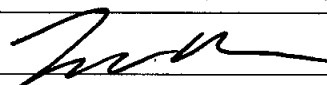








Res 91  
Significant

# CONTRACT COVERSHEET

NOTE: Shaded areas are for County Executive review.

<b>DEPARTMENT</b> Administration/ Information Mangement	<b>CONTRACT/ADDENDUM #:</b> 12437																		
1. This contract, grant or addendum: <input checked="" type="checkbox"/> AWARDS <input type="checkbox"/> ACCEPTS	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:50%;">Contract</th> <th style="width:50%;">Addendum</th> </tr> <tr> <td colspan="2" style="text-align:center;">If Addendum, please include original contract number</td> </tr> <tr> <td><input checked="" type="checkbox"/> POS</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Co Lesse</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Co Lessor</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Intergovernmental</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Purchase of Property</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Property Sale</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Other:</td> <td><input type="checkbox"/></td> </tr> </table>	Contract	Addendum	If Addendum, please include original contract number		<input checked="" type="checkbox"/> POS	<input type="checkbox"/>	<input type="checkbox"/> Co Lesse	<input type="checkbox"/>	<input type="checkbox"/> Co Lessor	<input type="checkbox"/>	<input type="checkbox"/> Intergovernmental	<input type="checkbox"/>	<input type="checkbox"/> Purchase of Property	<input type="checkbox"/>	<input type="checkbox"/> Property Sale	<input type="checkbox"/>	<input type="checkbox"/> Other:	<input type="checkbox"/>
Contract		Addendum																	
If Addendum, please include original contract number																			
<input checked="" type="checkbox"/> POS		<input type="checkbox"/>																	
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<input type="checkbox"/> Intergovernmental	<input type="checkbox"/>																		
<input type="checkbox"/> Purchase of Property	<input type="checkbox"/>																		
<input type="checkbox"/> Property Sale	<input type="checkbox"/>																		
<input type="checkbox"/> Other:	<input type="checkbox"/>																		
2. This contract is discretionary <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO																			
3. Term of Contract or Addendum: From: 6-1-2015 To: 10/31/15 <sup>10/31/15</sup>																			
4. Amount of Contract or Addendum \$ 115,773																			
5. Purpose: Install fiber for services to Dane County East District Campus (FNA Crossroads) which will connect to MUFN at Femrite and 190/94.																			
6. Vendor or Funding Source:																			
7. MUNIS Vendor Code: 3540 Intercon Construction																			
8. Bid/RFP Number: 115068 Crossroads Fiber Build																			
9. If grant: Funds Positions? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO Will require on-going or matching funds? <input type="checkbox"/> YES <input type="checkbox"/> NO																			
10. Are funds included in the budget? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO																			
11. Account No. & Amount, Org. & Obj. CPADMIN 57440 Amount \$ 115,773																			
Account No. & Amount, Org. & Obj. _____ Amount \$ _____																			
Account No. & Amount, Org. & Obj. _____ Amount \$ _____																			
12. Is a resolution needed: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If "YES," please attach a copy of the Resolution. If Resolution has already been approved by the County Board, Resolution No. & date of adoption Res 91																			
13. Does Domestic Partner equal benefits requirement apply? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO																			
14. Director's Approval 																			

### CONTRACT REVIEW/APPROVALS

Initials	Ftnt	Date In	Date Out
 Received	_____	6/5/15	_____
 Controller	_____	_____	6/9/15
 Corporation Counsel	_____	6/8/15	6/8/15
 Risk Management	_____	6/8/15	6/8/15
 ADA Coordinator	_____	6/8/15	6/8/15
 Purchasing Agent	_____	6/3/15	6/3/15
_____ County Executive	_____	_____	_____

### VENDOR

<b>Vendor Name &amp; Address</b> INTERCON CONSTRUCTION INC 5512 STATE RD 19 & 113 WAUNAKEE, WI 53597
<b>Contact Person</b> CHRIS WOZNIAK
<b>Phone No.</b> 608-850-4820 x 286
<b>E-mail Address</b> CWOZNIAK@INTERCON-CONST.COM

### Footnotes:

1. \_\_\_\_\_
2. \_\_\_\_\_

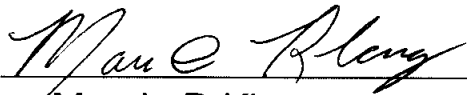
<b>Return To:</b> Name/Title: _____ Dept.: _____
Phone: _____ Mail Address: _____
E-mail: _____

**CERTIFICATION**

The attached contract: *(Check as many as apply)*

- conforms to Dane County's standard Purchase of Services Agreement form in all respects
- conforms to Dane County's standard Purchase of Services Agreement form with modifications and is accompanied by a revision copy<sup>1</sup>
- is a non-standard contract which has been reviewed or developed by corporation counsel which has not been changed since that review/development
- is a non-standard contract previously reviewed or developed by corporation counsel which has been changed since that review/development; it is accompanied by a revision copy<sup>1</sup>
- is a non-standard contract not previously reviewed by corporation counsel; it is accompanied by a revision copy
- contains non-standard/indemnification language which has been reviewed or developed by risk management and which has not been changed since that review/development
- contains non-standard insurance/indemnification language which has been changed since review/development or which has not been previously seen by risk management; it is accompanied by a revision copy
- contains non-standard affirmative action/equal opportunity language which has been reviewed or developed by contract compliance and which has not been changed since that review/development
- contains non-standard affirmative action/equal opportunity language which has been changed since the earlier review/development by contract compliance or which has not been previously seen by contract compliance; it is accompanied by a revision copy<sup>1</sup>

Date: 6-1-2015

Signed: 

Telephone Number: 608-266-4392

Print Name: Marvin D Klang

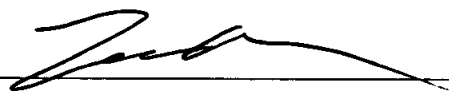
**MAJOR CONTRACTS REVIEW (DCO Sect. 25.20)** This review applies only to contracts which both exceed \$100,000 in disbursements or receipts and which require county board review and approval.

**EXECUTIVE SUMMARY** *(Attach additional pages, if needed).*

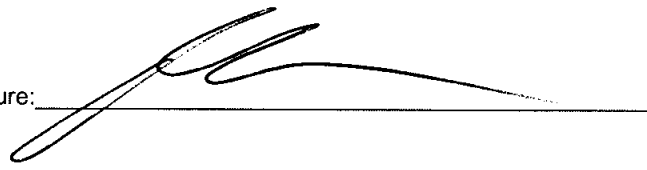
1. **Department Head**  Contract is in the best interest of the County.  
Describe any deviations from the standard contracting process and any changes to the standard Purchase of Services Form Agreement.

Date: \_\_\_\_\_ Signature: \_\_\_\_\_

2. **Director of Administration**  Contract is in the best interest of the County.  
Comments:

Date: 6/4/15 Signature: 

3. **Corporation Counsel**  Contract is in the best interest of the County.  
Comments:

Date: 6/5/15 Signature: 

<sup>1</sup>A revision copy is a copy of the contract which shows the changes from the standard contract or previously revised/developed contract by means of overstrikes (indicating deletions from the standard language) and underlining (showing additions to the standard language).

**COUNTY OF DANE**  
**Purchase of Services Agreement**

Number of Pages, including schedules: 43  
Agreement No. 12437  
Expiration Date: October 31, 2015  
Authority: Res. \_\_\_\_\_, 2014-2015  
Department: Administration, Information  
Management  
Maximum Cost: \$115,773.00  
Registered Agent: \_\_\_\_\_  
Address: \_\_\_\_\_

**THIS AGREEMENT**, made and entered into, by and between the County of Dane (hereafter referred to as "COUNTY") and InterCon Construction Inc. (hereafter, "PROVIDER"),

**WITNESSETH:**

**WHEREAS** COUNTY, whose address is 210 Martin Luther King Jr. Blvd., Room 524, Madison, WI 53703,

desires to purchase services from PROVIDER for the purpose of building the East Campus fiber connection; and

**WHEREAS** PROVIDER, whose address is 5512 State Road 19 & 113, Waunakee, WI 53597-9530, is able and willing to provide such services;

**NOW, THEREFORE**, in consideration of the above premises and the mutual covenants of the parties hereinafter set forth, the receipt and sufficiency of which is acknowledged by each party for itself, COUNTY and PROVIDER do agree as follows:

- I. **TERM.** The term of this Agreement shall commence as of the date by which all parties have executed this Agreement and shall end as of the EXPIRATION DATE set forth on page 1 hereof, unless sooner agreed to in writing by the parties. PROVIDER shall complete its obligations under this Agreement not later than the EXPIRATION DATE. Upon failure of PROVIDER to complete its obligation set forth herein by the EXPIRATION DATE, COUNTY may invoke the penalties, if any, set forth in this document and its attachments.
- II. **SERVICES.**
  - A. PROVIDER agrees to provide the services detailed in the bid specifications, if any; the request for proposals (RFP) and PROVIDER's response thereto, if any; and on the attached Schedule A, which is fully incorporated herein by reference. In the event of a conflict between or among the bid specifications, the RFP or responses thereto, or the

terms of Schedule A or any of them, it is agreed that the terms of Schedule A, to the extent of any conflict, are controlling.

- B. PROVIDER shall commence, carry on and complete its obligations under this Agreement with all deliberate speed and in a sound, economical and efficient manner, in accordance with this Agreement and all applicable laws. In providing services under this Agreement, PROVIDER agrees to cooperate with the various departments, agencies, employees and officers of COUNTY.
  - C. PROVIDER agrees to secure at PROVIDER's own expense all personnel necessary to carry out PROVIDER's obligations under this Agreement. Such personnel shall not be deemed to be employees of COUNTY nor shall they or any of them have or be deemed to have any direct contractual relationship with COUNTY.
- III. ASSIGNMENT/TRANSFER: PROVIDER shall neither assign nor transfer any interest or obligation in this Agreement, without the prior written consent of COUNTY unless otherwise provided herein, provided that claims for money due or to become due PROVIDER from COUNTY under this Agreement may be assigned to a bank, trust company or other financial institution without such approval if and only if the instrument of assignment contains a provision substantially to the effect that it is agreed that the right of the assignee in and to any moneys due or to become due to PROVIDER shall be subject to prior claims of all persons, firms and corporations for services rendered or materials supplied for the performance of the work called for in this Agreement. PROVIDER shall promptly provide notice of any such assignment or transfer to COUNTY.

IV. TERMINATION.

- A. Failure of PROVIDER to fulfill any of its obligations under this Agreement in a timely manner, or violation by PROVIDER of any of the covenants or stipulations of this Agreement, shall constitute grounds for COUNTY to terminate this Agreement by giving a thirty (30) day written notice to PROVIDER.
- B. The following shall constitute grounds for immediate termination:
  - 1. violation by PROVIDER of any State, Federal or local law, or failure by PROVIDER to comply with any applicable States and Federal service standards, as expressed by applicable statutes, rules and regulations.
  - 2. failure by PROVIDER to carry applicable licenses or certifications as required by law.
  - 3. failure of PROVIDER to comply with reporting requirements contained herein.
  - 4. inability of PROVIDER to perform the work provided for herein.
- C. Failure of the Dane County Board of Supervisors or the State or Federal Governments to appropriate sufficient funds to carry out COUNTY's obligations hereunder, shall result in automatic termination of this Agreement as of the date funds are no longer available, without notice.
- D. In the event COUNTY terminates this Agreement as provided herein, all finished and unfinished documents, services, papers, data, products, and the like prepared, produced or made by PROVIDER under this Agreement shall at the option of COUNTY become the property of COUNTY, and PROVIDER shall be entitled to receive just and equitable compensation, subject to any penalty, for any satisfactory work completed on such documents, services, papers, data, products or the like. Notwithstanding the above, PROVIDER shall not be relieved of liability to COUNTY for damages sustained by

COUNTY by virtue of any breach of this Agreement by PROVIDER, and COUNTY may withhold any payments to PROVIDER for the purpose of offset.

