

Dane County Contract Cover Sheet

Revised 01/2024

Res 033
significant

Dept./Division	AIRPORT/ADMINISTRATION		
Vendor Name	NICKLES Electric Corporation	MUNIS #	33660
Brief Contract Title/Description	Construct and replace end of life airport perimeter fiber supporting airport security systems and future expansion		
Contract Term	Upon Completion or 08/31/2025		
Contract Amount	Not to exceed \$503,479.		

Contract # Admin will assign	15535
Type of Contract	
<input checked="" type="checkbox"/>	Dane County Contract
<input type="checkbox"/>	Intergovernmental
<input type="checkbox"/>	County Lessee
<input type="checkbox"/>	County Lessor
<input type="checkbox"/>	Purchase of Property
<input type="checkbox"/>	Property Sale
<input type="checkbox"/>	Grant
<input type="checkbox"/>	Other

Department Contact Information		Vendor Contact Information	
Name	Adam Ussher	Name	Jay Stassi
Phone #	608-246-3388	Phone #	608.712.7921
Email	ussher.adam@msnairport.com	Email	jstassi@niclesec.com
Purchasing Officer			

Purchasing Authority	<input type="checkbox"/> \$13,000 or under – Best Judgment (1 quote required)	
	<input type="checkbox"/> Between \$13,000 – \$44,000 (\$0 – \$25,000 Public Works) (3 quotes required)	
	<input checked="" type="checkbox"/> Over \$44,000 (\$25,000 Public Works) (Formal RFB/RFP required)	RFB/RFP # 029-PR
	<input type="checkbox"/> Bid Waiver – \$44,000 or under (\$25,000 or under Public Works)	
	<input type="checkbox"/> Bid Waiver – Over \$44,000 (N/A to Public Works)	
	<input type="checkbox"/> N/A – Grants, Leases, Intergovernmental, Property Purchase/Sale, Other	



MUNIS Req.	Req #	Org: AIRADMIN	Obj:	Proj: 47887	\$
	Year	Org:	Obj:	Proj:	\$
		Org:	Obj:	Proj:	\$

Budget Amendment	
<input type="checkbox"/>	A Budget Amendment has been requested via a Funds Transfer or Resolution. Upon addendum approval and budget amendment completion, the department shall update the requisition in MUNIS accordingly.

Resolution Required if contract exceeds \$100,000	<input type="checkbox"/> Contract does not exceed \$100,000	
	<input checked="" type="checkbox"/> Contract exceeds \$100,000 – resolution required.	Res # 033
	<input checked="" type="checkbox"/> A copy of the Resolution is attached to the contract cover sheet.	Year 2024

CONTRACT MODIFICATIONS – Standard Terms and Conditions		
<input type="checkbox"/> No modifications.	<input checked="" type="checkbox"/> Modifications and reviewed by: Adam Ussher, Corp Counsel	<input type="checkbox"/> Non-standard Contract

APPROVAL	
Dept. Head / Authorized Designee	
Ussher, Adam	Digitally signed by Ussher, Adam Date: 2024.07.05 10:04:57 -05'00'

APPROVAL – Contracts Exceeding \$100,000	
Director of Administration	Corporation Counsel
	

APPROVAL – Internal Contract Review – Routed Electronically – Approvals Will Be Attached			
DOA:	Date In: 7/5/24	Date Out: _____	<input checked="" type="checkbox"/> Controller, Purchasing, Corp Counsel, Risk Management

Goldade, Michelle

From: Goldade, Michelle
Sent: Monday, July 8, 2024 10:49 AM
To: Krohn, Margaret; Rogan, Megan; Pabellon, Carlos; Cotillier, Joshua
Cc: Stavn, Stephanie; Oby, Joe
Subject: Contract #15535
Attachments: 15535.pdf

Tracking:	Recipient	Read	Response
	Krohn, Margaret		Approve: 7/8/2024 1:54 PM
	Rogan, Megan	Read: 7/8/2024 10:51 AM	Approve: 7/8/2024 10:51 AM
	Pabellon, Carlos		Approve: 7/8/2024 11:29 AM
	Cotillier, Joshua		Approve: 7/8/2024 11:09 AM
	Stavn, Stephanie	Read: 7/9/2024 10:50 AM	
	Oby, Joe		

Please review the contract and indicate using the vote button above if you approve or disapprove of this contract.

