and operating conditions for a period of ninety (90) days, or such other warranty period as may be</p>

		<p>indicated on the SOW, after the applicable Equipment Installation Date. <i>Id.</i> at p. 2.</p> <p>If the Customer has contracted for on-site Equipment Maintenance for the Equipment, then Warranty Services shall also be performed on-site. Otherwise, Warranty Services shall be performed at JDL's depot. <i>Id.</i> at p. 2.</p>
6	[No equivalent provision]	<p>In consideration of Customer paying in advance the Equipment Maintenance Service Charges set forth on the applicable Equipment Purchase and Equipment Maintenance Service SOW or such other authorized JDL order form, JDL shall render maintenance service for the covered Equipment during the Principal Period of Maintenance. <i>Id.</i> at p. 2.</p>

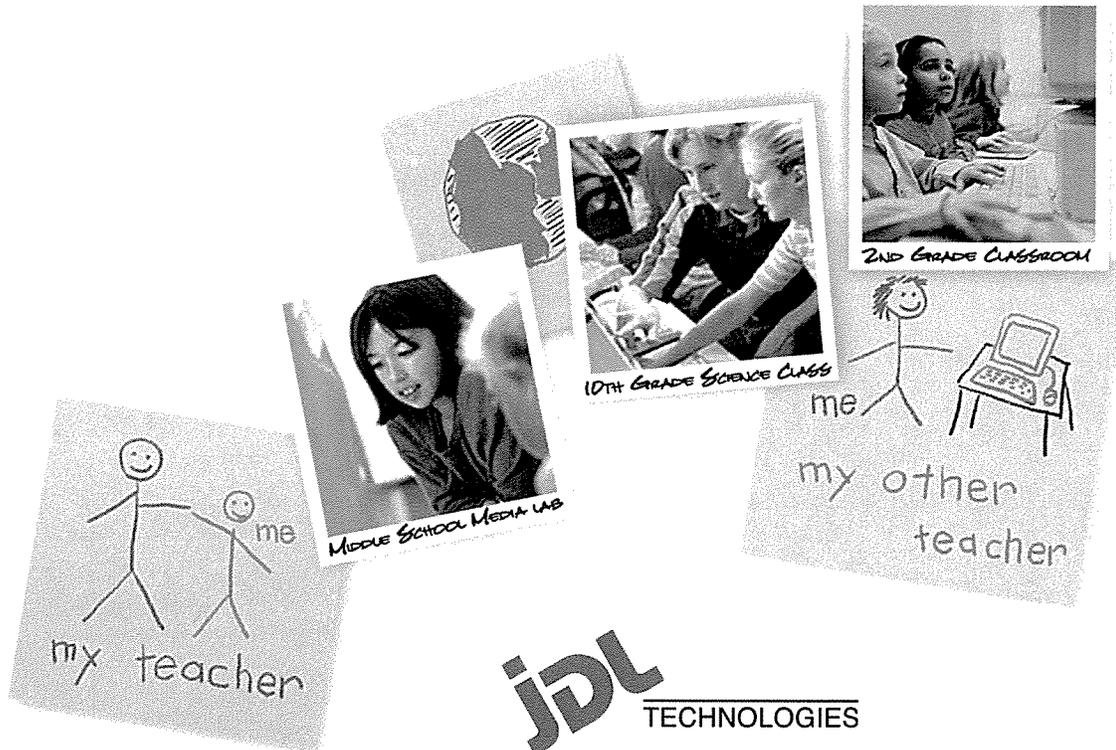
EXHIBIT H

Oakland E-Rate Year 7

Internal Wiring and Network Configuration for Modernization

Submitted January 14, 2004 for:

Oakland Unified School District



JDL
TECHNOLOGIES

5555 West 78th Street
Edina, MN 55439
www.jdltech.com

Steve VanTassel
svantassel@jdltech.com
(952) 946-1810

Transmittal Letter

RFP # ERATE YEAR 7 - 01

January 14, 2004

Edgar Rakestraw, Jr.
Oakland Unified School District
Office of the State Administrator
1025 2nd Avenue, Suite 301
Oakland, CA 94606

Re: **JDL Technologies Response to Oakland USD E-Rate Year 7 RFP**

Dear Mr. Rakestraw:

JDL Technologies is pleased to supply this proposal to Oakland Unified School District for Internal Wiring and Network Configuration for Federal Funds under the Universal Services Program (E-Rate) for Funding Year 2004. The scope of work and pricing of the project for which JDL is responding is a commitment to perform and will remain in place for 90 days from the date of this transmittal letter.

Steven J. Van Tassel is the person authorized to make representations for JDL Technologies:

TITLE: **Vice President Operations and Chief Operating Officer**
ADDRESS: **5555 West 78th Street, Edina, MN 55439**
TELEPHONE: **(952) 946-1810**
FACSIMILE: **(952) 946-1835**
EMAIL: svantassel@jdltech.com

Contact Persons

Jon Ebert is a person to whom any notice related to this engagement shall be addressed:

TITLE: **Vice President, Business Development**
ADDRESS: **5555 West 78th Street, Edina, MN 55439**
TELEPHONE: **(952) 946-1810**
FACSIMILE: **(952) 946-1835**
EMAIL: jebert@jdltech.com

Sincerely,

Steven J. VanTassel
Chief Operating Officer and
V.P. Operations for JDL Technologies, Inc.

E-Rate Year 7 Proposal #03-04-091

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Cover Letter

E-Rate Year 7 Proposal for Internal Wiring and Network Configuration in OUSD

January 14, 2004

Edgar Rakestraw, Jr.
Oakland Unified School District
Office of the State Administrator
1025 2nd Avenue, Suite 301
Oakland, CA 94606

Re: **JDL Technologies Response to Oakland USD E-Rate Year 7 RFP**

Dear Mr. Rakestraw,

JDL Technologies, doing business under this name continuously since its incorporation in 1990, is pleased to submit this response to Oakland USD's request for a qualified networking contractor to provide Internal Wiring and Network Configuration for Modernization under E-Rate for Year 7.