- V. PAYMENT. COUNTY agrees to make such payments for services rendered under this Agreement as and in the manner specified herein and in the attached Schedule B, which is fully incorporated herein by reference. Notwithstanding any language to the contrary in this Agreement or its attachments, COUNTY shall never be required to pay more than the sum set forth on page 1 of this Agreement under the heading MAXIMUM COST, for all services rendered by PROVIDER under this Agreement.
- VI. REPORTS. PROVIDER agrees to make such reports as are required in the attached Schedule C, which is fully incorporated herein by reference. With respect to such reports it is expressly understood that time is of the essence and that the failure of PROVIDER to comply with the time limits set forth in said Schedule C shall result in the penalties set forth herein.
- VII. DELIVERY OF NOTICE. Notices, bills, invoices and reports required by this Agreement shall be deemed delivered as of the date of postmark if deposited in a United States mailbox, first class postage attached, addressed to a party's address as set forth above. It shall be the duty of a party changing its address to notify the other party in writing within a reasonable time.
- VIII. INSURANCE.
- A. PROVIDER shall indemnify, hold harmless and defend COUNTY, its boards, commissions, agencies, officers, employees and representatives against any and all liability, loss (including, but not limited to, property damage, bodily injury and loss of life), damages, costs or expenses which COUNTY, its officers, employees, agencies, boards, commissions and representatives may sustain, incur or be required to pay by reason of PROVIDER's furnishing the services or goods required to be provided under this Agreement, provided, however, that the provisions of this paragraph shall not apply to liabilities, losses, charges, costs, or expenses caused by or resulting from the acts or omissions of COUNTY, its agencies, boards, commissions, officers, employees or representatives. The obligations of PROVIDER under this paragraph shall survive the expiration or termination of this Agreement.
- B. In order to protect itself and COUNTY, its officers, boards, commissions, agencies, agents, volunteers, employees and representatives under the indemnity provisions of the subparagraph above, PROVIDER shall, at PROVIDER's own expense, obtain and at all times during the term of this Agreement keep in full force and effect the insurance coverages, limits, and endorsements listed below. When obtaining required insurance under this Agreement and otherwise, PROVIDER agrees to preserve COUNTY's subrogation rights in all such matters that may arise that are covered by PROVIDER's insurance. Neither these requirements nor the COUNTY's review or acceptance of PROVIDER's certificates of insurance is intended to limit or qualify the liabilities or obligations assumed by the PROVIDER under this Agreement. The County expressly reserves the right to require higher or lower insurance limits where County deems necessary.

Commercial General Liability.

PROVIDER agrees to maintain Commercial General Liability insurance at a limit of not less than \$1,000,000 per occurrence. Coverage shall include, but not be limited to, Bodily Injury and Property Damage to Third Parties, Contractual Liability, Personal Injury and Advertising Injury Liability, Premises-Operations, Independent PROVIDERs and Subcontractors, and Fire Legal Liability. The policy shall not exclude Explosion, Collapse, and Underground Property Damage Liability Coverage. The policy shall list DANE COUNTY as an Additional Insured.

Commercial/Business Automobile Liability.

PROVIDER agrees to maintain Commercial/Business Automobile Liability insurance at a limit of not less than \$1,000,000 Each Occurrence. PROVIDER further agrees coverage shall include liability for Owned, Non-Owned & Hired automobiles. In the event PROVIDER does not own automobiles, PROVIDER agrees to maintain coverage for Hired & Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy.

Environmental Impairment (Pollution) Liability

PROVIDER agrees to maintain Environmental Impairment (Pollution) Liability insurance at a limit of not less than \$1,000,000 per occurrence for bodily injury, property damage, and environmental cleanup costs caused by pollution conditions, both sudden and non-sudden. This requirement can be satisfied by either a separate environmental liability policy or through a modification to the Commercial General Liability policy. Evidence of either must be provided.

Workers' Compensation.

PROVIDER agrees to maintain Workers Compensation insurance at Wisconsin statutory limits.

Umbrella or Excess Liability.

PROVIDER may satisfy the minimum liability limits required above for Commercial General Liability and Business Auto Liability under an Umbrella or Excess Liability policy. There is no minimum Per Occurrence limit of liability under the Umbrella or Excess Liability; however, the Annual Aggregate limit shall not be less than the highest "Each Occurrence" limit for the Commercial General Liability and Business Auto Liability. PROVIDER agrees to list DANE COUNTY as an "Additional Insured" on its Umbrella or Excess Liability policy.

- C. Upon execution of this Agreement, PROVIDER shall furnish COUNTY with a Certificate of Insurance listing COUNTY as an additional insured and, upon request, certified copies of the required insurance policies. If PROVIDER's insurance is underwritten on a Claims-Made basis, the Retroactive Date shall be prior to or coincide with the date of this Agreement, the Certificate of Insurance shall state that professional malpractice or errors and omissions coverage, if the services being provided are professional services coverage is Claims-Made and indicate the Retroactive Date, PROVIDER shall maintain coverage for the duration of this Agreement and for six (6) years following the completion of this Agreement. PROVIDER shall furnish COUNTY, annually on the policy renewal date, a Certificate of Insurance as evidence of coverage. It is further agreed that PROVIDER shall furnish the COUNTY with a 30-day notice of aggregate erosion, in advance of the Retroactive Date, cancellation, or renewal. It is also agreed that on Claims-Made policies, either PROVIDER or COUNTY may invoke the tail option on behalf of the other party and that the Extended Reporting Period premium shall be paid by PROVIDER. In the event any action, suit or other proceeding is brought against COUNTY upon any matter herein indemnified against, COUNTY shall give reasonable notice thereof to PROVIDER and shall cooperate with PROVIDER's attorneys in the defense of the action, suit or other proceeding. PROVIDER shall furnish evidence of adequate Worker's Compensation Insurance. In case of any sublet of work under this Agreement, PROVIDER shall furnish evidence that each and every subcontractor has in force and effect insurance policies providing coverage identical to that required of PROVIDER. In case of any sublet of work under this Agreement, PROVIDER shall furnish evidence that each and every subcontractor has in force and effect insurance policies providing coverage identical to that required of PROVIDER.
- D. The parties do hereby expressly agree that COUNTY, acting at its sole option and through its Risk Manager, may waive any and all requirements contained in this Agreement, such waiver to be in writing only. Such waiver may include or be limited to a reduction in the

amount of coverage required above. The extent of waiver shall be determined solely by COUNTY's Risk Manager taking into account the nature of the work and other factors relevant to COUNTY's exposure, if any, under this Agreement.

- IX. NO WAIVER BY PAYMENT OR ACCEPTANCE. In no event shall the making of any payment or acceptance of any service or product required by this Agreement constitute or be construed as a waiver by COUNTY of any breach of the covenants of this Agreement or a waiver of any default of PROVIDER and the making of any such payment or acceptance of any such service or product by COUNTY while any such default or breach shall exist shall in no way impair or prejudice the right of COUNTY with respect to recovery of damages or other remedy as a result of such breach or default.
- X. NON-DISCRIMINATION. During the term of this Agreement, PROVIDER agrees not to discriminate on the basis of age, race, ethnicity, religion, color, gender, disability, marital status, sexual orientation, national origin, cultural differences, ancestry, physical appearance, arrest record or conviction record, military participation or membership in the national guard, state defense force or any other reserve component of the military forces of the United States, or political beliefs against any person, whether a recipient of services (actual or potential) or an employee or applicant for employment. Such equal opportunity shall include but not be limited to the following: employment, upgrading, demotion, transfer, recruitment, advertising, layoff, termination, training, rates of pay, and any other form of compensation or level of service(s). PROVIDER agrees to post in conspicuous places, available to all employees, service recipients and applicants for employment and services, notices setting forth the provisions of this paragraph. The listing of prohibited bases for discrimination shall not be construed to amend in any fashion state or federal law setting forth additional bases, and exceptions shall be permitted only to the extent allowable in state or federal law.
- XI. CIVIL RIGHTS COMPLIANCE.
- A. If PROVIDER has 20 or more employees and receives \$20,000 in annual contracts with COUNTY, the PROVIDER shall submit to COUNTY a current Civil Rights Compliance Plan (CRC) for Meeting Equal Opportunity Requirements under Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title VI and XVI of the Public Service Health Act, the Age Discrimination Act of 1975, the Omnibus Budget Reconciliation Act of 1981 and Americans with Disabilities Act (ADA) of 1990. PROVIDER shall also file an Affirmative Action (AA) Plan with COUNTY in accordance with the requirements of chapter 19 of the Dane County Code of Ordinances. PROVIDER shall submit a copy of its discrimination complaint form with its CRC/AA Plan. The CRC/AA Plan must be submitted prior to the effective date of this Agreement and failure to do so by said date shall constitute grounds for immediate termination of this Agreement by COUNTY. If an approved plan has been received during the previous CALENDAR year, a plan update is acceptable. The plan may cover a two-year period. Providers who have less than twenty employees, but who receive more than \$20,000 from the COUNTY in annual contracts, may be required to submit a CRC Action Plan to correct any problems discovered as the result of a complaint investigation or other Civil Rights Compliance monitoring efforts set forth herein below. If PROVIDER submits a CRC/AA Plan to a Department of Workforce Development Division or to a Department of Health and Family Services Division that covers the services purchased by COUNTY, a verification of acceptance by the State of PROVIDER's Plan is sufficient.
- B. PROVIDER agrees to comply with the COUNTY's civil rights compliance policies and procedures. PROVIDER agrees to comply with civil rights monitoring reviews performed by the COUNTY, including the examination of records and relevant files maintained by the PROVIDER. PROVIDER agrees to furnish all information and reports required by the COUNTY as they relate to affirmative action and non-discrimination. PROVIDER further

agrees to cooperate with COUNTY in developing, implementing, and monitoring corrective action plans that result from any reviews.

- C. PROVIDER shall post the Equal Opportunity Policy, the name of PROVIDER's designated Equal Opportunity Coordinator and the discrimination complaint process in conspicuous places available to applicants and clients of services, applicants for employment and employees. The complaint process will be according to COUNTY's policies and procedures and made available in languages and formats understandable to applicants, clients and employees. PROVIDER shall supply to COUNTY's Contract Compliance Officer upon request a summary document of all client complaints related to perceived discrimination in service delivery. These documents shall include names of the involved persons, nature of the complaints, and a description of any attempts made to achieve complaint resolution.
- D. PROVIDER shall provide copies of all announcements of new employment opportunities to COUNTY's Contract Compliance Officer when such announcements are issued.
- E. If PROVIDER is a government entity having its own compliance plan, PROVIDER'S plan shall govern PROVIDER's activities.

## XII. LIVING WAGE.

- A. PROVIDER agrees to pay all workers employed by PROVIDER in the performance of this Agreement, whether on a full-time or part-time basis, the prevailing living wage as defined in section 25.015(1)(f), Dane County Ordinances. PROVIDER agrees to make available for COUNTY inspection PROVIDER's payroll records relating to employees providing services on or under this Agreement or subcontract.
- B. If any payroll records of PROVIDER contain any false, misleading or fraudulent information, or if PROVIDER fails to comply with the provisions of section 25.015 of the Dane County Code of Ordinances, COUNTY may withhold payments on the Agreement, terminate, cancel or suspend the Agreement in whole or in part, or, after a due process hearing, deny PROVIDER the right to participate in bidding on future county contracts for a period of one year after the first violation is found and for a period of 3 years after a second violation is found.
- C. PROVIDER agrees to submit to COUNTY a certification as required in section 25.015(7) of the Dane County Code of Ordinances.
- D. PROVIDER agrees to display COUNTY's current living wage poster in a prominent place where it can be easily seen and read by persons employed by PROVIDER.
- E. PROVIDER shall ensure that any subcontractors comply with the provisions of this section.
- F. The following are exemptions from the requirements of this section:
  - 1. When the Maximum Cost of the Agreement is less than \$5,000;
  - 2. When the provider is a school district, a municipality, or other unit of government;
  - 3. When the County is purchasing residential services at an established per bed rate;
  - 4. When employees are persons with disabilities working in employment programs and the provider holds a current sub-minimum wage certificate issued by the U.S. Department of Labor or where such a certificate could be issued but for the fact that the employer is paying a wage higher than the minimum wage;
  - 5. When an individual receives compensation for providing services to a family member;



6. When employees are student interns;
7. When the provider meets any other criteria for exemption outlined in section 25.015(1)(d) of the Dane County Code of Ordinances; and
8. Where the contract is funded or co-funded by a government agency requiring a different living wage, the higher wage requirement shall prevail.