Contract #15535

Department: Airport

Vendor: Nickles Electric Corp

Contract Description: Construct & replace end of life airport perimeter fiber support airport security system & future expansion (Res 033)

Contract Term: 7/1/24 – 8/31/25

Contract Amount: \$503,479.00

On a side note...I have reminded the airport that a purchase requisition needs to be entered for this contract.

Thanks much,
Michelle

Michelle Goldade

Administrative Manager

Dane County Department of Administration

Room 425, City-County Building

210 Martin Luther King, Jr. Boulevard

Madison, WI 53703

PH: 608/266-4941

Fax: 608/266-4425

TDD: Call WI Relay 711

Please note: I am currently working a modified schedule. I work in office Mondays and Wednesdays and work remotely Tuesday, Thursdays and Fridays.

DANE COUNTY CONTRACT # 15535



Department: Dane County Regional Airport

Provider: Nickles Electric Construction,
Inc.

Expiration Date: Upon completion or
August 31, 2025,
whichever is earlier

Maximum Cost: Not to exceed \$503,749

Registered Agent (if applicable): Rodney J. Howard

Registered Agent Address: 2861 Index Road
Madison, Wisconsin 53713

THIS AGREEMENT is between the County of Dane, a Wisconsin quasi-municipal corporation ("COUNTY"), and Nickles Electric Construction, Inc., a Wisconsin corporation ("PROVIDER") and is effective on the date it is fully executed by both parties.

RECITALS:

1. COUNTY, whose address is c/o Airport Director, 4000 International Lane, Madison, Wisconsin 53704, desires to purchase services from PROVIDER for the purpose of constructing a fiber optic connection at the Dane County Regional Airport ("Airport"); and
2. PROVIDER, whose address is 2861 Index Road, Madison, Wisconsin 53713, is able and willing to provide such services;

ACCORDINGLY, COUNTY and PROVIDER agree as follows:

I. TERM:

This Agreement begins on the date it is executed and ends upon completion or August 31, 2025, whichever is earlier, unless sooner agreed to in writing by the parties. PROVIDER shall complete its obligations under this Agreement consistent with the timelines stated in Schedule A but no later than August 31, 2025, except as extended by COUNTY. COUNTY shall not be liable for any services performed by PROVIDER other than during the term of this Agreement. COUNTY shall never pay more than the Maximum Cost as stated above for all services over the term of this Agreement, including any extensions. 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, in addition to any other remedies available.

II. SERVICES:

- A. PROVIDER shall provide the services detailed in the bid specifications, if any; the request for bid ("RFB") and PROVIDER's response to the RFB, if any; and on the attached Schedule A. In the event of a conflict between or among the bid specifications, the RFB or RFB response, or Schedule A or any of them, the terms of Schedule A are controlling to the extent of any conflict.
- B. PROVIDER shall perform its obligations under this Agreement with all deliberate speed and in a sound, economical, and efficient manner, in accordance with this Agreement and

all laws. In providing services under this Agreement, PROVIDER shall cooperate with the various departments, agencies, employees, and officers of COUNTY.

- C. PROVIDER shall secure at its 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.
- D. No portion of funds under this Agreement may be used to support or advance religious activities.
- E. PROVIDER warrants that it has complied with all necessary requirements to do business in the State of Wisconsin and has met all state and federal service standards, certifications, and assurances as expressed by State and Federal law.
- F. PROVIDER shall follow public health guidelines to provide safe services and a safe workplace. In addition, by signing this Agreement, PROVIDER acknowledges the contagious nature of COVID-19 and voluntarily assumes the risk that PROVIDER and its staff may be exposed to or infected by COVID-19 when providing services under this Agreement and that such exposure or infection may result in personal injury, illness, permanent disability, and death.
- G. PROVIDER further acknowledges that PROVIDER is assuming all of the foregoing risks and accept sole responsibility for any injury to itself and staff, including, but not limited to, personal injury, disability, death, illness, damage, loss, claim, liability, or expense or any kind, that PROVIDER or its staff may experience or incur in connection with providing services. PROVIDER hereby releases, covenants not to sue, discharges, and holds harmless and indemnifies the COUNTY, its employees, agents, and representatives, of and from any and all claims, including all liabilities, claims, actions, damages, costs or expenses of any kind arising out of or relating thereto. Provider understands and agrees that this release includes any claims based on the actions, omissions, or negligence of COUNTY, its employees, agents, and representatives, whether a COVID-19 infection occurs before, during, or after the provision of services under this Agreement.