In addition to our formal response, JDL would like to notify OUSD that we have been contacted by a vendor, SMC, which seems to offer a solution at a lower cost than HP. However, we have not had experience with SMC's products in an enterprise environment. If OUSD is interested in testing the SMC products, JDL would be happy to aid in the investigation. Should the test be successful, JDL can provide the SMC products to OUSD if desired.

JDL Technologies is an attractive partner for Oakland Unified School District in two ways:

- First, JDL provides networking services only to K-12 school districts. JDL's experience in Baltimore City Schools, Chicago Public Schools, Los Angeles Unified Schools District, New York City Schools and Baltimore City Public Schools has underlined JDL's conviction that the requirements of public education are best met by a company that understands that education networks are not anything like business networks.
- Second, JDL is vendor neutral. But, since technology without effective electronics is impossible, JDL is also a premier level, value added supplier of the leading technology products. JDL's technical team members carry industry certifications with Cisco, HP, Proxim, Microsoft and others.

JDL's goal is to help districts achieve the promise of technology for every student. This will be impossible without providing teachers, students and staff with reliable access to the technology resources.

JDL also has interpreted and adapted IT best practice to the K-12 world. Best practice guides technology service delivery and service support. We understand that Service Level Management begins with district goals and support of the end user. We believe that the value of IT can and should be measured in terms of how effectively it enables achievement of the vital district functions. We appreciate this opportunity to propose a workable and cost effective approach to the Internal Wiring and Network Configuration for Infrastructure project in Oakland USD.

Sincerely,

Steven J. VanTassel
Chief Operating Officer and
V.P. Operations for JDL Technologies, Inc.

Executive Summary

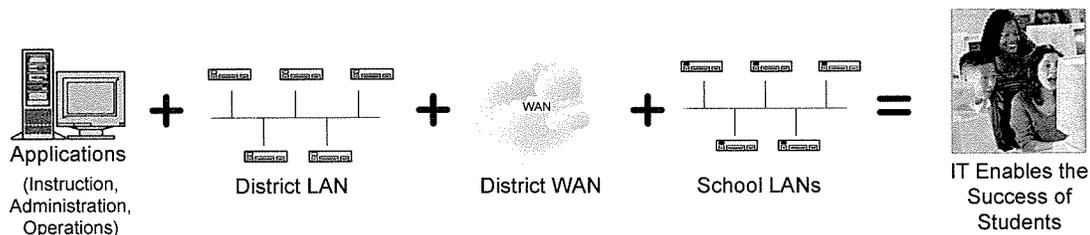
JDL Understands the Goals

JDL is very pleased to respond with a proposal to provide E-Rate eligible internal wiring and network configuration in the Oakland Unified School District.

A Network Everyone Can Rely On

Oakland USD is seeking the services of a company to supply internal wiring and network configuration services under E-Rate for Year 7 funding. Even though a functioning network is critical, it is not the overall goal. The goal is to give technology and network services in Oakland USD the capacity to enable the success of every person who uses network resources. The main focus of district investments is on student achievement.

The drawing below depicts the ultimate goal of network wiring and the network services it carries.



Several IT components work together to provide a highly reliable end user experience. This RFP response by JDL focuses on an effective, standards-based internal wiring installation and configuration.

The Best Internal Wiring Possible for the Best Price

To help Oakland USD achieve this goal, JDL is proposing to implement internal wiring and network configuration under the controls of effective project management and within the experience JDL has with thousands of school networks. JDL is an expert at internal wiring implementation in the school networking environment at a best price that meets the regulatory demands of the SLD. Cost control is a key to protecting the district's precious financial resources and solidify its ability to supply network services.

JDL understands that E-Rate does not pay for everything. Oakland USD must match funds and pay for ERate-ineligible but necessary elements of the wired network infrastructure. Thus, the best price for the best solution is more than just a legal requirement of the School Board. Cost consciousness and control are the foundation for JDL's approach to providing internal wiring and network configuration services. Cost control is necessary for assuring all end users get the IT resources they need to be effective whether it be for teaching, learning, administering or operating the school system. In an era of severely limited resources and increased fiscal accountability, JDL has the experience to supply a fully controlled project on time and within budget.

Focusing on Total Cost of Ownership and Total Cost of Value

JDL also understands that Total Cost of Ownership (TCO) is a vital but only partial answer to the financial requirements. TCO means that the true life-cycle cost of internal wiring is more than the price paid for it at the time of installation. Assuring proper support and maintenance of the network assures that the infrastructure is of value to all end users. Therefore, the Total Cost of Value is an equally important measure. Does the network supply the value to the end user that induces them to use technology or, more importantly, to stop avoiding its use because it may be at times slow or unreliable? This investment in network resources and services is important to the overall achievement of Oakland USD objectives.

JDL is Capable of Providing the Requested Internal Wiring Services

JDL has extensive experience with complying with the requirements of K-12 based technology needs. JDL is capable of designing and provisioning LANs that meet all current district requirements including E-Rate eligibility. We've done this for fourteen years with thousands of networks in K-12 schools. JDL has provided wired network services in the School Board of Broward County, Baltimore City Public Schools, Detroit Public Schools, Chicago Public Schools, the Virgin Islands Department of Education and many more school systems of a similar complexity to Oakland USD.

JDL Brings Added Value to Internal Wiring Services

There are three keys to assessing JDL's value for the Internal Wiring and Network Configuration project

1. A proven track record in K-12.
2. A system and process of implementation, change control and cost control.
3. An understanding of Oakland USD's core objectives.

The company that meets these value propositions will make a trusted partner in the procurement and maintenance of wired network equipment.