XIII. DOMESTIC PARTNER EQUAL BENEFITS. The PROVIDER agrees to provide the same economic benefits to all of its employees with domestic partners as it does to employees with spouses, or the cash equivalent if such a benefit cannot reasonably be provided. The PROVIDER agrees to make available for County inspection the PROVIDER's payroll records relating to employees providing services on or under this contract or subcontract. If any payroll records of a PROVIDER contain any false, misleading or fraudulent information, or if a PROVIDER fails to comply with the provisions of s. 25.016, D. C. Ords., the contract compliance officer may withhold payments on the contract; terminate, cancel or suspend the contract in whole or in part; or, after a due process hearing, deny the contractor the right to participate in bidding on future County contracts for a period of one year after the first violation is found and for a period of three years after a second or subsequent violation is found.

XIV. COMPLIANCE WITH FAIR LABOR STANDARDS.

- A. Reporting of Adverse Findings. During the term of this Agreement, PROVIDER shall report to the County Contract Compliance Officer, within ten (10) days, any allegations to, or findings by the National Labor Relations Board (NLRB) or Wisconsin Employment Relations Commission (WERC) that PROVIDER has violated a statute or regulation regarding labor standards or relations,. If an investigation by the Contract Compliance Officer results in a final determination that the matter adversely affects PROVIDER'S responsibilities under this Agreement, and which recommends termination, suspension or cancellation of this agreement, the County may take such action.
- B. Appeal Process. PROVIDER may appeal any adverse finding by the Contract Compliance Officer as set forth in sec. 25.015(11)(c) through (e).
- C. Notice Requirement. PROVIDER shall post the following statement in a prominent place visible to employees: "As a condition of receiving and maintaining a contract with Dane County, this employer shall comply with federal, state and all other applicable laws prohibiting retaliation for union organizing."

XV. MISCELLANEOUS.


- A. Registered Agent. PROVIDER warrants that it has complied with all necessary requirements to do business in the State of Wisconsin, that the persons executing this Agreement on its behalf are authorized to do so, and, if a corporation, that the name and address of PROVIDER's registered agent is as set forth opposite the heading REGISTERED AGENT on page 1 of this Agreement. PROVIDER shall notify COUNTY immediately, in writing, of any change in its registered agent, his or her address, and PROVIDER's legal status. For a partnership, the term 'registered agent' shall mean a general partner.
- B. Controlling Law and Venue. It is expressly understood and agreed to by the parties hereto that in the event of any disagreement or controversy between the parties, Wisconsin law shall be controlling. Venue for any legal proceedings shall be in the Dane County Circuit Court.

- C. Limitation Of Agreement. This Agreement is intended to be an agreement solely between the parties hereto and for their benefit only. No part of this Agreement shall be construed to add to, supplement, amend, abridge or repeal existing duties, rights, benefits or privileges of any third party or parties, including but not limited to employees of either of the parties.
- D. Entire Agreement. The entire agreement of the parties is contained herein and this Agreement supersedes any and all oral agreements and negotiations between the parties relating to the subject matter hereof. The parties expressly agree that this Agreement shall not be amended in any fashion except in writing, executed by both parties.
- E. Counterparts. The parties may evidence their agreement to the foregoing upon one or several counterparts of this instrument, which together shall constitute a single instrument.

**IN WITNESS WHEREOF**, COUNTY and PROVIDER, by their respective authorized agents, have caused this Agreement and its Schedules to be executed, effective as of the date by which all parties hereto have affixed their respective signatures, as indicated below.

**FOR PROVIDER:**

Date Signed: 6/1/15

  
Chris Wozniak, V.P.

Date Signed: \_\_\_\_\_

\_\_\_\_\_

\*\*\*

**FOR COUNTY:**

Date Signed: \_\_\_\_\_

\_\_\_\_\_  
JOSEPH PARISI, County Executive

Date Signed: \_\_\_\_\_

\_\_\_\_\_  
SCOTT MCDONELL, County Clerk

\* [print name and title, below signature line of any person signing this document]

## **Schedule A – Scope of Service**

### **1. Scope of Work**

The “Work” under this Agreement shall consist of constructing a fiber optic connection to the Crossroads Campus and Dane County sanitary landfill, including, but not limited to, conduit, handholes, fiber optic cable, fiber optic splicing, fiber optic system testing, and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

### **2. Prosecution and Progress**

#### **A Prosecution of the Work**

PROVIDER acknowledges that COUNTY has designated SRF Consulting Group Inc. as the Engineer under this Agreement to supervise the work as further set forth herein.

PROVIDER shall begin the work within seven (7) days after the date of written notice to proceed. Such notice shall be provided by the Engineer after the Agreement is executed.

Once PROVIDER is prepared to proceed with the work, Provider shall submit to Engineer a written Definite Notice of intention to start work Engineer at least seventy-two (72) hours in advance of beginning any work. Such notice shall detail the start date for the work.

PROVIDER shall employ an ample labor and supervisory force and provide construction equipment properly adapted to the work and of sufficient capacity and efficiency to accomplish the work in a safe and workmanlike manner at the rate of progress specified. All equipment shall be maintained in good working order and provision shall be made for immediate emergency repairs.

In the event work is prosecuted during adverse weather conditions, PROVIDER will be required to exercise such precautions necessary to produce satisfactory work, and shall protect the finished work from the elements. It is agreed and understood that the cost thereof has been included in the unit prices bid for the various items of work in the contract and that no extra compensation will be provided.

#### **B Progress Schedule**

At least fourteen (14) calendar days prior to the preconstruction meeting, PROVIDER shall submit to the Engineer an initial progress schedule for review. The schedule shall meet the following requirements:

1. Include activities that describe essential features of the work and activities that might potentially delay contract completion. Identify activities that are controlling items of work.
2. Identify the contemplated start and completion dates for each activity. Provide a duration, ranging from one to 15 working days, for each activity. Break longer activities into 2 or more activities distinguished by the addition of a location or some other description. Specify the sequencing of all activities.
3. List the working days per week, number of shifts per day, and number of hours per shift. Provide the quantity and estimated daily production rate for controlling items of work.
4. Show completing the work within the specified completion date.

The Engineer and PROVIDER will review the initial schedule at the preconstruction meeting. Within five (5) business days after the preconstruction meeting, the Engineer will either accept PROVIDER's initial schedule or request additional information and changes to the schedule. If Engineer does not accept the initial schedule, PROVIDER shall respond to Engineer's request for additional information, and make the appropriate adjustments. PROVIDER shall then resubmit the revised initial schedule within five (5) business days after the Engineer's request. If the Engineer requests justification for an activity duration, PROVIDER shall provide responsive information that may include estimated labor, equipment, unit quantities, and production rates used to determine the activity duration.

PROVIDER and the Engineer will meet monthly to assess PROVIDER's progress and to add updated information to the initial schedule. At a minimum, updates will include the actual dates of each activity's beginning and completion, percentage complete, and remaining durations of activities started but not yet completed.

The Engineer will monitor the progress of the work and may request that PROVIDER revise the schedule if project completion or interim completion targets are delayed. PROVIDER agrees to submit the revised schedule within five (5) business days after the Engineer's request.

### **C Methods and Equipment**

PROVIDER shall provide and furnish the machinery, equipment and tools necessary to perform the work. These shall be in such condition and of such capacity as will produce work of satisfactory quality and complete the work within the contract time.

Equipment shall be such that no injury to the roadway, pavement, structures, adjacent property, or other highways will result from its use, and it shall conform to the requirements set forth in detail under specific items or classes of work.

Failure on the part of PROVIDER to provide adequate equipment, maintained in proper working order, may be sufficient cause for suspension of specific operations until compliance is attained or may constitute cause for default of contract.

When the methods and equipment to be used by PROVIDER in accomplishing the construction are not prescribed in the Agreement, PROVIDER is free to use any methods or equipment that will accomplish the contract work, in a professional manner and according to industry standards, and in conformity with the requirements of the Agreement.

When the Agreement specifies that the construction be performed by the use of certain methods and equipment, such methods and equipment shall be used unless others are authorized by the Engineer. If the PROVIDER desires to use a method or type of equipment other than those specified in the Agreement, the PROVIDER may request authority from the Engineer to do so. The request shall be in writing and shall include a full description of the methods and equipment proposed to be used and an explanation of the reasons for desiring to make the change. Engineer shall provide written approval after the delivery of the request. Any such approval, shall be conditioned on PROVIDER's agreement that PROVIDER will be fully responsible for producing construction work in conformity with Agreement requirements. If, after trial use of the substituted methods or equipment, the Engineer determines that the work produced does not meet Agreement requirements, the PROVIDER shall discontinue the use of the substitute method or equipment and shall complete the remaining construction with the specified methods and equipment. PROVIDER shall remove the deficient work and replace it with work of specified quality, or take such other corrective action as the Engineer may direct. No change will be made in basis of payment for the construction items involved nor in contract time as result of authorizing a change in methods or equipment under these provisions.

#### **D Contract Time**

Work shall be prosecuted effectively and diligently to completion. Failure to begin operations, or failure to diligently prosecute the work, may be considered as a breach of contract and render PROVIDER liable to action under default of contract, or the revocation or suspension of the PROVIDER's privilege to bid additional work, or both.

It is understood that the rate of progress and the completion of the work within the time as specified is an essential part of the Agreement.

The Agreement starting date, for purposes of determining "contract time" and extensions, is the seventh (7) day following the date of notification to begin work.

Contract time will be extended in an amount as is mutually agreed upon by the Engineer and the PROVIDER, on the basis of contract change orders involving alterations in the Agreement affecting the prosecution of work, or involving extra or additional work, when such alterations are necessary for the purposes or convenience of the County when such extra additional work is of such character or is ordered to be done at such a time that the

amount of time reasonably necessary to perform such work is disproportionate to the contract time originally set up in the proposal. The agreement for extended time on this account shall be arrived at concurrently with and as a part of the consideration for the specific alteration or extra or additional work covered by that order.

A "work day" shall be defined as any day that PROVIDER can work on a project and which would or does necessitate an Engineer on the project for any part of the day. If inclement weather curtails construction, the Engineer shall decide what portion, if any part of a day, shall be called a "Work Day." Work days may be counted to the nearest one-half day. A record of work days shall be kept on the job by the Engineer.

### **E Liquidated Damages for Schedule Delays**

Should PROVIDER fail to complete the work within the time specified in the Agreement, or within such extra time as may have been allowed by extensions, there shall be deducted from any monies due or that may become due PROVIDER, or in the event no monies are due, PROVIDER shall pay to the County, the sum set forth in the following schedule for each and every day that the work shall remain uncompleted. This sum shall be considered and treated not as a penalty but as fixed, agreed and liquidated damages due the County from the PROVIDER by reason of inconvenience to the public, added cost of engineering and supervision, maintenance of detours and other items which have caused an expenditure of public funds resulting from PROVIDER's failure to complete the work within the time specified in the contract.

**Liquidated damages shall be assessed in the amount of \$500.00 per working day after October 31, 2015, in which the fiber optic connection is not complete.** The fiber optic connection shall not be considered complete until the fiber optic cable is installed and spliced and successfully passes all testing requirements in accordance with the Agreement.

### **3. Changes to Work**

The Engineer shall have the right to make alterations to the work herein contemplated, including the lengthening or shortening of the project, either before or after the commencement of the work. Such alterations shall, insofar as practical, be ordered in writing before starting work on such alterations.