III. ASSIGNMENT/TRANSFER:

PROVIDER shall not assign, subcontract, or transfer any interest or obligation in this Agreement, without the prior written consent of COUNTY, including the hiring of independent contract service providers unless otherwise provided herein. 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. Any unauthorized assignment, subcontract, or transfer is void.

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 law, or failure by PROVIDER to comply with any State and Federal service standards, as expressed by statute, rule, and regulation;
 - 2. failure by PROVIDER to carry licenses or certifications as required by law;
 - 3. failure of PROVIDER to comply with reporting requirements contained in this Agreement; or

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 in this Agreement and the attached Schedule B. 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 schedules. 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 schedules 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. A party changing its address shall notify the other party in writing within a reasonable time.

VIII. INSURANCE & INDEMNIFICATION:

- 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. Any failure on the part of the PROVIDER to comply with reporting or other provisions of its insurance policies shall not affect this PROVIDER's obligations under this paragraph. COUNTY reserves the right, but not the obligation, to participate in defense without relieving PROVIDER of any obligation under this paragraph. 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.

1. 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 cover bodily injury and property damage liability, owned and non-owned equipment, blanket contractual liability, completed operations.

2. Professional Liability Insurance.

If PROVIDER renders professional services (such as medical, architectural or engineering services) under this Agreement, then PROVIDER shall provide and maintain two million dollars (\$2,000,000.00) of professional liability insurance. If such policy is a "claims made" policy, all renewals during the life of the Agreement shall include "prior acts coverage" covering at all times all claims made with respect to PROVIDER's work performed under the Agreement. This Professional Liability coverage must be kept in force for a period of six (6) years after the services have been accepted by COUNTY

3. Commercial/Business Automobile Liability Insurance.

If applicable to the services covered by this Agreement, PROVIDER shall provide and maintain commercial general liability and automobile liability insurance at a limit of not less than \$1,000,000 per occurrence. Coverage for commercial general liability and automobile liability insurance shall, at a minimum, be at least as broad as Insurance Services Office ("ISO") Commercial General Liability Coverage (Occurrence Form CG 0001) and ISO Business Auto Coverage (Form CA 0001), covering Symbol 1 (any vehicle).

4. Environmental Impairment (Pollution) Liability

If PROVIDER will be transporting waste or will be disposing of waste or products under this Agreement, then 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.

5. Workers' Compensation.

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

6. 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. Required provisions.

1. Insurer's Requirement

All of the insurance shall be provided on policy forms and through companies satisfactory to COUNTY, and shall have a minimum AM Best's rating of A- VIII

2. Additional Insured.

COUNTY, its elected and appointed officials, officers, employees or authorized representatives or volunteers are to be given additional insured status (via ISO endorsement CG 2010, CG 2033, or insurer's equivalent for general liability coverage) as respects: liability arising out of activities performed by or on behalf of PROVIDER; products and completed operations of PROVIDER; premises occupied or used by PROVIDER; and vehicles owned, leased, hired or borrowed by PROVIDER. The coverage shall contain no special limitations on the scope of protection afforded to COUNTY, its elected and appointed officials, officers, employees or authorized representatives or volunteers. Except for the workers compensation policy, each insurance policy shall contain a waiver of subrogation endorsement in favor of COUNTY.

3. Provider's Insurance Shall be Primary

For any claims related to this Agreement, PROVIDER's insurance shall be primary insurance with respect to COUNTY, its elected and appointed officials, officers, employees or authorized representatives or volunteers. Any insurance, self-insurance, or other coverage maintained by COUNTY, its elected and appointed officers, officials, employees or authorized representatives or volunteers shall not contribute to the primary insurance. PROVIDER's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability

4. Cancellation Notice

Each insurance policy required by this Agreement shall state, or be endorsed so as to the state, that coverage shall not be canceled by the insurance carrier or the PROVIDER, except after sixty (60) days (ten (10) days for non-payment of premium) prior written notice by U.S. mail has been given to COUNTY.