1 – A Proven Track Record in K-12

JDL knows that K-12 networks are different than business networks. School district IT departments are required to support systems that may see 8 to 10 different users, of different age and ability levels, using the same workstation on the same day. Business networks do not have hundreds of users demanding network resources at the top of the hours and then all printing their projects fifty minutes later. We understand and empathize with these demands and have the experience to help meet the load students and others place on the networks in Oakland USD.

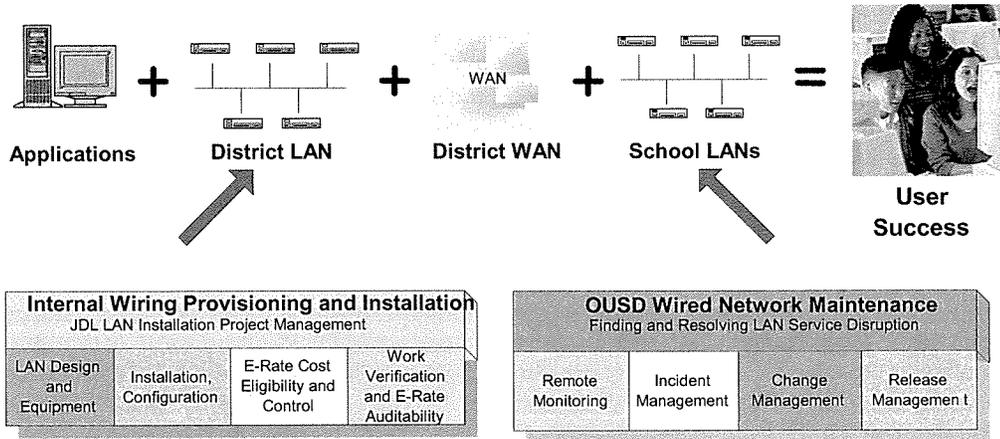
In addition to focusing exclusively on K-12, JDL is vendor neutral. Because of this vendor neutrality, JDL is looking for solutions to the district problems rather than places its products can be sold. However, networks cannot be built without products and JDL is an expert in, including holding industry certifications for, the leading networking products. This ensures that the emphasis in this project will be on solutions and what is best for SBBC including the best products combined with the best service in the industry.

2 – A system and process of implementation, change control and cost control

JDL employs practices founded on IT best practice that combine a focus on the end user experience with technology and proven processes. These practices and processes have been established by IT standards organizations worldwide and leave nothing to chance.

JDL's LAN service delivery framework is the IT best practice known as Service Level Management (SLM). This framework contains proven processes for managing all aspects of wired network equipment design, acquisition and maintenance. Prior to equipment

acquisition an insightful design must be agreed upon that accounts for all costs, not only E-Rate discount amounts.



The JDL Best Practice for LAN Services

At the time of delivery there must be an effective process for accounting for each item, recording it in a dynamic database (CMDB) for proper tracking and integrating it into the existing network environment. Change Management processes assure that the introduction of new network components does not create new problems for network users. The new equipment must then be tested and the installation must be verified.

The best practice for verifying network installation, and JDL's daily routine, is to "view" the device from the network maintenance center where the working device can be evaluated for full functionality. This process is also used to verify the work of network contractors. The work is not complete until there is an electronic "view" of the work that ensures all systems are working as specified.

While JDL understands few, if any, IT departments fully incorporate best practice across their operations, our goal as a partner is to go beyond simply providing equipment to helping our customers recognize areas of opportunity for process improvement and make progress toward those offering the best chance of improving the IT department's value to the district.

3 - An understanding of Oakland USD's core objectives

Awareness that technology resources are not the end but rather the means to achieving the district's goals is critical to the success of any technology implementation in a K-12 school system. The most important objective is to enable achievement of district and state learning outcomes for every student, while also delivering cost-effective support of the administrative and operations functions.

-End of Executive Summary-

Statement of Work (SOW)

1.0 General Objectives

This SOW provides product performance requirements, general design considerations, and installation guidelines. JDL will furnish all labor, project management and field supervision, tooling, miscellaneous mounting hardware, and consumables for work described in this SOW. In addition, JDL will provide design-build, integration services, and certification/testing documentation for individual schools to achieve LAN connectivity for all classrooms, computer laboratories, libraries, instructional areas and work areas, as specified in this SOW.

2.0 Scope

Section 2.0 details the services JDL Technologies and partners will provide Oakland Unified School District:

2.1 LAN Design for each school: JDL will provide the following documentation.

- 2.1.1 Drawing of logical network configuration both in hard and soft copy format which includes:
 - 2.1.1.1 All SNMP managed devices
 - 2.1.1.2 IP addresses of all network equipment
 - 2.1.1.3 Location of equipment
 - 2.1.1.4 Riser diagram to include cable types and counts
 - 2.1.1.5 Drop types and counts
- 2.1.2 A material list specifying quantity and part/specification and serial numbers on a CDF, IDF, and MDF room-by-room basis.
- 2.1.3 JDL must coordinate cable runs, rack equipment locations with the OUSD Technology Services Department during the initial design of the cable installation. JDL and Technology Services must agree to the final location of all devices and the cable plant design.
- 2.1.4 Complete set of floor plans indicating entire system configuration, both in hard copy and in soft copy format. Floor plans have to include existing and new installation.
- 2.1.5 Cable Management Program that will operate on a MS Windows platform, including:
 - 2.1.5.1.1 Circuit identifications and locations.
 - 2.1.5.1.2 Cable schedule and routing.
 - 2.1.5.1.3 Cross-connect table for electronics to patch panel interconnections.
 - 2.1.5.1.4 Cable test forms and test results.
 - 2.1.5.1.5 Cable labels.
 - 2.1.5.1.6 Networking Planning Charts.
 - 2.1.5.1.7 Diskettes containing design database.

2.2 Installation of all Racks and Hardware in MDFs (1 per school) including:

- 2.2.1 Install 84" high by 19" wide, floor-mounted, double-sided aluminum rack in MDF. Minimum of one rack per MDF.