Except as otherwise provided below, whenever the quantity of any item of work as given in the proposal shall be increased or decreased as required to satisfactorily complete the work, payment for such item of work shall be made on the basis of the actual quantity completed at the original contract unit price.

Compensation for alterations in plans or quantities of work requiring contract change orders shall be as stipulated in such agreements.

### **A Increased or Decreased Quantities**

It is agreed and understood that the quantities of any items of work shown on the plans or in the Agreement are subject to increase or decrease during the progress of the work.

The Engineer reserves the right to increase or decrease the quantities of any items of work, including increase or decrease of quantities by alteration of plans, as may be considered necessary or desirable during the progress of the work to satisfactorily complete the construction. Such increases or decreases in quantities shall not be considered as a waiver of any conditions of the Agreement nor invalidate any of the provisions thereof.

#### **B Increased Items**

Unless otherwise designated in the Agreement, any increase of the prices contained herein shall be limited to fifteen (15) percent of the lump sum Agreement price. Any item may be increased up to twenty-five (25) percent of the original quantity in the Agreement, but in no case may such an increase exceed in dollar value fifteen (15) percent of the original lump sum Agreement price bid. If it is determined by the Engineer that increases in excess of those mentioned above will prevail, then the Engineer along with the County shall: (a) renegotiate the unit price for all estimated work over the percentage limit shown above, or (b) advertise for and receive bids for estimated excess work. Unforeseen items of extra work not included in the Agreement as a bid item shall be included when calculating the total amount of increase over the original lump sum Agreement price bid.

#### **C Decreased or Deleted Items**

Unless otherwise designated in the Agreement, the quantity of any item may be decreased, and the actual quantity installed and accepted will be paid for at the Agreement unit price. Such decrease shall not constitute the basis for a claim for damages for anticipated profits for the work dispensed with. When the reduction in amount is a material part of the work contemplated for the project, PROVIDER shall be entitled to compensation as determined by the Engineer for overhead and equipment charges incurred in expectation of the quantity of work originally estimated, unless specifically provided herein.

County and Engineer reserves the right to delete from the work any item or portion thereof found unnecessary to the improvement. Such deletion shall not constitute the basis for a claim for damages for anticipated profits for the work dispensed with. The PROVIDER will be paid for all work done toward the completion of the item or portion thereof prior to such deletion a fair and equitable amount covering all items of cost incurred prior to the date of deletion of the work by order of the Engineer. Acceptable materials ordered by PROVIDER, and not canceled prior to the date of deletion of the work, and which are delivered on the work, will be paid for at the actual cost to PROVIDER, and shall become the property of the County.

#### **D Extra Work**

In connection with the work covered by the Agreement, the Engineer may, at any time during its progress, order other work or materials incidental thereto. All such work and materials that do not appear in the Agreement as a specific item accompanied by a unit price, and which are not included under the price bid for other items in the contract, shall be designated as Extra Work. Extra Work may also consist of additions to or changes in



design in contract items or portions thereof, when such additions are wholly disassociated from or outside the scope of the work as evidenced by the plans and special provisions, and when the work caused by such additions or changes in design must be performed under conditions or in a manner that is materially and inherently different from the conditions and manner existent for such contract items as contemplated in the original scope of the work. PROVIDER hereby agrees to perform Extra Work whenever it is deemed necessary or desirable by the Engineer to complete the project as originally contemplated, or as subsequently altered, and it shall be done in accordance with the requirements herein set forth.

Extra Work shall be done under the supervision of the Engineer, and the Engineer's decision shall be final and binding. The plan of the work to be followed, the equipment to be used, and the amount and character of labor to be employed shall meet with the approval of the Engineer.

PROVIDER shall not perform any Extra Work until a contract change order has been executed by both parties. Claims for compensation for Extra Work performed which has not been authorized by an executed contract change order may be rejected.

The contract change order for Extra Work may provide for payment in an agreed lump sum or the Extra Work performed, on an agreed unit price basis for the units of such Extra Work performed. Where agreement cannot be reached to pay for Extra Work on either the lump sum basis or the unit price basis, the Engineer may direct that payment for Extra Work be determined on a force account basis.

Prices for Extra Work to be completed by subcontractors shall be the subcontractor's actual prices submitted for the work contemplated to which the PROVIDER may add an amount equal to, but not to exceed, five (5) percent thereof.

For Extra Work to be paid for on a force account basis, the actual cost computed in accordance with the terms of the contract change order shall include such costs and allowances and subject to such limitations as hereinafter provided:

1. For all labor and supervisors in direct charge of the specific work, PROVIDER shall receive the rate of wage agreed upon in writing before beginning work, for each and every hour that said labor and supervisors are actually engaged in such work.

PROVIDER shall receive the actual costs paid to, or in behalf of, laborers by reason of health and welfare benefits, pension fund benefits or other benefits required to be paid.

An amount equal to thirty-five (35) percent of the above items will be added to the cost of such items.

2. For property damage, liability, and worker's compensation insurance premiums, unemployment insurance contributions and social security taxes on the force account work, PROVIDER shall receive the actual cost, to which cost shall be added an amount equal to fifteen (15) percent of the sum thereof. PROVIDER shall furnish satisfactory evidence of the rate or rates paid.
3. For materials accepted by the Engineer and used, PROVIDER shall receive the actual cost of such materials delivered to the work including transportation charges (exclusive of machinery rentals as hereinafter set forth), to which cost shall be added an amount equal to fifteen (15) percent of the sum thereof.
4. For any machinery or special equipment (other than small tools) including fuel and lubricants, the use of which has been authorized by the Engineer, PROVIDER shall receive the rental rates agreed upon in writing before such work is begun, for the actual time that such equipment is in operation on the work, and to which rental sum no percentage shall be added.
5. No additional allowance shall be made for general superintendence, the use of small tools, or other costs of which no specific allowance is herein provided.
6. For administration cost when work is performed by an approved subcontractor, PROVIDER shall receive an amount equal to five (5) percent of the total costs of such work computed as set forth above.
7. The compensation as set forth above shall be received by PROVIDER as payment in full for Extra Work done on a force account basis. At the end of each day PROVIDER's representative and the inspector shall compare records of the cost of work done as ordered on a force account basis.
8. No payment will be made for work performed on a force account basis until PROVIDER shall furnish to the Engineer duplicate itemized statements of the cost of such force account work, detailed as to the following:
  - a. Name, classification, dates, daily hours, total hours, rate and extension of each laborer and supervisor.
  - b. Designation, dates, daily hours, total hours, rental rate and extension of each truck and other unit of machinery and equipment.
  - c. Quantities of materials, prices and extensions.
  - d. Transportation on materials.
  - e. Cost of property damage, liability and worker's compensation insurance premiums, unemployment insurance contributions and social security tax.
  - f. Such statements shall be accompanied and supported by original receipted invoices for all materials used and transportation charges; provided, that if materials used on the force account work are not specifically purchased for such work, but are taken from the PROVIDER's stock, then in lieu of the original invoices, the statements shall contain or be accompanied by an

affidavit of PROVIDER, certifying that such materials were taken from stock, that the quantity claimed was actually used, and that the price and transportation claimed represents the actual cost to PROVIDER.

No verbal order or suggestions given by an employee of the County shall be construed as authorizing or laying the basis for any claim on the part of PROVIDER for extra compensation, either for Extra Work or materials, or for damages, because of PROVIDER's compliance therewith. Such verbal orders and suggestions as to the performance of the work may be freely given, but in case they appear to PROVIDER to involve Extra Work, for which PROVIDER should receive extra compensation, PROVIDER shall obtain a written change order from the Engineer for such Extra Work prior to performing the work. In case of a dispute as to what does or does not constitute Extra Work, a decision will be made by the Engineer.

#### **4. Utilities**

PROVIDER agrees that this Agreement does not come under the provision of Administrative Rule Trans 220.

The following utility companies have facilities with the project area. However, no adjustments to existing utility facilities are anticipated. The Engineer may adjust the location of items under this contract to avoid conflict with the existing utility facilities.

Storm Sewer & Sanitary Sewer

City Of Madison  
Andy Solberg  
Engineering Division  
1600 Emil Street  
Madison, WI 53713  
608-267-9408  
asolberg@cityofmadison.com

Water

Madison Water Utility  
Mark Taylor  
119 East Olin Avenue  
Madison, WI 53713  
608-266-4661  
mtaylor@madisonwater.org

Gas

ANR TransCanada  
Dick Mellom  
6827 North Consolidated School Road  
Janesville, WI 53545  
608-373-6923  
dick\_mellom@transcanada.com

Gas

Koch Pipeline Company  
Drew Suydam  
N4240 State Road 26  
Waupun, WI 53963  
920-948-4665  
drew.suydam@kochpipeline.com

Gas & Electric

Madison Gas & Electric – Gas  
608-252-7154

Gas & Electric

Madison Gas & Electric – Electric  
Terry Maloney  
133 South Blair Street  
Madison, WI 53701  
608-252-5695  
tmaloney@mge.com

Electric

Alliant Energy  
Matthew Klam  
Janesville, WI 53545  
matthewklam@alliantenergy.com

Contact ANR TransCanada at least three (3) working days prior to any work within their right-of-way. Maintain at least eighteen (18) feet of separation when crossing their facilities.

Contact Koch Pipeline Company at least three (3) working days prior to any digging within twenty-five (25) feet of their facilities. A Koch Pipeline Company representative must be on site when working within twenty-five (25) feet of their facilities. Maintain at least two (2) feet of separation when crossing their facilities.

Contact Madison Gas & Electric – Gas at least three (3) working days prior to crossing their facilities.

This item, as described above, shall be considered subsidiary and incidental to the other items of the contract, and no separate or additional compensation will be made.

## **5. Permits**

PROVIDER shall obtain all permits and licenses, pay all charges and fees, and give all notices necessary to perform the work. PROVIDER shall comply with all permit requirements whether the permit is issued to PROVIDER or the maintaining authority.

PROVIDER shall submit copies of all permits prior to the preconstruction meeting.

This item, as described above, shall be considered subsidiary and incidental to the other items of the Agreement, and no separate or additional compensation will be made.

## **6. Public Convenience and Safety**

### **A Laws to be Observed**

PROVIDER shall at all times observe and comply with all Federal and State laws and administrative rules, local laws, ordinances, and regulations which in any manner affect the conduct of the work, and all orders or decrees, as exist at the present or which may be enacted later, of bodies or tribunals having jurisdiction or authority over the work. No plea of misunderstanding or ignorance thereof will be considered. PROVIDER shall indemnify, defend and save harmless the County and all of its officers, officials, agents, employees and servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by PROVIDER or PROVIDER's employees, subcontractors or agents.

PROVIDER shall comply with all Federal, State and local laws governing safety, health and sanitation. PROVIDER shall also provide all safeguards, safety devices and protective equipment, and take any other actions necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the Agreement

### **B Responsibility to the Public**

PROVIDER shall avoid as far as possible the maintenance of any condition which might be deemed at law to be an "attractive nuisance". Where such condition is unavoidable or where apparent or potential hazards occur incident to PROVIDER's conduct of the work, PROVIDER shall maintain a proper watch or provide other reasonable safeguards. PROVIDER shall be responsible for all damage, bodily injury, or death

arising through PROVIDER's negligence either in maintaining an attractive nuisance or otherwise.

Fire hydrants shall be visible and accessible from the street at all times to the Fire Department. No material or other obstructions shall be placed within ten (10) feet of a fire hydrant.

PROVIDER shall strictly adhere to Section 182.0175, Wis. Statutes, regarding notification and location of utilities, including but not limited to three working days advance notice.