5. Evidences of Insurance.

Prior to execution of the Agreement, PROVIDER shall file with COUNTY a certificate of insurance (Accord Form 25-S or equivalent) signed by the insurer's representative evidencing the coverage required by this Agreement. Such evidence shall include an additional insured endorsement signed by the insurer's representative. Such evidence shall also include confirmation that coverage includes or has been modified to include all required provisions as detailed herein.

6. Sub-Contractors.

In the event that PROVIDER employs sub-contractors as part of this Agreement, it shall be the PROVIDER's responsibility to require and confirm that each sub-contractor meets the minimum insurance requirements specified above.

- 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:

PROVIDER shall not 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. 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 Dane County Ordinances Sec. 25.08(20)(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."

XIII. REQUIRED FEDERAL PROVISIONS

The provisions in this section and Schedule C are included as required by federal law:

- A. General Civil Rights Provisions. In all its activities within the scope of its airport program, the Provider agrees to comply with pertinent statutes, Executive Orders, and such rules as identified in Title VI List of Pertinent Nondiscrimination Acts and Authorities to ensure that no person shall, on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

The above provision binds the Provider and subcontractors from the bid solicitation period through the completion of the contract.

- B. Compliance with Nondiscrimination Requirements. During the performance of this contract, the Provider, for itself, its assignees, and successors in interest (hereinafter referred to as the "Provider"), agrees as follows:

1. Compliance with Regulations: The Provider (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. Nondiscrimination: The Provider, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Provider will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.
3. Solicitations for Subcontracts, including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding or negotiation made by the Provider for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Provider of the Provider's obligations under this contract and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.
4. Information and Reports: The Provider will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit

access to its books, records, accounts, other sources of information, and its facilities as may be determined by County or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of Provider is in the exclusive possession of another who fails or refuses to furnish the information, the Provider will so certify to County or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of a Provider's noncompliance with the non-discrimination provisions of this contract, County will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:
 - a. Withholding payments to the Provider under the contract until the Provider complies; and/or
 - b. Cancelling, terminating, or suspending a contract, in whole or in part.
6. Incorporation of Provisions: The Provider will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The Provider will take action with respect to any subcontract or procurement as County or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Provider becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Provider may request County to enter into any litigation to protect the interests of County. In addition, the Provider may request the United States to enter into the litigation to protect the interests of the United States.

- C. Provisions of 29 CFR part 201. This Agreement and any contracts and subcontracts entered into under authority of this Agreement shall incorporate by reference the provisions of 29 CFR part 201, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part time workers. Provider has full responsibility to monitor compliance with 29 CFR part 201. Provider must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.
- D. Requirements of 29 CFR Part 1910. This Agreement and any contracts and subcontracts entered into under authority of this Agreement shall incorporate by reference the requirements of 29 CFR Part 1910, the Occupational Safety and Health Act of 1970, with the same force and effect as if given in full text. Provider and any subcontractors performing work under this Agreement shall provide a work environment that is free from recognized hazards that may cause death or serious physical harm to an employee. Provider shall comply with, and monitor the compliance of its subcontractors with, the Occupational Safety and Health Act of 1970, and shall address any claims or disputes that pertain to such Act directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

XIV. 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.

XV. FINANCIAL INTEREST PROHIBITED:

Under s. 946.13, Wis. Stats. COUNTY employees and officials are prohibited from holding a private pecuniary interest, direct or indirect, in any public contract. By executing this Agreement, each party represents that it has no knowledge of a COUNTY employee or official involved in the making or performance of the Agreement that has a private pecuniary interest therein. It is expressly

understood and agreed that any subsequent finding of a violation of s. 946.13, Wis. Stat. may result in this Agreement being voided at the discretion of the COUNTY.

XVI. 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.

XVII. 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.

XVIII. 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.

XIX. CONSTRUCTION:

This Agreement shall not be construed against the drafter.

XX. COPIES VALID:

This Agreement, and any amendment or addendum relating to it, may be executed and transmitted to any other party by legible facsimile reproduction or by scanned legible electronic PDF copy, and utilized in all respects as, an original, wet-inked manually executed document. Further, this Agreement and any amendment or addendum thereto, may be stored and reproduced by each party electronically, photographically, by photocopy or other similar process, and each party may at its option destroy any original document so reproduced. All parties hereto stipulate that any such legible reproduction shall be admissible in evidence as the original itself in any judicial, arbitration or administrative proceeding whether or not the original is in existence and whether or not such reproduction was made by each party in the regular course of business. This term does not apply to the service of notices under this Agreement.