- 2.2.2 Properly mount and ground all racks.
- 2.2.3 Install 19" rack-mounted horizontal patch cord/cable organizers for cable management in MDF.
- 2.2.4 Install vertical jumper retainer cable organizers mounted to front of rack, on sides of rack frame (two per rack), running the full height of rack.
- 2.2.5 Install 18" wide ladder rack between the top of rack and backboard with associated hanger supports and seismic bracing.
- 2.2.6 Install one 12-port 19" rack mountable, one unit high combination patch panel LIU. (One LIU for each 12-strand fiber cable). LIU shall contain rear fiber entry slots, wire retainers, fiber storage drum, slide out rails for front access, and jumper trough for cable management in MDF.
- 2.2.7 Install one 19" surge protected rack-mounted 3-wire electrical power strip with a minimum of 12-single outlets, mounted horizontally in MDF. One power strip per rack.
- 2.2.8 Install center weighted shelves for district supplied servers, keypads and monitor with associated seismic straps. Minimum of one shelf per rack.
- 2.2.9 Install a minimum of two dedicated 20 Amp circuit quadplex receptacle outlets in MDF.

2.3 Installation of all Racks and Hardware in IDFs including:

- 2.3.1 Install 84" high by 19" wide, floor mounted, double-sided aluminum rack in IDF. Minimum of one rack per IDF.
- 2.3.2 Properly mount and ground all racks.
- 2.3.3 Install 19" rack mounted horizontal patch cord/cable organizers for cable management in IDF.
- 2.3.4 Install vertical jumper retainer cable organizers mounted to front of rack, on sides of rack frame (two per rack), running the full height of rack.
- 2.3.5 Install 18" wide ladder rack between the top of rack and backboard with associated hanger supports and seismic bracing.
- 2.3.6 Install one 12-port 19" rack mountable, one unit high combination patch panel LIU. (One LIU for each 12-strand fiber cable). LIU shall contain rear fiber entry slots, wire retainers, fiber storage drum, slide out rails for front access, and jumper trough for cable management in IDF.
- 2.3.7 Install a minimum of one 19" surge protected rack-mounted 3-wire electrical power strip with a minimum of 12-single outlets, mounted horizontally in IDF. Install a minimum of one power strip per rack.
- 2.3.8 Install a minimum of one dedicated 20 Amp circuit quadplex receptacle outlet at each IDF location.

2.4 Installation of all Racks and Hardware in CDFs including:

- 2.4.1 Install one 24" high x 24" wide x 24" deep 16 gauge wall mount cabinet with dual hinged lockable solid doors (front and back), 250 cfm exhaust fan, drilled EIA standard hole spacing, and vented side panels for mounting equipment specified herein at the CDF.
- 2.4.2 Properly mount and ground all cabinets.
- 2.4.3 Install one 12-port 19" rack mountable, one unit high combination patch panel LIU. (One LIU for each 12-strand fiber cable). LIU shall contain rear fiber entry slots,

wire retainers, fiber storage drum, slide out rails for front access, and jumper trough for cable management in CDF. Install SC couplings for termination of fiber cables.

- 2.4.4 Install a minimum of one 19" surge protected rack-mounted 3-wire electrical power strip with a minimum of 12-single outlets, mounted horizontally in CDF.
- 2.4.5 Install a minimum of one dedicated 20 Amp circuit for every two CDF locations with a quadplex receptacle outlet at each CDF location.

2.5 Cabling (Fiber)

- 2.5.1 Install 12-strand multi-mode outside plant Fiber Optic cable from the MDF to each IDF.
- 2.5.2 Install one 12-strand multi-mode outside plant Fiber Optic cable from the IDF to each CDF.
- 2.5.3 Fiber Optic cable shall have continuous sheath continuity.
- 2.5.4 Each Fiber Optic cable shall be identified with a pre-established uniform numbering system. Identification will be securely attached to the cable at each end, whenever it enters or leaves a conduit, and at the MDF, IDF and CDF.
- 2.5.5 Fiber Optic cable must be installed in 1" corrugated type innerduct (orange in color) when running in shared conduit. Armored fiber is an acceptable alternative.
- 2.5.6 Terminate all 12 fiber strands at each end of the cable with SC type connectors.
- 2.5.7 Labeling of all terminations will be done to industry standards.

2.6 Cabling (Cat 6)

- 2.6.1 Install 10 new PVC rated Category 6 cables for each classroom. All cables will route through newly installed pathways.
- 2.6.2 8 data cables are for student use and 2 data cables are for teacher use.
- 2.6.3 Install 3-channel metal (aluminum model AL4000 or steel model 4000) wiremold for the accommodation of new data cables and new AC electrical cable in the classroom. A total of 36 feet of wiremold per classroom.
- 2.6.4 The CAT 6 4-pair cable will meet EIA/TIA Commercial Building Telecommunications Wiring Standards.
- 2.6.5 Terminate the new Category 6 station cable on jacks at the station end and at the patch panel at the CDF end.
- 2.6.6 Maintain the outer jacket of all Category 6 cables up to the leading edge of the wiring block at both ends of the cable.
- 2.6.7 All jacks will use the EIA/TIA-568B wiring configuration.
- 2.6.8 Maintain twists on all Category 6 cables up to the edge of the termination point of the data jack.
- 2.6.9 Labeling of all terminations will be done to industry standards.
- 2.6.10 Furnish Category 6 patch cords in varying lengths (1, 3, 5, 7, and 10 feet) as needed. Provide one patch cord for each switch port.
- 2.6.11 Install two new Category 6 cables for each auditorium/multi-purpose room access points. Data jacks for access points are to be installed to industry standards. All cables will route through newly installed pathways.
- 2.6.12 Install three new Category 6 cables for each computer laboratory. Data jacks for access points are to be installed to industry standards. Two cables are for access

points and one cable for network printer. All cables will route through newly installed pathways.