In the case of horizontal boring construction within the right-of-way, PROVIDER shall verify that no damage was done to storm sewer mains, sanitary mains and laterals which were crossed, when directed by the Engineer. This may be accomplished by uncovering the line prior to boring or televising the line after boring. In addition, PROVIDER may wish to televise the line before boring to verify the existing condition of the pipe. If PROVIDER decides not to televise prior to boring, any damage to the pipe shall be considered the responsibility of PROVIDER and shall be repaired by PROVIDER at their expense. All costs associated with exposing and or televising storm sewer mains, sanitary mains and laterals shall be the responsibility of PROVIDER. PROVIDER shall coordinate access to homes in order to televise laterals. The video tape shall be date and time stamped and provided to the Engineer within twenty-four (24) hours of televising.

PROVIDER shall schedule the operations so as to cause a minimum of interruption, interference or disturbance to the operation of stores, businesses, office buildings, hotels, churches, etc., and to allow access by pedestrians and emergency, delivery and service vehicles at all times.

Any temporary shutdown of existing services, i.e., sewers, water, gas, electrical power and access, as may be required, shall be performed only at such times and for such duration as agreed to by the Engineer. The interruption of services and access shall be conducted in accordance with a program mutually agreed to by the Engineer and PROVIDER.

PROVIDER shall work such overtime, including extended hours on normal work days, Saturdays, Sundays and holidays, as required by the Engineer to meet the above requirements at no additional cost to the County.

Gasoline or diesel operated equipment shall be equipped with mufflers and insulators to minimize noise.

During times when work will prevent access to driveways, PROVIDER shall notify all residents, a minimum of forty-eight (48) hours in advance, if vehicular access cannot be provided to their property.

PROVIDER shall phase the work in such a way that the maximum cumulative total time in which any residential property is completely without driveway access is twenty (20) calendar days.

PROVIDER shall maintain access to all commercial drives, at all times unless permission is granted in writing to close the drive. This may be done by phasing of drive construction and/or plating of drives. No additional compensation shall be given for plating to maintain access.

PROVIDER shall provide access to handicap residents at all times.

PROVIDER shall assist residents with refuse collection. Assistance shall be provided by either: maintaining access for collection vehicles to all properties located in the project limits; or hauling all refuse and recyclables to a common location at the end of the project.

The County will refer any call or claim, the substance of which is an event caused by PROVIDER, or by any person or company utilized by PROVIDER, to PROVIDER for handling. Within two (2) business days after contacting the individual, PROVIDER shall provide a factual summary of the event giving rise to the call or claim, along with PROVIDER's proposed resolution, to the County.

PROVIDER shall use every reasonable precaution to prevent the damage or destruction of corporate, government or private property such as poles, trees, shrubbery, crops and fences adjacent to or interfering with the work; all overhead structures such as wires, cables, etc.; within or outside of the right-of-way; and buildings or structures in close proximity to the construction. PROVIDER shall consider, and minimize where reasonable, the impact of vibrations that may occur during all phases of construction upon buildings or structures in close proximity to the construction where a risk of damage or destruction due to nearby construction activity has been identified.

PROVIDER shall notify the owners of all corporate, government or private property which interferes with the work advising them of the nature of the interference, and shall arrange with them for the disposition of such property. PROVIDER shall furnish the Engineer upon request with copies of all such notification and final agreements.

PROVIDER shall give notice to owners and protect and support all water and gas pipes or other conduits and all railway tracks, buildings, walls, fences or other properties which may be subject to damage or subsidence during the execution of the work. PROVIDER's responsibility shall be as prescribed in Section 101.111, Wis. Statutes. PROVIDER shall take all reasonable and proper precautions to protect persons, animals and vehicles of the public from injury and wherever necessary shall erect and maintain a fence or railing around any excavation, and place a sufficient number of amber lights about the work and keep them burning from twilight until sunrise. PROVIDER shall employ one or more watchpersons as an additional security wherever they are needed.

PROVIDER shall not in any way prevent the flow of water in the gutters of the street, and shall use proper means to permit the flow of surface water along the gutters while the work is progressing.

PROVIDER shall be responsible for the damage or destruction of property of any character resulting from neglect, misconduct, or omission in the manner or method of execution or non-execution of the work, or caused by defective work or the use of unsatisfactory materials, and shall restore such property to a condition similar or equal

to that existing before such damage or injury was done, by repairing, rebuilding, or replacing it as may be directed, or PROVIDER shall otherwise make good such damage or destruction in an acceptable manner. If PROVIDER fails to do so, the Engineer may, after the expiration of a period of forty-eight (48) hours after giving notice to PROVIDER in writing, proceed to repair, rebuild or otherwise restore such property as may be deemed necessary, and the cost thereof shall be deducted from any compensation due or which may become due PROVIDER under the contract.

PROVIDER shall be responsible for all costs for the repair of underground pipes, wires, or conduits damaged by PROVIDER's employees or subcontractors during the construction of the project.

### **C Safety**

PROVIDER shall comply with all Federal, State and local laws governing safety, health and sanitation. PROVIDER shall also provide all safeguards, safety devices and protective equipment, and take any other actions necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

Open excavations shall be properly barricaded at all times that PROVIDER is not in the immediate vicinity of the excavation. Excavations that are to remain open overnight shall be barricaded in a fashion that will make the excavation easily detectable and avoidable by passersby.

Potholes in the immediate vicinity of the work zone during working hours shall be covered by a cone at all times that PROVIDER is not in the immediate vicinity of the excavation. Potholes that are to remain exposed overnight shall be covered with a Type II barricade.

All work areas, both interior and outdoor, shall remain clean and free of all rubbish and tools that are not in use at all times. During non-working hours PROVIDER shall clean the worksite and secure all equipment and tools.

### **D Equipment and Material Storage**

Materials shall be so stored as to insure the preservation of their quality and suitability for the work. Stored materials, even though approved before storage, shall be subject to inspection prior to their use in the work and shall meet the requirements of the Agreement at the time they are used. Stored materials shall be located so as to facilitate inspection. With the Engineer's approval, portions of the right-of-way not required for public travel may be used for storage purposes and for the placing of PROVIDER's plant and equipment, but any additional space required shall be provided by PROVIDER at PROVIDER's expense. PROVIDER's equipment shall not be secured in any way to a street or park tree trunk.

This item, as described above, shall be considered subsidiary and incidental to the other items of the Agreement, and no separate or additional compensation will be made.

## **7. Maintenance of Traffic**



PROVIDER shall at all times conduct the work in such a manner as to insure the least possible obstruction to traffic.

All signing and barricading shall conform to the Federal Highways Administrations "Manual on Uniform Traffic Control Devices" (MUTCD) and the City of Madison standards for sidewalk and bikeway closures.

PROVIDER shall submit an acceptable traffic control plan to the Engineer, a minimum of forty-eight (48) hours prior to the start of work on any project.

PROVIDER shall not restrict traffic during peak hours. Peak hours are defined as 7:00am to 8:30am and 4:00pm to 5:30pm.

This item, as described above, shall be considered subsidiary and incidental to the other items of the contract, and no separate or additional compensation will be made.

## **8. Environmental Protection**

### **A Erosion Control**

Soil erosion and uncontrolled runoff from construction and land disturbing activities can have adverse impacts upon regional water resources and the health, safety, property and general welfare of the community. PROVIDER shall conduct and schedule operations so as to avoid or minimize siltation of streams, lakes, reservoirs and other areas. PROVIDER shall also take all necessary precautions to prevent pollution of streams, lakes, reservoirs and other areas with fuels, oils, bitumen, calcium chloride, or other harmful materials.

PROVIDER shall have adequate erosion control measures available on site for erosion control. PROVIDER shall schedule the work so that the amount of open excavation and the stockpiling of construction materials on the job site are minimized.

Excavated materials and imported backfill materials stockpiled at the project site shall be stored and protected in such a manner that will not result in transport of said materials by storm water runoff into adjacent streets or drainage facilities. Unprotected excavated materials and imported backfill materials stored temporarily on street pavements to facilitate construction shall be removed and/or properly stored/protected by the end of the work period, which shall not extend past the end of the work day.

Backfilled trenches and other areas shall be left to the level of the adjacent area or slightly below until restored to reduce the potential for erosion. All excess excavated materials and imported backfill materials shall be promptly removed from the site and disposed of following completion of construction and/or restoration activities.

Tracking of foreign materials (mud, silt, etc.) on street and/or other paved surfaces shall be controlled during the working day as necessary and/or as directed by the Engineer, as but no later than the end of the working day, by one or more of the following methods:

5. Hand shoveling material off street or pavement surfaces.

6. Machine removal (such as with end loader or grader), provided that the results are equal to that of hand shoveling.
7. Mechanical sweeping of material off paved surfaces and adjacent streets.

Diversion berms or sediment filtration berms shall be constructed and maintained as determined necessary by the erosion control plan and/or the Construction Engineer in order to route off-site storm water runoff around disturbed work areas.

Replacement/repair of pre-existing erosion control measures which are disturbed in the course of the work shall be completed promptly following completion of the work on the project causing such disturbance.

### **B Tree Protection**

The maintenance and enhancement of the urban forest is a goal of the City of Madison. Preserving and protecting healthy trees is one objective towards achieving this goal. Trees vary in their ability to adapt to altered growing conditions. Mature trees have established systems in the pre-existing physical environment. Disruption of this environment by construction activities interrupts the tree's physiological processes causing depletion of energy reserves and a decline in vigor, often resulting in the tree's death. These tree protection specifications are intended to insure that appropriate practices will be implemented in the construction phase of the project to protect a tree's structural integrity and future health. Also, these specifications will reduce the likelihood of undesirable consequences that may result from uninformed or careless construction practices adjacent to trees. The three most common forms of construction damage to trees are:

- Root cutting
- Bark abrasions
- Soil compaction

Damage can be prevented or minimized by following the specifications below and properly educating construction staff of these specifications and use of care when working around trees during the construction process. If the City Forester or Engineer determines that a tree has been damaged due to failure to follow these specifications, or negligence of PROVIDER or Subcontractor, PROVIDER or Subcontractor will be responsible for the damage.

PROVIDER shall not grade, excavate, or otherwise disturb the area within five (5) feet of any tree as measured from the outside edge of the tree trunk or visible aboveground portion of the root system along the length of the terrace, without prior permission from the City Forestry Representative or Engineer.

For laterals or utilities that are in close proximity to terrace trees, the situation shall be reviewed on a case by case basis by the Engineer and City Forestry Representative. PROVIDER shall use construction methods to minimize tree damage as directed by the Engineer. The Engineer may elect to terminate lateral installation prior to conflict with tree (normally terminate at the curb). Most laterals shall have their locations verified and on the plan set in advance of bidding. Laterals that have not had their locations verified, shall be so noted on the plans.

Boring under or within the five (5) foot protection zone may be allowable.

All roots over one (1) inch in diameter that are damaged shall be cleanly cut immediately in back of the damaged section on the same day of the excavation. Cuts may be made with lopping shears, chainsaw, stump grinder, or other means which will produce a clean cut. Exposed roots should be covered as soon as excavation and installation are complete.

PROVIDER shall not rip or pull roots out towards the trunk of a tree while excavating with a backhoe. The use of a backhoe to cut roots is NOT acceptable.

All mechanical grading, including sod installation within five (5) feet of any tree as measured from the outside edge of the tree trunk or visible aboveground portion of the root system shall be prohibited. Any grading required within the root protection zone shall be done with hand implements and performed in a manner so as to minimize damage to the root system.

PROVIDER shall take precautions during construction not to disfigure, scar, or impair the health of any tree on public or private property.

Preconstruction pruning – Trees larger than ten (10) inch diameter at breast height will be pruned by City Forestry to an approximate minimum height of fourteen (14) feet above the road wherever construction equipment is expected to invade the tree crown. All pruning shall be done according to ANSI A300 tree pruning specifications. Occasionally a limb may have to remain at a height less than fourteen (14) feet above the roadway. These instances shall be noted during the 'walk thru' and PROVIDER shall employ methods to protect said limb.

PROVIDER shall operate equipment in a manner as to not damage the branches of a tree. This may require using smaller equipment and loading or unloading materials in a designated space away from trees on the construction site.

PROVIDER shall notify City Forestry the same day of any damage to trees resulting from construction activities.