XXI. 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.

XXII. DEBARMENT:

By signing this Contract, PROVIDER attests that it is not debarred from participating in federal procurements. COUNTY reserves the right to cancel this Contract if PROVIDER is presently, or is in the future, on the list of parties excluded from federal procurements.

XXIII. EXECUTION:

A. The parties agree that execution of this document may be made by electronic signatures. The parties may make electronic signatures by typing the name of the authorized signature followed by the words, "electronically signed" or by any other electronic means representing an authorized signature by PROVIDER. PROVIDER shall ensure that only authorized persons may affix electronic signatures to this Agreement and COUNTY may rely that the electronic signature provided by PROVIDER is authentic.

B. This Agreement has no effect until signed by both parties. The submission of this Agreement to PROVIDER for examination does not constitute an offer. PROVIDER warrants that the persons executing this Agreement on its behalf are authorized to do so.

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:



NAME Rodney Howard
TITLE President

5/8/2024
Date

FOR COUNTY:

Jamie Kuhn
Dane County Executive

Date

Scott McDonell
Dane County Clerk

Date

SCHEDULE A

Scope of Work

The work under this contract shall consist of constructing a fiber optic connection at the Dane County Regional Airport, including, but not limited to, fiber optic cable, fiber optic terminations, fiber optic splicing, fiber optic patch panels, fiber optic system testing, and all incidental items necessary to provide a functioning communication system as shown on the plans and included in the proposal and contract.

All work shall be performed in accordance with the contract, plans, and the City of Madison Standard Specifications for Public Works Construction.

1. Prosecution and Progress

A. Prosecution of the Work

The Contractor shall begin the work within seven days after the date of written notice to proceed.

Definite notice of intention to start work shall be given to the Engineer at least seventy-two hours in advance of beginning any work.

The Contractor 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, the Contractor 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 calendar days before the preconstruction meeting, submit to the Engineer for review an initial progress schedule. 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 fifteen working days, for each activity. Break longer activities into two 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 Contractor will review the initial schedule at the preconstruction meeting. Within five business days after the preconstruction meeting, the Engineer will accept the Contractor's initial schedule or request additional information. Make the appropriate adjustments and resubmit the revised initial schedule within five business days after the Engineer's request. If the Engineer requests justification for an activity duration, provide information that may include estimated labor, equipment, unit quantities, and production rates used to determine the activity duration.

The Contractor and the Engineer will meet monthly to assess progress and add updated information to the initial schedule. At a minimum, updates will include the actual start and finish of each activity, 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 the Contractor revise the schedule if project completion or interim completion targets are delayed. Submit the revised schedule within five business days after the Engineer's request.

C Methods and Equipment

The Contractor 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 the Contractor 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 the Contractor in accomplishing the construction are not prescribed in the contract, the Contractor is free to use any methods or equipment that will accomplish the contract work in conformity with the requirements of the contract.

When the contract 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 Contractor desires to use a method or type of equipment other than those specified in the contract, the Contractor 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. If approval is given, it will be on the condition that the Contractor will be fully responsible for producing construction work in conformity with contract requirements. If, after trial use of the substituted methods or equipment, the Engineer determines that the work produced does not meet contract requirements, the Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining construction with the specified methods and equipment. The Contractor 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 the Contractor liable to action under default of contract, or the revocation or suspension of the Contractor'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 contract.

The contract starting date, for purposes of determining contract time and extensions, is the seventh 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 Contractor, on the basis of contract change orders involving alterations in the contract 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 a Contractor 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 the Contractor fail to complete the work within the time specified in the contract, 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 the Contractor, or in the event no monies are due, the Contractor 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 Contractor 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 the Contractor'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 90 working days, 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 contract.

2. Changes to Work

The plans and special provisions reflect conditions known during the development of the plans and special provisions. The Contractor is fully responsible for the application of all work shown in the plans to the actual physical field conditions to provide a complete and accepted project. In the event that actual physical field conditions affect or prevent the application or progression of any work shown in the plans or special provisions, the Contractor shall notify the Engineer immediately, prior to any further work being performed.

Any changes to the work shown in the plans shall be approved in writing by the Engineer prior to the work being performed.