- 2.6.13 Install a minimum of two new Category 6 cables in each private administrative office.
- 2.6.14 Install a minimum of one Category 6 cable per workstation in shared administrative work area.
- 2.6.15 Install a minimum of one Category 6 cable for network printers.
- 2.6.16 Install a minimum of one Category 6 cable for network copiers.

2.7 Networking Hardware in MDF

- 2.7.1 Install one Cisco 3725 Router with the minimum of two 1-port T1/Fractional T1 DSU/TSU WAN Interface Card in MDF and 2 10/100 Ethernet ports.
- 2.7.2 Install minimum of one switch with the following capabilities:
 - 2.7.2.1.1 10 GBIC-based Gigabit Ethernet ports and 2 10/100/1000 ports
 - 2.7.2.1.2 1.5 rack unit (RU) stackable, multilayer Gigabit Ethernet switch
 - 2.7.2.1.3 Power-over-Ethernet
 - 2.7.2.1.4 Layer III Capabilities
- 2.7.3 Install minimum of one switch with the following capabilities:
 - 2.7.3.1.1 24 10/100 ports and 2 GBIC-based Gigabit Ethernet ports
 - 2.7.3.1.2 1 rack unit (RU) stackable, multilayer switch upgradeable to full dynamic IP routing
 - 2.7.3.1.3 Power-over-Ethernet
 - 2.7.3.1.4 Layer III Capabilities
- 2.7.4 Install GBICs (Multimode Only) in all GBIC ports.
- 2.7.5 Install 2 meter SC to SC Multimode Fiber Patch Cables in all fiber ports.
- 2.7.6 Install one rack-mounted UPS for all switches and servers 1 hour minimum up time and appropriately rated for equipment in MDF.

2.8 Networking Hardware in IDF

- 2.8.1 Install minimum of one switch with the following capabilities:
 - 2.8.1.1.1 10 GBIC-based Gigabit Ethernet ports and 2 10/100/1000 ports
 - 2.8.1.1.2 1.5 rack unit (RU) stackable, multilayer Gigabit Ethernet switch
 - 2.8.1.1.3 Power-over-Ethernet
 - 2.8.1.1.4 Layer III Capabilities
- 2.8.2 Install minimum of one switch with the following capabilities:
 - 2.8.2.1.1 24 10/100 ports and 2 GBIC-based Gigabit Ethernet ports
 - 2.8.2.1.2 1 rack unit (RU) stackable, multilayer switch upgradeable to full dynamic IP routing
 - 2.8.2.1.3 Power-over-Ethernet
 - 2.8.2.1.4 Layer III Capabilities
- 2.8.3 Install GBICs (Multimode Only) in all GBIC ports.
- 2.8.4 Install 2 meter SC to SC Multimode Fiber Patch Cables in all fiber ports.
- 2.8.5 Install one rack-mounted UPS for all switches and servers (1 hour) in MDF.

2.9 Networking Hardware in CDF

- 2.9.1 Install minimum of one switch with the following capabilities:
 - 2.9.1.1.1 24 10/100 ports and 2 GBIC-based Gigabit Ethernet ports
 - 2.9.1.1.2 1 rack unit (RU) stackable, multilayer switch upgradeable to full dynamic IP routing
 - 2.9.1.1.3 Layer III Capabilities
- 2.9.2 Install GBICs (Multimode Only) in all GBIC ports at CDF.

2.9.3 Install 2 meter SC to SC Multimode Fiber Patch Cable in all fiber ports.

2.10 Wireless Hardware in Auditoriums and Multi-purpose Rooms

- 2.10.1 Install minimum of two access points in auditoriums/multi-purpose rooms.
- 2.10.2 Install Power-over-Ethernet modules as needed.
- 2.10.3 Access points shall support both 802.11a and 802.11b clients simultaneously.
- 2.10.4 Access points shall support IEEE 802.3af Power-over-Ethernet.
- 2.10.5 Access points shall be installed to industry standards.
- 2.10.6 Access points that support only 802.11a or 802.11b exclusively can be installed with approval by the Technology Services Department at OUSD.
- 2.10.7 Install 20 Amp circuit receptacle outlets at each access point location.

2.11 Wireless Hardware in Computer Laboratories

- 2.11.1 Install minimum of two access points in each computer laboratory.
- 2.11.2 Install Power-over-Ethernet modules as needed.
- 2.11.3 Access points shall support both 802.11a and 802.11b clients simultaneously.
- 2.11.4 Access points shall support IEEE 802.3af Power-over-Ethernet.
- 2.11.5 Access points shall be installed to industry standards.
- 2.11.6 Access points that support only 802.11a or 802.11b exclusively can be installed with approval by the Technology Services Department at OUSD.
- 2.11.7 Install 20 Amp circuit receptacle outlets at each access point location.

2.12 Testing

- 2.12.1 Testing of all new copper and fiber cable.
- 2.12.2 Testing for copper cables will include continuity, shorts, crosses, grounds, attenuation, impedance, near-end-cross talk (NEXT) and distance.
- 2.12.3 Testing all fibers, using a Power Meter and light source, at 850 nm and 1300 nm.
- 2.12.4 Pre-testing of all fibers prior to removing the cable from the reel to install.
- 2.12.5 These test results will be provided to OUSD Technology Services Department in soft (cd-rom) and hard copy form when testing is completed.

2.13 Completion of Installation: Each school installation will be considered complete after the following have been accomplished:

- 2.13.1 All system testing has been completed
- 2.13.2 Installer assures that entire system is in working order
- 2.13.3 All Cable Test Forms have been submitted to the District in both hard and soft copy.
- 2.13.4 All ceiling panels previously removed have been put back in place.
- 2.13.5 All system labels have been put in place.
- 2.13.6 All construction debris and scrap materials have been removed from project site.
- 2.13.7 All marked up, project record documents have been returned to the District.
- 2.13.8 All unused customer material has been returned to the District.