No equipment or materials will be allowed to be parked on, driven over, or be piled on areas within five (5) feet a tree as measured from the outside edge of the tree trunk or visible aboveground portion of the root system. This not only prevents compaction, but also prevents damage to the trunks of trees and branches through scraping of scuffing the bark.

The Tree Protection specification and known conflicts and concerns shall be reviewed at the preconstruction meeting with PROVIDER. This review shall include review of a one page educational informational sheet that details the procedures for avoiding damage to the tree and tree roots.

Utilities or others working in the public right-of-way shall be required to sign this acknowledgement on a case by case basis.

PROVIDER's failure to follow the proper safeguards of these specifications shall result in the following cost recovery charges and liquidated damages to be assessed against PROVIDER:

Where construction damage occurs causing or resulting in removal of the tree of three (3) inch diameter or less (as measured at twelve (12) inches above the ground):

1. The costs associated with removing the tree including wood disposal.
2. The costs associated with removing the stump to a depth of at least twenty-four (24) inches below the ground.
3. The costs associated with replanting a replacement tree that is balled & burlapped and shall have a minimum caliper of two (2) inches. The species and replanting location shall be determined by City Forestry.

Where construction damage occurs causing or resulting in removal of the tree of greater than three (3) inch diameter (as measured at twelve (12) inches above the ground):

1. The costs associated with removing the tree including wood disposal.
2. The costs associated with removing the stump to a depth of at least twenty-four (24) inches below the ground.
3. The costs associated with replanting a replacement tree that is balled & burlapped and shall have a minimum caliper of two (2) inches. The species and replanting location shall be determined by City Forestry.
4. The value of the existing tree which shall equal \$125.00 per trunk diameter inch, as measured at twelve (12) inches above the ground.

For bark scraping and broken branches:

1. The costs associated with pruning broken branches, including wood disposal.
2. Loss of limb or broken branch larger than three (3) inches in diameter: \$150.00 for each occurrence. Breakage of limbs that are less than fourteen (14) feet above the roadway shall be reviewed on a case by case basis.
3. Damage to trunk or bark larger than one-half (1/2) square foot in area: \$400.00 each area.

For root cutting or excavation within the root protection zone:

1. For mechanical excavation within five (5) feet of a tree as measured from the outside edge of the tree trunk or visible aboveground portion of the root system, along the length of the terrace or sidewalk side of the tree, including ripping of roots back towards the trunk, without prior permission from City Forestry Representative: \$150.00 for each occurrence

2. For failure to cleanly cut damaged roots greater than one (1) inch on the same day as the excavation: \$150.00 for each occurrence.

### **C Aquatic Exotic Species Control**

Exotic invasive organisms such as VHS, zebra mussels, purple loosestrife, and Eurasian water milfoil are becoming more prolific in Wisconsin and pose adverse effects to waters of the state. Wis. Statutes 30.07, "Transportation of Aquatic Plants and Animals; Placement of Objects in Navigable Waters", details the state law that requires the removal of aquatic plants and zebra mussels each time equipment is put into State waters.

At construction sites that involve navigable water or wetlands, PROVIDER shall use the follow cleaning procedures to minimize the chance of exotic invasive species infestation. PROVIDER shall use these procedures for all equipment that comes in contact with waters of the state and/or infested water or potentially infested water in other states.

PROVIDER shall ensure that all equipment that has been in contact with waters of the State, or with infested or potentially infested waters, has been decontaminated for aquatic plant materials and zebra mussels prior to being used in other waters of the State. Before using equipment on this project, PROVIDER shall thoroughly disinfect all equipment that has come into contact with potentially infested waters. PROVIDER shall use the following inspection and removal procedures (guidelines from the Wisconsin Department of Natural Resources [http://dnr.wi.gov/topic/fishing/documents/vhs/disinfection\\_protocols.pdf](http://dnr.wi.gov/topic/fishing/documents/vhs/disinfection_protocols.pdf) for disinfection):

1. Prior to leaving the contaminated site, PROVIDER shall wash machinery and ensure that the machinery is free of all soil and other substances that could possibly contain exotic invasive species.
2. PROVIDER shall drain all water from boats, trailers, bilges, live wells, coolers, bait buckets, engine compartments, and any other area where water may be trapped.
3. PROVIDER shall inspect boat hulls, propellers, trailers and other surfaces. PROVIDER shall scrape off any attached mussels, remove any aquatic plant materials (fragments, stems, leaves, seeds, or roots), and dispose of removed mussels and plant materials in a garbage can prior to leaving the area or infested waters.
4. Disinfect boats, equipment and gear by either:
  - a. Washing with ~212° F water (steam clean), or
  - b. Drying thoroughly for five days after cleaning with soap and water and/or high pressure water, or
  - c. Disinfecting with either 200 ppm (0.5 oz per gallon or 1 Tablespoon per gallon) Chlorine for 10-minute contact time or 1:100 solution (38 grams per gallon) of Virkon Aquatic for 20- to 30-minute contact time. Note: Virkon is not registered to kill zebra mussel veligers nor invertebrates like spiny water flea. Therefore this disinfect should be used in conjunction with a hot water (>104° F) application.

Complete the inspection and removal procedure before equipment is brought to the project site and before the equipment leaves the project site.

#### **D Final Clean Up**

Upon completion of the work and before acceptance and final payment will be made, PROVIDER shall remove from the project area all surplus and discarded materials, rubbish and temporary structures and leave the project area in a neat and presentable condition.

No project shall be accepted until all excess mud, terrace dirt, asphalt material, rocks and crushed stone have been removed from the sidewalk, terrace, gutter and pavement.

This item, as described above, shall be considered subsidiary and incidental to the other items of the contract, and no separate or additional compensation will be made.

### **9. Documentation**

#### **A Project Documentation**

PROVIDER shall provide the following documentation prior to the preconstruction meeting, as described herein:

- Progress Schedule
- Permits
- Traffic Control Plan
- Fiber Optic Technician Certification

These documents will be discussed and reviewed during the preconstruction meeting and be approved in writing by the Engineer prior to PROVIDER beginning work on the project.

#### **B Shop Drawings**

PROVIDER shall provide the following shop drawings prior to the preconstruction meeting, as described herein:

- Conduit (including conduit directional bore and innerduct)
- No. 10 Locate Wire
- Handhole
- Fiber Optic Cable
- Fiber Optic Splice Enclosure (including fiber optic splice tray)

These shop drawings will be discussed and reviewed during the preconstruction meeting and be approved in writing by the Engineer prior to PROVIDER beginning work on the project.

#### **C Project Closeout Documentation**

PROVIDER shall provide the following documentation prior to the completion of the project, as described herein:

- Fiber Optic Test Results

These documents will be reviewed and shall be approved in writing by the Engineer prior to project completion and final payment.

This item, as described above, shall be considered subsidiary and incidental to the other items of the contract, and no separate or additional compensation will be made.

## **10. Handhole**

### **A Description**

This item consists of furnishing and installing handholes as shown on the plans.

### **B Materials**

All handhole hardware shall be stainless steel.

Handhole labels shall read "TRAFFIC SIGNAL" on the cover.

Type VII Handholes shall be gray colored polymer concrete construction. The box dimensions shall be 30 inches wide by 50 inches long by 36 inches deep. The box and cover shall be rated at 5,000 pounds over a ten inch square with a minimum test load of 22,568 pounds.

PROVIDER shall submit shop drawings of the proposed handholes prior to the preconstruction meeting. Handholes proposed for use shall be approved in writing by the Engineer prior to beginning work on the project.

### **C Construction**

Six (6) inches of No. 2 compacted coarse aggregate shall be placed beneath the handhole.

Native material will not be allowed for backfill if it is thirty (30) percent or more stones by volume. No rocks larger than four (4) inch diameter, stone aggregate, or any foreign debris shall be backfilled, unless otherwise approved by the Engineer.

The handhole shall be placed such that the cover is flush with the finished grade.

Furnish and install an eight (8) foot long by half (1/2) inch copper clad ground rod with a conductor clamp to ground wires and/or cables that are installed in the handhole.

PROVIDER shall notify the Engineer at least twenty-four (24) hours in advance of any work on City of Madison owned or maintained facilities to arrange for an inspector to be present during all such work. Work shall not commence until the City Traffic Engineering inspector is present.

### **D Measurement**

These items shall be measured as units complete in place and accepted in accordance with the contract.

### **E Payment**

These items, measured as provided above, will be paid for at the contract unit price for each, which price shall be payment in full for furnishing and installing all materials

necessary to complete the installation, including excavation, backfill and disposal of surplus materials; for grounding; and for all labor, tools, equipment and incidentals necessary to complete these items of work.

## **11. Conduit**

### **A Description**

This item consists of furnishing and installing underground conduit as shown on the plans.

### **B Materials**

PROVIDER shall submit shop drawings of the proposed conduit prior to the preconstruction meeting. Conduit proposed for use shall be approved in writing by the Engineer prior to beginning work on the project.

#### **B.1 Rigid Steel Conduit**

Rigid steel conduit (zinc coated) shall conform to the requirements of the American Standards Association Specifications for Rigid Steel Conduit, Zinc Coated, ANSI Designation: C 80.1, except with regard to identification and inspection. In addition to the manufacturer's name or trademark, as required by ANSI Designation: C 80.1, each length of conduit and nipple elbow shall have the Underwriters Laboratories, Inc. label, or an acceptable equivalent, firmly affixed.

#### **B.2 Polyethylene Conduit**

The conduit shall be either a medium density or high density grade polyethylene conduit suitable for direct earth burial. Medium density polyethylene shall meet the applicable requirements for Polyethylene Molding and Extrusion Materials, ASTM D-1248, Type II, Class C. High density polyethylene shall meet the applicable requirements for Polyethylene Molding and Extrusion Materials, ASTM D 1248, Type III, Class C.

The above materials shall also pass:

- ASTM D 638: Tests for Tensile Strength and Elongation.
- ASTM D 746: Brittle Temperature, 80% Non-failure.
- ASTM D 1238: Test for Flow Rate.

The conduit shall be packaged on reels in accordance with industry standards.

#### **B.3 Polyvinyl Chloride (PVC) Conduit (Schedule 40 and Schedule 80)**

PVC conduit shall be used in accordance with the National Electrical Code and shall comply with all requirements in NEMA Specifications TC-2 (Conduit) and TC-3 (Fittings-UL 514), Federal Specification W-C-1094A, UL 651 (Standard for rigid nonmetallic conduit), and ANSI C33.91.

The conduit and fittings shall be clearly marked with a UL label. The type and manufacturer shall be identified by legible and permanent markings.

The conduit and fittings shall be produced by the same manufacturer and be homogeneous, virgin PVC C-300 compound free from visible cracks, holes or foreign inclusions. The conduit bore shall be smooth and free of blisters, nicks, or other imperfections which could mar conductors or cables.



All conduit and fittings shall be solvent welded in accordance with instructions from the manufacturer, and as directed by the Engineer. Solvent for welding PVC shall be clear, medium viscosity, with a fast set time, ASTM D 2564 or approved equal.

#### **B.4 Innerduct**

Corrugated flexible riser innerduct shall be used in accordance with the National Electrical Code and shall comply with all requirements in UL 2024, CSA C22.2 No. 262-04, and ASTM D 4216. The corrugated flexible riser innerduct shall be orange.

The conduit and fittings shall be clearly marked with a UL label. The type and manufacturer shall be identified by legible and permanent markings.

#### **C Construction**

Each conduit run between access points to the wiring shall be one size for its entire length.

For each conduit run in which cable will not be installed as part of the contract, the ends of the conduit shall be capped with standard conduit caps to preclude water and soil infiltration. If threaded caps are used, the threads shall be lubricated. Conduits terminating in a non-paved location and not in a structure shall be turned up and end at terrace finish grade with a PVC cap securely attached.

All splices between reels of polyethylene conduit and connections to steel or PVC conduit shall be made with approved watertight coupling assemblies. Standard conduit fittings shall be used and all costs for couplings and joints shall be included in the unit price bid for the conduit.