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 proposal 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 contract nor invalidate any of the provisions thereof.

B Increased Items

Unless otherwise designated in the proposal, any increase of the contract shall be limited to fifteen percent of the lump sum contract price submitted by the Contractor. Any item may be increased up to twenty-five percent of the original quantity in the contract, but in no case may such an increase exceed in dollar value fifteen percent of the original lump sum contract 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 proposal as a bid item shall be included when calculating the total amount of increase over the original lump sum contract price bid.

C Decreased or Deleted Items

Unless otherwise designated in the proposal, the quantity of any item may be decreased, and the actual quantity installed and accepted will be paid for at the contract 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, the Contractor 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.

The right is reserved 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 Contractor 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 the Contractor, 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 the Contractor, and shall become the property of the County.

D Extra Work

In connection with the work covered by the contract, 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 proposal or contract 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. The Contractor 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.

The Contractor 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 general contractor may add an amount equal to, but not to exceed, five 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, the Contractor 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.

The Contractor 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 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, the Contractor shall receive the actual cost, to which cost shall be added an amount equal to fifteen percent of the sum thereof. The Contractor shall furnish satisfactory evidence of the rate or rates paid.
3. For materials accepted by the Engineer and used, the Contractor 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 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, the Contractor 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, the Contractor shall receive an amount equal to five percent of the total costs of such work computed as set forth above.
7. The compensation as set forth above shall be received by the Contractor as payment in full for Extra Work done on a force account basis. At the end of each day the Contractor's representative and the Engineer 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 the Contractor 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 Contractor's stock, then in lieu of the original invoices, the statements shall contain or be accompanied by an affidavit of the Contractor, 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 the Contractor.

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 the Contractor for extra compensation, either for Extra Work or materials, or for damages, because of the Contractor'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 the Contractor to involve Extra Work, for which the Contractor should receive extra compensation, the Contractor 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.

3. Utilities

This contract does not come under the provision of Administrative Rule Trans 220.

The Contractor shall contact Diggers Hotline to locate all public utilities. Public utility locators will require an escort while inside the perimeter fence. For private and FAA utility locates, the Contractor shall coordinate with the Airport Engineer. 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.

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.

4. Permits

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

The Contractor 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 contract, and no separate or additional compensation will be made.

5. Public Convenience and Safety

A Laws to be Observed

The Contractor 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. The Contractor 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 the Contractor or the Contractor's employees, subcontractors or agents.

The Contractor shall comply with all Federal, State and local laws governing safety, health and sanitation. The Contractor 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.

B Responsibility to the Public

The Contractor 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 the Contractor's conduct of the work, the Contractor shall maintain a proper watch or provide other reasonable safeguards. The Contractor shall be responsible for all damage, bodily injury, or death arising through the Contractor'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.

The Contractor 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, the Contractor 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, the Contractor may wish to televise the line before boring to verify the existing condition of the pipe. If the Contractor decides not to televise prior to boring, any damage to the pipe shall be considered the responsibility of the Contractor and shall be repaired by the Contractor at their expense. All costs associated with exposing and or televising storm sewer mains, sanitary mains and laterals shall be the responsibility of the Contractor.

The Contractor 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 hours of televising.

The Contractor 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 the Contractor.

The Contractor 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, the Contractor shall notify all residents, a minimum of forty-eight hours in advance, if vehicular access cannot be provided to their property.

The Contractor 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 calendar days.

The Contractor 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.

The Contractor shall provide access to handicap residents at all times.

The Contractor 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 the Contractor, or by any person or company utilized by the Contractor, to the Contractor for handling. Within two business days after contacting the individual, the Contractor shall provide a factual summary of the event giving rise to the call or claim, along with the Contractor's proposed resolution, to the County.

The Contractor 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. The Contractor 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.

The Contractor 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. The Contractor shall furnish the Engineer upon request with copies of all such notification and final agreements.

The Contractor 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. The Contractor's responsibility shall be as prescribed in Section 101.111, Wis. Statutes. The Contractor 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. The Contractor shall employ one or more watchpersons as an additional security wherever they are needed.

The Contractor 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.

The Contractor 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 the Contractor shall otherwise make good such damage or destruction in an acceptable manner. If the Contractor fails to do so, the Engineer may, after the expiration of a period of forty-eight hours after giving notice to the Contractor 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 the Contractor under the contract.