- 2.13.9 The District has successfully completed acceptance testing of the network installation.
- 2.13.10 The District's Technology Services Department-Office of Technology Support Coordinator has inspected and accepted the installation.
- 2.13.11 Documentation, to include as-builts, along with required soft copies and completed cable management database has been turned over to the District.

2.14 Additional Notes for Installation

- 2.14.1 Each CDF will support 2 classrooms unless the need to feed three classrooms is required. If third classroom is added to CDF:
 - 2.14.1.1.1 Install additional switches as needed.
 - 2.14.1.1.2 Install additional GBICs (Multimode Only) in each GBIC fiber port.
 - 2.14.1.1.3 Install additional 2 meter SC to SC Multimode Fiber Patch Cables in each fiber port.
 - 2.14.1.1.4 Install additional Category 6 patch cords in varying lengths (1, 3, 5, 7, and 10 feet) as needed. Provide sufficient quantities to match switch ports.
- 2.14.2 No copper, fiber, or coaxial cable shall be installed aurally.
- 2.14.3 Substitutions will only be allowed with written approval from the Technology Services Department.
- 2.14.4 Design and implementation services have to be in accordance with applicable TIA and EIA Standards.
- 2.14.5 For this proposal, JDL has specifically and purposely stayed completely in line with everything called for in the RFP. During our walkthrough we recognized things such as the presently installed wall-mounted cabinets and raceway that could most definitely be used to house the new electronics and Cat 6; however, since floor mounted racks and raceway were specifically called out in the RFP we are not suggesting reuse of legacy equipment. We also contemplated going outside the scope of the RFP with alternative solutions doing away with a great number of the CDFs; however, JDL again decided against this thereby staying within the parameters of the RFP. We discussed giving the District an option for Layer 2 switches but opted not to since Layer 3 is called for in the RFP. We wish to make the District aware that while we did have several alternatives to bidding this project, and are aware other contractors may indeed bid these alternatives, the JDL Team has bid this entirely according to the parameters and specifics of the RFP.

2.15 Summary of Services

Site Name	CAT6 Drops to be Installed	MDFs For Buildout	IDFs For Buildout	CDFs For Buildout	Fiber Cables to be Installed	LAN Designs	Wireless Access Points to be Installed	20 amp Circuits to be Installed
GROUP 1 SCHOOLS								
Washington	220	1	2.0	11	13	1	2	12
Golden Gate	315	1	2.0	15	17	1	2	14
Longfellow	245	1	2.0	12	14	1	2	12
Carter	320	1	2.0	16	18	1	2	14
Emerson Schools	230	1	2.0	11	13	1	2	12
Totals Group 1	1330	5	10	65	75	5	10	64

Site Name	CAT6 Drops to be installed	MDFs For Buildout	IDFs For Buildout	CDFs For Buildout	Fiber Cables to be Installed	LAN Designs	Wireless Access Points to be Installed	20 amp Circuits to be Installed
GROUP 2 SCHOOLS								
Lafayette	285	1	2.0	14	16	1	2	13
Lowell	455	1	3.0	22	25	1	4	22
M.L. King	220	1	2.0	11	13	1	2	12
Cole	270	1	2.0	13	15	1	2	13
Prescott Schools	345	1	2.0	17	19	1	2	15
Totals Group 2	1575	5	11	77	88	5	12	75

Site Name	CAT6 Drops to be installed	MDFs For Buildout	IDFs For Buildout	CDFs For Buildout	Fiber Cables to be Installed	LAN Designs	Wireless Access Points to be Installed	20 amp Circuits to be Installed
GROUP 3 SCHOOLS								
Westlake	480	1	3.0	23	26	1	4	21
Foster	260	1	2.0	13	15	1	2	13
Bella Vista	375	1	2.0	18	20	1	4	17
Think College Now	335	1	2.0	16	18	1	2	14
College Preparatory and Architecture	100	1	2.0	5	7	1	2	9
Mandela Schools	195	1	2.0	9	11	1	2	11
Totals Group 3	1745	6	13.0	84	97	6	16	85

Site Name	CAT6 Drops to be installed	MDFs For Buildout	IDFs For Buildout	CDFs For Buildout	Fiber Cables to be Installed	LAN Designs	Wireless Access Points to be Installed	20 amp Circuits to be Installed
GROUP 4 SCHOOLS								
Brewer	425	1	3.0	21	24	1	4	20
Manzanita	500	1	3.0	24	27	1	4	21
Roosevelt	485	1	3.0	24	27	1	4	21
International Community	235	1	2.0	11	13	1	2	12
Urban Promise Schools	60	1	1.0	3	4	1	2	7
Totals Group 4	1705	5	12	83	95	5	16	81

Site Name	CAT6 Drops to be installed	MDFs For Buildout	IDFs For Buildout	CDFs For Buildout	Fiber Cables to be Installed	LAN Designs	Wireless Access Points to be Installed	20 amp Circuits to be Installed
GROUP 5 SCHOOLS								
Simmons	520	1	3.0	25	28	1	4	22
Horace Mann	245	1	2.0	12	14	1	2	12
Ascend	130	1	1.0	6	7	1	2	8
Hawthorne Schools	365	1	2.0	18	20	1	4	17
Totals Group 5	1260	4	8	61	69	4	12	59

Site Name	CAT6 Drops to be installed	MDFs For Buildout	IDFs For Buildout	CDFs For Buildout	Fiber Cables to be Installed	LAN Designs	Wireless Access Points to be Installed	20 amp Circuits to be Installed
GROUP 6 SCHOOLS								
Burbank	180	1	1.0	9	10	1	2	10
Burckhalter	130	1	1.0	6	7	1	2	8
Frick	480	1	3.0	23	26	1	4	21
Whittier	305	1	2.0	15	17	1	2	14
Lockwood	455	1	2.0	22	24	1	4	19
Havencourt Schools	415	1	2.0	20	22	1	4	18
Totals Group 6	1965	6	11	95	106	6	18	90