When connections are to be made to an existing conduit, PROVIDER shall first verify that the existing conduit is fully clear and useable for its entire cross-section and length. When the existing conduit is found to be defective, PROVIDER shall notify the Engineer and not proceed until the Engineer so directs. If PROVIDER connects to an existing defective conduit without the express direction from the Engineer, PROVIDER shall make any and all necessary repairs and replacements to all conduits, including conduit that was "existing" prior to PROVIDER starting work. All costs of this work shall be at the expense of PROVIDER.

Conduit, duct, or other raceways shall be installed in accordance with the following minimum cover requirements. "Cover" is defined as the distance between the FINISHED grade and the TOP of the conduit. Exceptions shall require the approval of the Engineer.

- In Terrace or Under Sidewalk: Thirty (30) inches
- Roadway: Twenty-four (24) inches

PROVIDER shall notify the Engineer at least forty-eight (48) hours in advance of any work on City of Madison owned or maintained facilities to arrange for an inspector to be present during all such work. Work shall not commence until the City Traffic Engineering inspector is present.

#### **C.1 Trenching**

The width of the conduit trench shall be sufficient to accommodate the conduit installations shown on the plan without stacking the conduits. The trench shall be excavated true to line and to provide a 30 inch depth for conduit, except as otherwise authorized by the Engineer in the field. Backfill shall be carefully and adequately compacted in place.

Native material will not be allowed for backfill if it is thirty (30) percent or more stones by volume. No rocks larger than four (4) inch diameter, stone aggregate, or any foreign debris shall be backfilled, unless otherwise approved by the Engineer. When sand backfill is required, a six (6) inch minimum sand padding shall be used below the conduit and a six (6) inch minimum sand lift shall be used above the conduit.

### **C.2 Directional Boring**

Conduit to be placed under existing pavements, sidewalks and driveways shall be installed by directional boring.

Schedule 80 PVC conduit shall be installed under pavements, sidewalks and driveways to provide protection for underground cable.

### **D Measurement**

This item, complete in place and accepted, shall be measured in linear feet in a horizontal plane from terminal connection to terminal connection along the centerline of the trench or conduit, with the terminal connection being the centerline of the electrical utility access structure, handhole, junction box or other terminal location as required by the plans and specifications. The quantity measured for payment shall be the summation of linear feet of each size and type.

Additional lengths of conduit necessary for terminating conduit at or above grade shall be installed by PROVIDER and considered as part of the work included in this item, but will not be measured or paid for directly.

### **E Payment**

The quantity, measured as provided above, will be paid for at the contract unit price per linear foot of each of the specified sizes and types, which price shall be payment in full for furnishing, hauling and placing the conduit, hangers, clips, fittings, and attachments; for trench work, such as excavation, bedding and backfilling, including any sand, asphalt, concrete or other required materials; for drilling holes in handholes and resealing such openings after the conduit is installed; for disposal of surplus materials; for restoration of disturbed or damaged areas including seeding and sodding; for making inspections; and for all labor, tools, equipment, and incidentals necessary to complete this item of work in accordance with the contract.

## **12. No. 10 Locate Wire**

### **A Description**

This item consists of furnishing and installing locate wire as shown on the plans.

### **B Materials**

The locate wire shall meet the following requirements:

Conductor: No. 10 AWG bare copper

Stranding:	Solid
Insulating Material:	Polyethylene
Insulating Thickness:	0.047 inches (nominal)
Insulating Conductor Diameter:	0.196 inches (nominal)
Temperature Rating:	-20 °C to +60 °C
Operating Voltage:	600 Volts (RMS max)
DC Resistance @ 20 °C:	1 Ohm per 1,000 feet (nominal)

PROVIDER shall submit shop drawings of the proposed locate wire prior to the preconstruction meeting. Locate wire proposed for use shall be approved in writing by the Engineer prior to beginning work on the project.

### **C Construction**

PROVIDER shall install locate wire using acceptable trade methods and practices. PROVIDER shall at all times exercise caution to protect the locate wire and its insulation from being damaged by sharp edges. Under no circumstances shall locate wire ends be left uncovered or allowed to become submerged in water.

Connect the locate wire to the ground rod within the handhole. Furnish and install an eight (8) foot long by half (1/2) inch copper clad ground rod with a conductor clamp to ground wires and/or cables if one is not present in an existing handhole.

PROVIDER shall notify the Engineer at least forty-eight (48) hours in advance of any work on City of Madison owned or maintained facilities to arrange for an inspector to be present during all such work. Work shall not commence until the City Traffic Engineering inspector is present.

### **D Measurement**

This item, complete in place and accepted, shall be measured in linear feet in a horizontal plane, from terminal connection to terminal connection along the center line of the trench or conduit with the terminal connection being the center line of the electrical utility access structure, handhole, junction box or other terminal location as required by the plans and specifications.

Additional lengths of locate wire for making connections at terminal locations shall be installed by PROVIDER and considered as part of the work included in this item, but will not be measured or paid for directly.

### **E Payment**

The quantity of locate wire installed, measured as provided above, will be paid for at the contract unit price per linear foot, which price shall be payment in full for storing, handling, transporting, and installing; for grounding; for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

## **13. Fiber Optic Cable**

### **A Description**

This item consists of furnishing and installing fiber optic cable as shown on the plans.

### **B Materials**

The fiber type shall be single mode.

All fibers in the cable shall be usable and meet required specifications.

Each optical fiber shall be sufficiently free of surface imperfections and inclusions to meet the optical, mechanical, and environmental requires of the specification.

PROVIDER shall submit shop drawings of the proposed fiber optic cable prior to the preconstruction meeting. Fiber optic cable proposed for use shall be approved in writing by the Engineer prior to beginning work on the project.

### **B.1 Fiber Characteristics**

Each optical fiber shall consist of a germania-doped silica core surrounded by a concentric glass cladding. The fiber shall be a matched clad design.

Each optical fiber shall be proof tested by the fiber manufacturer at a minimum of 100 kpsi (0.69 GPa).

The fiber shall be coated with a dual layer acrylate protective coating. The coating shall be in physical contact with the cladding surface.

The attenuation specification shall be a maximum value for each cabled fiber on the original shipping reel.

The fiber shall meet ITU-T G.652.D specifications.

### **B.2 Cable Construction**

Optical fibers shall be placed inside a loose buffer tube. Each buffer tube shall contain 6/12 fibers dependent on the fiber size. The fibers shall not adhere to the inside of the buffer tube.

Each buffer tube and fiber shall be distinguishable by means of color coding according to the TIA/EIA-598 Specifications, "Optical Fiber Cable Color Coding". Buffer tubes containing fibers shall be color-coded with distinct and recognizable colors according to the above reference's specification.

In buffer tubes containing multiple fibers, the colors shall be stable across the specified storage and operating temperature range and not subject to fading or smearing onto each other. Colors shall not cause fibers to stick together.

Buffer tubes shall be kink resistant within the specified minimum bend radius.

Fillers may be included in the cable core to lend symmetry to the cable cross-section where needed.

The central anti-buckling member shall consist of a glass reinforced plastic rod. The purpose of the central member is to prevent buckling of the cable.

Each buffer tube shall contain a water-swellable yarn or water blocking element for water-blocking protection. The water-swellable yarn or water blocking element shall be non-nutritive to fungus, electrically non-conductive, and homogeneous. It shall also be

free from dirt or foreign matter. This yarn or element will preclude the need for other water-blocking material. The buffer-tube shall be gel-free.

The optical fibers shall not require cleaning before placement into a splice tray or fan-out kit.

Buffer tubes shall be stranded around the dielectric central member using the reverse oscillation, or "S-Z", stranding process.

Water swellable yarn(s) shall be applied longitudinally along the central member during stranding. Water blocking elements shall be applied uniformly throughout the buffer tube.

Two polyester yarn binders shall be applied contrahelically with sufficient tension to secure each buffer tube layer to the dielectric central member without crushing the buffer tubes. The binders shall be non-hygroscopic, non-wicking, and dielectric with low shrinkage.

For single layer cables, a water swellable tape shall be applied longitudinally around the outside of the stranded tubes/fillers. The water swellable tape shall be non-nutritive to fungus, electrically non-conductive, and homogenous. It shall also be free from dirt and foreign matter.

For dual layer cables, a second (outer) layer of buffer tubes shall be stranded over the original core to form a two layer core. A water swellable tape shall be applied longitudinally over both the inner and outer layer. The water swellable tape shall be non-nutritive to fungus, electrically non-conductive, and homogenous. It shall also be free from dirt and foreign matter.

Armored cables shall contain two ripcords under the steel armor for easy armor removal. Additionally, armored cables that have an inner sheath will also contain one ripcord under the inner sheath.

Tensile strength shall be provided by the central member, and additional dielectric yarns as required. The dielectric yarns shall be helically stranded evenly around the cable core.

Armored cables without an inner jacket shall have an armor layer applied directly over the dielectric strength members (if present). The armor shall be a corrugated steel tape, plastic-coated on both sides for corrosion resistance, and shall be applied around the outside of the dielectric strength members (if present) with an overlapping seam with the corrugations in register. The outer jacket shall be applied over the corrugated steel tape armor. The outer jacket shall be a medium density polyethylene (MDPE) with a minimum nominal jacket thickness of 1.4 mm. The polyethylene shall contain carbon black to provide ultraviolet light protection and shall not promote the growth of fungus.

The MDPE jacket material shall be as defined by ASTM D1248, Type II, Class C, Category 4 and Grades J4, E7, and E8.

The jacket or sheath shall be free of holes, splits, and blisters.

The cable jacket shall contain no metal elements and shall be of a consistent thickness.

Cable jackets shall be marked with the manufacturer's name, month and year of manufacture, sequential meter or foot markings, a telecommunication handset symbol as required by Section 350G of the National Electrical Safety Code (NESC), fiber count, and fiber type. The actual length of the cable shall be within -0/+1% of the length markings. The print color shall be white, with the exception that cable jackets containing one or more coextruded white stripes, which shall be printed in light blue. The height of the marking shall be approximately 2.5 mm.

The shipping, storage, and operating temperature range of the cable shall be -40 °C to +70 °C. The installation temperature range of the cable shall be -30 °C to +70 °C.

The completed cable shall be packaged for shipment on wooden reels. Each reel shall have a weatherproof reel tag attached identifying the reel and cable. The top and bottom ends of the cable shall be available for testing. Both ends of the cable shall be sealed to prevent the ingress of moisture. Each cable shall be accompanied by a cable data sheet. The cable data sheet shall include the following information:

- Manufacturer Cable Number
- Manufacturer Product Number
- Factory Order Number
- Customer Purchase Order Number
- Ordered Length
- Actual Shipped Length
- Measured Attenuation of Each Fiber (for lengths greater than 1000 m)

### **C Construction**

A certified fiber optic technician shall supervise all fiber optic cable installation. Prior to the preconstruction meeting, submit materials indicating the certified technician has attended and successfully completed at least one four (4) day class on the installation of fiber optic products conducted by major manufacturer and have FOA certification and demonstrating that the certified technician has a minimum of two (2) years of work experience in the last five (5) years with splicing, termination, and testing of fiber optic cable.

Install all cables into the conduit using a flat woven pull tape. Optionally, install the cable via forced air and a track pushing mechanism. Do not use a single pull tape for more than a single cable pull. Install the pull tape and fiber optic cables according to the manufacturers' recommendations.

Install all cable according to Siecor recommended procedure SRP 005-011 for fiber optic cable placing - duct. Follow these procedures regardless of the manufacturer of the cable. If the cable manufacturer recommends an operation in conflict with these procedures, submit a request for installation procedure change to the Engineer for approval. Do not exceed a maximum pulling tension of 608 pounds-force (2700 N) during installation and 200 pounds-force (890 N) after installation.