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

C Safety

The Contractor shall comply with all Federal, State and local laws governing safety, health and sanitation. The Contractor 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 the Contractor 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 the Contractor 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 the Contractor 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 contract 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 the Contractor's plant and equipment, but any additional space required shall be provided by the Contractor at the Contractor's expense. Contractor'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 contract, and no separate or additional compensation will be made.

6. Maintenance of Traffic

This project will occur around the perimeter of the airfield. Therefore, it is not anticipated that there will be any maintenance of traffic required for this project. If a need for traffic control should arise, the Contractor shall coordinate with the Airport Engineer. The Contractor shall at all times conduct the work in such a manner as to insure the least possible obstruction to traffic.

7. 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. The Contractor shall conduct and schedule operations so as to avoid or minimize siltation of streams, lakes, reservoirs and other areas. The Contractor 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.

The Contractor shall have adequate erosion control measures available on site for erosion control. The Contractor 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:

1. Hand shoveling material off street or pavement surfaces.
2. Machine removal (such as with end loader or grader), provided that the results are equal to that of hand shoveling.
3. 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 contractor shall protect trees in accordance with the City of Madison Standard Specifications for Public Works Construction.

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, the Contractor shall use the follow cleaning procedures to minimize the chance of exotic invasive species infestation. The Contractor 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.

The Contractor 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, the Contractor shall thoroughly disinfect all equipment that has come into contact with potentially infested waters. The Contractor 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 for disinfection):

1. Prior to leaving the contaminated site, the Contractor shall wash machinery and ensure that the machinery is free of all soil and other substances that could possibly contain exotic invasive species.
2. The Contractor 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. The Contractor shall inspect boat hulls, propellers, trailers and other surfaces. The Contractor 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 invested 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, the Contractor 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.

8. Documentation

A Project Documentation

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

- Progress Schedule
- Permits
- Traffic Control Plan
- Fiber Optic Technician Certification
- Fiber Optic Test Results Forms

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

B Shop Drawings

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

- Fiber Optic Cable
- Fiber Optic Splice Enclosure
 - Splice Enclosure
 - Splice Tray
 - Splice Module
 - Splice Sleeve
 - Drop Port Wrap Kit
- Fiber Optic Termination/Patch Panel
- Pre-terminated/Integrated Fiber Optic Patch Assemblies
- Fiber Optic Fan-out Kits
- Cable Pull Sleeve Kits
- Liquidtight Conduits and Fittings
- Fiber Optic Patch Cables
- Fiber Optic Warning Tape
- HDPE and PVC Conduits
- Strut Framing Channel Segments and Fittings

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

C Project Closeout Documentation

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

- Fiber Optic Test Results
- Redline As-Builts

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.

9. Conduit

A Description

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

B Materials

B.1 Non Metal Conduit

All materials furnished, assembled, fabricated, or installed under this item shall be new, Underwriters Laboratories (UL) listed, corrosion resistant and National Electric Code (NEC) compliant. Electrical conduit shall be suitable for underground use and shall be in the diameters and quantities shown on the plans. Electrical conduit and fittings shall be UL listed.

The Contractor 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.2 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.

All exposed rigid steel conduit shall be painted a color to match the building it is attached to.

C Construction

The Contractor shall notify the Engineer at least forty-eight hours in advance of any work on Airport owned or maintained facilities to arrange for an inspector to be present during all such work. Work shall not commence until the Airport inspector is present.

Each conduit run between access points to the cabling 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.

A self-sealing split duct conduit product is required. Appropriate split duct PVC-to-HDPE couples/adapters are required to transition from HDPE conduit to PVC conduits and fittings. A high-strength polyethylene adhesive (like Pro-Poly) is required to adhere HDPE conduit to standard PVC conduits and fitting. 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, the Contractor 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, the Contractor shall notify the Engineer and not proceed until the Engineer so directs. If the Contractor connects to an existing defective conduit without the express direction from the Engineer, the Contractor shall make any and all necessary repairs and replacements to all conduits, including conduit that was "existing" prior to the Contractor starting work. All costs of this work shall be at the expense of the Contractor.

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 the proper conduit depth.

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

Conduit to be placed under existing sidewalks, roads, bridges, railroads, gullies, ditches, streams, or rivers, shall be installed by directional boring.