Site Name	CAT6 Drops to be installed	MDFs For Buildout	IDFs For Buildout	CDFs For Buildout	Fiber Cables to be Installed	LAN Designs	Wireless Access Points to be Installed	20 amp Circuits to be Installed
GROUP 7 SCHOOLS								
Acorn Woodland	190	1	1.0	9	10	1	2	10
Cox	640	1	3.0	32	35	1	4	25
Elmhurst	355	1	2.0	17	19	1	2	15
Brookfield	365	1	2.0	18	20	1	2	15
Sobrante Park	215	1	1.0	10	11	1	2	10
Madison Schools	345	1	2.0	17	19	1	2	15
Totals Group 7	2110	6	11	103	114	6	14	90

Totals All Groups	CAT6 Drops to be installed	MDFs For Buildout	IDFs For Buildout	CDFs For Buildout	Fiber Cables to be Installed	LAN Designs	Wireless Access Points to be Installed	20 amp Circuits to be Installed
	11690	37	76.0	568	644	37	98	544

3.0 Terms and Conditions

- 3.1 We assume there will be adequate power distribution from current breakers available allowing for the installation of all called for 20 amp circuits in all MDF/IDF/CDF, and access point locations. If adequate power is not available at any of these above locations, the JDL Team will do an electrical survey at these locations at no charge to the District to provide a cost proposal for needed power installations to meet all electrical tasks as called for in the RFP.
- 3.2 We assume there will be adequate station grounds in all MDF/IDF/CDF locations.
- 3.3 Although not specifically called for, our proposal includes plenum Cat 6 and fiber to meet all EIA/TIA codes and standards.
- 3.4 At school locations where usable existing aluminum wire mold is already installed, the District will be credited according to unused quantities.
- 3.5 All pathways for new CAT 6 cables will be provided by the District
- 3.6 All areas will be restored to pre-installation condition
- 3.7 All services out of scope or not called for in the RFP will be covered by change orders to be mutually agreed upon by the District and the JDL Consortium
- 3.8 A complete installation and work schedule will be mutually agreed upon by the District and the JDL consortium after award
- 3.9 Proposal is valid 90 days from the date of submission

4.0 JDL Responsibilities

Responsibilities include:

- 4.1 JDL will assign a Project Manager to coordinate and manage OUSD E-Rate Year 7 Service deliverables as defined in this SOW.
- 4.2 Project Management and Technical Supervision: JDL will provide the Project Management Team and all technical supervision necessary to design and install a complete and operational system.
- 4.3 JDL will propose any and all items required for a complete and operational system.
- 4.4 JDL will furnish, install, connect, and test the networking system, including all components described in this SOW, in accordance with design services provided under this SOW.

5.0 Customer Responsibilities

- 5.1 OUSD must define lead functional personnel or an overall OUSD Project Manager to work with JDL to review the final project plan, documentation, schedules, sign-off procedures, etc.

6.0 Cost

Section 6.0 details the costs of Year 7 E-Rate Services by school group.

Note: Cost estimate for required Non-Erate electrical circuits is detailed in Section 7.0

GROUP 1 SCHOOLS	PRICING
LAN Design Services	\$ 60,047.51
MDF Installation Services	\$ 43,078.75
IDF Installation Services	\$ 79,841.50
CDF Installation Services	\$ 177,343.53
CAT6 Cabling Services	\$ 79,600.50
Fiber Installation Services	\$ 49,875.00
Wireless Installation Services	\$ 11,930.10
System Testing Services	\$ 26,693.10
Total Services Group 1	\$ 528,409.98
Total Materials Group 1	\$ 233,123.83
Total Ser & Mat Group 1	\$ 761,533.81
Cisco/HP Hardware Group 1	\$ 449,113.15
Total Group 1	\$ 1,210,646.96

GROUP 2 SCHOOLS	PRICING
LAN Design Services	\$ 70,922.25
MDF Installation Services	\$ 43,079.23
IDF Installation Services	\$ 87,825.65
CDF Installation Services	\$ 210,083.87
CAT6 Cabling Services	\$ 96,990.25
Fiber Installation Services	\$ 58,520.00
Wireless Installation Services	\$ 14,316.12
System Testing Services	\$ 31,493.07

Total Services Group 2	\$ 613,230.44
Total Materials Group 2	\$ 252,550.73
Total Ser & Mat Group 2	\$ 865,781.17
Cisco/HP Hardware Group 2	\$ 486,539.09
Total Group 2	\$ 1,352,320.26

GROUP 3 SCHOOLS	PRICING
LAN Design Services	\$ 78,487.29
MDF Installation Services	\$ 51,695.08
IDF Installation Services	\$ 103,793.94
CDF Installation Services	\$ 229,182.41
CAT6 Cabling Services	\$ 104,438.25
Fiber Installation Services	\$ 63,840.00
Wireless Installation Services	\$ 19,088.16
System Testing Services	\$ 34,820.73

Total Services Group 3	\$ 685,345.86
Total Materials Group 3	\$ 291,404.70
Total Ser & Mat Group 3	\$ 976,750.56
Cisco/HP Hardware Group 3	\$ 561,391.28
Total Group 3	\$ 1,538,141.84

GROUP 4 SCHOOLS	PRICING
LAN Design Services	\$ 77,068.85
MDF Installation Services	\$ 43,078.75
IDF Installation Services	\$ 95,809.80
CDF Installation Services	\$ 226,454.05
CAT6 Cabling Services	\$ 102,044.25
Fiber Installation Services	\$ 63,175.00
Wireless Installation Services	\$ 19,088.16
System Testing Services	\$ 34,054.65