A pulling swivel breakaway rated at 600 pounds shall be used at all times. The Engineer is authorized to verify compliance during the construction process and stop construction

operations if in violation. Bends of small radii (less than 20 times the outside diameter of the cable) and twists may damage the cable and shall be avoided during cable placement. The cable shall be lubricated and placed in accordance with the cable manufacturer specifications.

Cable labels shall be affixed to each newly installed cable and include:

- (line 1) "NUMBER OF STRANDS-CT FO CABLE"
- (line 2) "DANE COUNTY / MUFN"
- (line 3) "DATE OF INSTALL"

100 feet of fiber optic cable shall be coiled and placed in all handholes unless otherwise indicated in the plans.

Ground the fiber optic cable per the manufacturer's recommendation.

PROVIDER shall notify the Engineer at least forty-eight (48) hours in advance of any work on City of Madison owned or maintained facilities to arrange for an inspector to be present during all such work. Work shall not commence until the City Traffic Engineering inspector is present.

#### **D Measurement**

This item, complete in place and accepted, shall be measured in linear feet in a horizontal plane from terminal connection to terminal connection along the centerline of the fiber optic cable, with the terminal connection being the centerline of the handhole or other terminal location as required by the plans and specifications. This shall also include all lengths necessary for coiling in handholes. The quantity measured for payment shall be the summation of linear feet of each size and type.

#### **E Payment**

The quantity, measured as provided above, will be paid for at the contract unit price per linear foot of each of the specified sizes and types, which price shall be payment in full for furnishing and the installing fiber optic cable; for grounding; for disposal of surplus materials; for restoration of disturbed or damaged areas including seeding and sodding; and for all labor, tools, equipment, and incidentals necessary to complete this item of work in accordance with the contract.

### **14. Fiber Optic Splice Enclosure**

#### **A Description**

This item consists of furnishing and installing fiber optic splice enclosures as shown on the plans.

#### **B Materials**

Furnish fiber optic splice enclosures to be used in fiber optic splices for both mainline end-to-end splices and drop splices, as shown in the plans.

Furnish fiber optic splice enclosures designed for use under the most severe conditions such as moisture, vibration, impact, cable stress, and flex temperature extremes as demonstrated by successfully passing the factory test procedures.

PROVIDER shall submit shop drawings of the proposed fiber optic splice enclosure prior to the preconstruction meeting. Fiber optic splice enclosure proposed for use shall be approved in writing by the Engineer prior to beginning work on the project.

The following fiber optic splice enclosure materials are approved for use on this project:

Fiber Optic Splice Enclosure

Tyco FOSC 450-D6-6-NT-0-D6V

Fiber Optic Splice Tray

Tyco FOSC-ACC-D-TRAY-48

Tyco FOSC-ACC-D-TRAY-72

**B.1 Physical Requirements**

The enclosure shall handle up to four (4) cables in a butt configuration. PROVIDER may use a butt adapter to increase capacity to six (6) cables.

The enclosure shall prevent the intrusion of water without the use of encapsulates.

The enclosure shall be capable of accommodating splice organizer trays that accept mechanical, fusion, or multi-fiber array splices. The splice enclosure shall have provisions for storing fiber splices in an orderly manner, mountings for splice organizer assemblies, and space for excess or unspliced fiber. Splice organizers shall be re-entable. Ensure that splice cases have enough trays to hold up to 144 splices.

The splice case shall be UL or NRTL rated.

Enclosure re-entry and subsequent reassemble shall not require specialized tools or equipment. Further, these operations shall not require the use of additional parts.

The splice enclosure shall have provisions for controlling the fiber bend radius to a minimum of 1 1/2 inches.

**C Construction**

A certified fiber optic technician shall perform all work with the fiber optic splice enclosure. Prior to the preconstruction meeting, submit materials indicating the certified technician has attended and successfully completed at least one four (4) day class on the installation of fiber optic products conducted by major manufacturer and have FOA certification and demonstrating that the certified technician has a minimum of two (2) years of work experience in the last five (5) years with splicing, termination, and testing of fiber optic cable.

Ground the fiber optic splice enclosure per the manufacturer's recommendations.

PROVIDER shall notify the Engineer at least forty-eight (48) hours in advance of any work on City of Madison owned or maintained facilities to arrange for an inspector to be present during all such work. Work shall not commence until the City Traffic Engineering inspector is present.

**D Measurement**



These items shall be measured as units complete in place and accepted in accordance with the contract.

### **E Payment**

These items, measured as provided above, will be paid for at the contract unit price for each, which price shall be payment in full for furnishing and installing all materials necessary to complete the installation; for grounding; and for all labor, tools, equipment and incidentals necessary to complete these items of work.

## **15. Fiber Optic Splice**

### **A Description**

This item consists of furnishing and installing fiber optic splices as shown on the plans.

### **B Materials**

PROVIDER shall furnish all equipment necessary to perform the fiber optic splicing.

### **C Construction**

All splicing operations shall occur between the hours of 12:00am and 6:00am.

PROVIDER shall notify the Engineer at least forty-eight (48) hours before performing any splicing operations or any other work that will impact the existing fiber optic network.

A certified fiber optic technician shall perform all work for fiber optic splicing. Prior to the preconstruction meeting, submit materials indicating the certified technician has attended and successfully completed at least one four (4) day class on the installation of fiber optic products conducted by major manufacturer and have FOA certification and demonstrating that the certified technician has a minimum of two (2) years of work experience in the last five (5) years with splicing, termination, and testing of fiber optic cable.

PROVIDER shall use fusion splicing for all splices. Mechanical splices shall not be permitted.

Protect each splice in a protective sleeve and secure in the splice tray. Protect bare fibers with a heatshrink coating before placement in a sleeve or housing. Install the heat-shrink coating in to protect the fiber from scoring, dirt, accumulation, moisture intrusion, and micro bending.

Perform end-to-end splicing according to the manufacturer's instructions for the fiber optic splice enclosures.

Perform mid-span splicing, drop splicing, for each device location as shown on the plans. Splice according to Sicom recommended procedure SRP-004-013 for mid-span access of fiber optic cable with cable slack present, or appropriate manufacturer instructions. Contain all mid-span splices within enclosures.

Do not deviate from the splice details shown in the plans without the Engineer's approval.

PROVIDER shall notify the Engineer at least forty-eight (48) hours in advance of any work on City of Madison owned or maintained facilities to arrange for an inspector to be present during all such work. Work shall not commence until the City Traffic Engineering inspector is present.

#### **D Measurement**

These items shall be measured as units complete in place and accepted in accordance with the contract.

#### **E Payment**

These items, measured as provided above, will be paid for at the contract unit price for each, which price shall be payment in full for furnishing and installing all materials necessary to complete the installation and for all labor, tools, equipment and incidentals necessary to complete these items of work.

### **16. Fiber Optic System Testing**

#### **A Description**

This item consists of testing the fiber optic system as shown on the plans.

#### **B Materials**

PROVIDER shall furnish all equipment necessary to test the completed installation. Test and demonstrate to the Engineer's satisfaction that all equipment is calibrated and in working order.

#### **C Construction**

A certified fiber optic technician shall perform all work for testing. Prior the preconstruction meeting, submit materials indicating the certified technician has attended and successfully completed at least one four (4) day class on the installation of fiber optic products conducted by major manufacturer and have FOA certification and demonstrating that the certified technician has a minimum of two (2) years of work experience in the last five (5) years with splicing, termination, and testing of fiber optic cable.

PROVIDER shall provide the date, time, and location of all fiber optic system testing to the Engineer at least forty-eight (48) hours before performing the test.

PROVIDER shall notify the Engineer at least forty-eight (48) hours in advance of any work on City of Madison owned or maintained facilities to arrange for an inspector to be present during all such work. Work shall not commence until the City Traffic Engineering inspector is present.

After completing cable installation, splicing, and termination, PROVIDER test all fibers for continuity, events losses, and total attenuation of the cable as follows:

1. Test each individual fiber for event losses using an OTDR. Conduct the test using the standard operating procedure as defined by the manufacturer of the test equipment.

2. Connect the OTDR and the cable with a factory patch cord of a length equal to the dead zone of the OTDR. Optionally, the technician can use a factory fiber box of 325 feet minimum with no splices within the box.
3. Test each individual fiber for total segment attenuation loss using an optical source/power meter. Conduct the test using the standard operating procedure as defined by the manufacturer of the test equipment.
4. Conduct both tests, OTDR and optical source/power meter, at 1310 nm and 1550 nm for each fiber in the cable.
5. Conduct both tests bi-directionally for each fiber in the cable.

After completing the tests, PROVIDER shall submit five hard copies of the test results to the Engineer documenting the following test parameters:

- Operator name
- Date and time
- Setup parameters
- Wavelength
- Pulse width OTDR
- Refractory index OTDR
- Range
- OTDR
- Scale OTDR

The test results summarize the results of the both the OTDR and optical source/power meter tests in a spreadsheet/tabular format adhering to the following requirements:

- List fiber optic segment name including route, start point, and end point.
- List all fibers by number.
- List direction of test as NB, SB, EB, or WB.
- List total fiber optic cable length for each fiber as documented in the OTDR test.
- List attenuation in dB of gain or loss for each fiber optic event in the OTDR test.
- List fiber optic loss event descriptions and locations including splices, miscellaneous events, and terminations.
- List the attenuation across the cable in dB/mile for each fiber tested.
- List the total segment loss for each fiber as determined by the optical source/power meter test.
- Provide bi-directional data including event distances, event descriptions, and attenuation losses for each fiber corresponding to a common start point
- Provide bi-directional data on separate lines, side-by-side within the same sheet.
- Provide 1310 nm and 1550 nm test results on separate sheets in identical formats.

PROVIDER shall also provide electronic copies of the fiber optic cable traces taken during the OTDR test to the Engineer for review. The electronic files shall be in a universal file format, or PROVIDER shall supply the Engineer software to view the files.

The following requirements shall be used for acceptance of fiber optic cable testing. If the fiber optic cable testing does not pass these requirements, PROVIDER shall replace the cable run at PROVIDER's expense.

- The dB/km loss shall not exceed three (3) percent to the factory test or one (1) percent of the cable's published production loss. The error rate of the test equipment will be considered.
- No event loss shall exceed 0.10 dB.
- The total dB loss across the cable shall not exceed 0.5 dB/km.

#### **D Measurement**

This item shall be measured as a lump sum, with all fiber optic cables completed tested and passing acceptance requirements.

#### **E Payment**

This item, measured as provided above, will be paid for as a lump sum, which price shall be payment in full for fiber optic system testing documentation; disposal of surplus materials and for all labor, tools, equipment, and incidentals necessary to complete this item of work in accordance with the Agreement.

**Schedule B - Payment**

ITEM NO.	DESCRIPTION	COST/UNIT	UNIT	QTY	COST
1.1	TYPE VII HANDHOLE	\$850.00	EACH	10	\$8,500.00
2.1	2-INCH CONDUIT	\$2.95	LF	8450	\$24,927.50
2.2	2-INCH CONDUIT DIRECTIONAL BORE	\$9.95	LF	3210	\$31,939.50
2.3	1.5-INCH INNERDUCT	\$2.95	LF	400	\$1,180.00
3.1	NO. 10 LOCATE WIRE	\$0.50	LF	16880	\$8,440.00
4.1	FIBER OPTIC CABLE 144-CT	\$2.00	LF	12960	\$25,920.00
4.2	FIBER OPTIC CABLE 48-CT	\$1.50	LF	6580	\$9,870.00
5.1	FIBER OPTIC SPLICE	\$34.00	EACH	84	\$2,856.00
6.1	FIBER OPTIC SPLICE ENCLOSURE	\$285.00	EACH	4	\$1,140.00
7.1	FIBER OPTIC SYSTEM TESTING	\$1,000.00	LS	1	\$1,000.00
					<b>TOTAL</b>
					\$115,773.00

**Schedule C – Installation Timeline & Reporting**

Construction will begin by August 17, 2015 and will be completed in 4 weeks from the start date.

PROVIDER must send weekly status reports at the end of the day on Friday to the Dane County project manager and the engineer.