Total Services Group 4	\$ 660,773.50
Total Materials Group 4	\$ 271,977.71
Total Ser & Mat Group 4	\$ 932,751.21
Cisco/HP Hardware Group 4	\$ 523,965.18
Total Group 4	\$ 1,456,716.40

GROUP 5 SCHOOLS	Pricing
LAN Design Services	\$ 56,737.80
MDF Installation Services	\$ 34,462.96
IDF Installation Services	\$ 63,873.20
CDF Installation Services	\$ 166,430.89
CAT6 Cabling Services	\$ 75,411.00
Fiber Installation Services	\$ 45,885.00
Wireless Installation Services	\$ 14,316.12
System Testing Services	\$ 24,993.36

Total Services Group 5	\$ 482,110.33
Total Materials Group 5	\$ 213,696.77
Total Ser & Mat Group 5	\$ 695,807.10
Cisco/HP Hardware Group 5	\$ 411,686.92
Total Group 5	\$ 1,107,494.03

GROUP 6 SCHOOLS	Pricing
LAN Design Services	\$ 88,889.22
MDF Installation Services	\$ 51,694.44
IDF Installation Services	\$ 87,825.65
CDF Installation Services	\$ 259,195.65
CAT6 Cabling Services	\$ 117,605.25
Fiber Installation Services	\$ 70,490.00
Wireless Installation Services	\$ 21,474.18
System Testing Services	\$ 38,746.89

Total Services Group 6	\$ 735,921.28
Total Materials Group 6	\$ 330,258.66
Total Ser & Mat Group 6	\$ 1,066,179.94
Cisco/HP Hardware Group 6	\$ 636,243.44
Total Group 6	\$ 1,702,423.38

GROUP 7 SCHOOLS	Pricing
LAN Design Services	\$ 95,035.82
MDF Installation Services	\$ 51,694.44
IDF Installation Services	\$ 87,825.65
CDF Installation Services	\$ 281,022.66
CAT6 Cabling Services	\$ 126,283.50
Fiber Installation Services	\$ 75,810.00
Wireless Installation Services	\$ 16,702.14
System Testing Services	\$ 41,631.66

Total Services Group 7	\$ 776,005.86
Total Materials Group 7	\$ 349,685.63
Total Ser & Mat Group 7	\$ 1,125,691.49
Cisco/HP Hardware Group 7	\$ 673,669.52
Total Group 7	\$ 1,799,361.00

Aggregated Costs for all Groups

All Groups (1-7)	PRICING
LAN Design Services	\$ 527,188.73
MDF Installation Services	\$ 318,783.66
IDF Installation Services	\$ 606,795.37
CDF Installation Services	\$ 1,549,713.06
CAT6 Cabling Services	\$ 702,373.00
Fiber Installation Services	\$ 427,595.00
Wireless Installation Services	\$ 116,914.98
System Testing Services	\$ 232,433.46
Total All Services	\$ 4,481,797.25
Total Materials	\$ 1,942,698.02
Total Service and Material	\$ 6,424,495.28
Cisco/HP Electronics	\$ 3,742,608.59
Total Services, Materials, & Electronics	\$ 10,167,103.86

7.0 Cost Estimate of Required Electrical Circuits (non-Erate costs)

SITE NAME	20 amp circuits	SITE NAME	20 amp circuits	Site Name	20 amp circuits
GROUP 1 SCHOOLS		GROUP 2 SCHOOLS		GROUP 3 SCHOOLS	
Washington	12	Lafayette	13	WestLake	21
Golden Gate	14	Lowell	22	Foster	13
LongFellow	12	ML King	12	Bella Vista	17
Carter	14	Cole	13	Think College Now	14
Emerson	12	Prescott	15	College Prep and Arch.	9
				Mandela	11
Totals Group 1	64	Totals Group 2	75	Totals Group 3	85
Electrical Cost Group 1	\$ 39,200.00	Electrical Cost Group 2	\$ 45,937.50	Electrical Cost Group 3	\$ 52,062.50

SITE NAME	20 amp circuits	SITE NAME	20 amp circuits	SITE NAME	20 amp circuits
GROUP 4 SCHOOLS		GROUP 5 SCHOOLS		GROUP 6 SCHOOLS	
Brewer	20	Simmons	22	Burbank	10
Manzanita	21	Horace Mann	12	Burckhalter	8
Roosevelt	21	Ascend	8	Frick	21
Int'l Community	12	Hawthorne	17	Whittier	14
Urban Promise	7			Lockwood	19
				Havenscourt	18
Totals Group 4	81	Totals Group 5	59	Totals Group 6	90
Electrical Cost Group 4	\$ 49,612.50	Electrical Cost Group 5	\$ 36,137.50	Electrical Cost Group 6	\$ 55,125.00

SITE NAME	20 amp circuits
GROUP 7 SCHOOLS	
Acorn	10
Cox	25
Elmhurst	15
Brookfield	15
Sobrante Park	10
Madison	15
Totals Group 7	90
Electrical Cost Group 7	\$ 55,125.00

Total 20 amp circuits	544
Total Electrical Costs	\$ 333,200.00

8.0 Additional Services

Additional services not provided by the Scope of this E-Rate services SOW can be requested at the following time and material rates.

- 8.1 The rate for time and material services is \$187.50 per hour.
- 8.2 The daily rate for time and material services is \$1500.
- 8.3 Travel time is invoiced at the hourly rate
- 8.4 Additional materials are billed at then current product rates.
- 8.5 Actual Travel costs (i.e. flights, hotel, meals, car rental, and mileage for local travel) will be invoiced for each additional service request.

9.0 Payment

Upon delivery of services and products described in this SOW, JDL will invoice the OUSD and Schools and Libraries Division for eligible services and products in accordance with E-Rate discount billing procedures.

OUSD shall pay 100% of any Additional Services not provided by the Scope of this SOW within thirty (30) days of receipt of an invoice for such services.