Conduits shall be placed within twelve inches of the back of the curb unless otherwise noted on the plans.

Conduit shall be placed at a minimum depth of thirty inches unless otherwise specified or approved by the Engineer. Greater cable depth is required at the following locations.

- Where conduit crosses roads, bridges, or railroads, the conduit shall be placed at a minimum depth of sixty inches below the surface, or as directed by the permitting authority.
- Where conduit crosses gullies, ditches, streams, or rivers, the conduit shall be placed at a minimum depth of sixty inches below the water level, or as directed by the permitting authority.

Additional conduit required to satisfy the proceeding depth requirements shall not be construed as additional work.

A 2-inch wide warning tape shall be provided in each conduit trench. The warning tape and lettering shall be chemically inert, resistant to acid and alkali, designed for installation underground, and be constructed of polyethylene plastic. The warning tape shall have a minimum nominal thickness of 4 mil. The warning tape shall be orange with the repeated phrase "CAUTION FIBER OPTIC CABLE BURIED BELOW". The text shall be black printed in a single line.

Restore the area to the original condition after installing the conduit.

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 handhole 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 the Contractor 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, attachments, and warning tape; for trench work, such as excavation, bedding and backfilling, including any sand, asphalt, concrete or other required materials; for directional boring; 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.

10. 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.

Fiber optic cables shall be loose tube, single jacket, and single armor.

Fiber optic cables shall have zero water peak and be dry (no gel).

Fiber optic cables shall meet the following industry standard specifications:

- Telcordia GR-20
- RDUP PE-90
- ANSI/ICE 87-640
- RoHS compliant

The Contractor 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 or 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.

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.

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.

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.

For outdoor applications, all fiber optic cables jackets shall be outdoor rated. For indoor applications, all fiber optic cable jackets shall be indoor/outdoor rated.

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

The Contractor shall notify the Engineer at least forty-eight hours in advance of any work on Airport or owned or maintained facilities to arrange for an inspector to be present during all such work. Work shall not commence until the Airport inspector is present.

The Contractor shall call the Airport Engineer at least twenty-four hours in advance of installing conduit within the Airport property.

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 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 years of work experience in the last five years with splicing, termination, and testing of fiber optic cable.

If requested by the Engineer, the Contractor shall perform OTDR tests on randomly selected fiber optic cable reels and compare the results to the cable manufacturer's

specifications prior to cable placement. Fiber optic cable which does not meet the cable manufacturer's specification will be identified to the Engineer within twenty-four hours of testing and shall not be used.

The Contractor shall inspect the fiber optic cable to ensure that it is free from defects. Cable damaged due to the Contractor's negligence will be the responsibility of the Contractor. Every instance of damaged cable observed at any time shall be immediately reported to the Engineer prior to installation, during construction, during testing, or after installation. The method of repair or correction will be determined by the Engineer. The Contractor shall make repairs or corrections promptly.

Cable repairs shall be made as follows:

- Minor damage to the outer jacket of the cable observed prior to or during construction shall be repaired per the Engineer.
- Cable damage in excess of minor damage to the outer jacket observed prior to or during construction shall be repaired by enclosing the damaged section of the cable in a handhole as specified by the Engineer. If the cable shield has been broken or the conductor insulation damaged, the cable shall be restored to a new condition. This may require cutting out the damaged section of cable or replacing an entire section of cable between two existing splice locations. The method of correction will be determined by the Engineer.
- Damage to the cable discovered after installation through testing or observation shall be repaired per the Engineer. This may require removing the damaged cable and replacing it with a short section of new cable with splices made in type VII handholes. If the damage is close enough to a handhole, it may be possible to repair the cable by removing the damaged cable jacket and placing a mid-sheath splice case on the cable.

When installing fiber optic cable using a pulling machine, a breakaway swivel, along with a slip clutch capstan winch that shows the dynamometer readings at all times, shall be used. Do not exceed a maximum pulling tension of 600 pounds or 400 pounds, as designated by the manufacturer.

When installing fiber optic cable in HDPE conduit, the fiber optic cable shall be placed by blowing.

Ensure the minimum bending radius of the fiber optic cable is not exceeded. The minimum bending radius for fiber optic cable in movement is twenty times the outside diameter of the cable. The minimum bending radius for fiber optic cable in place is ten times the outside diameter of the cable.

All slack fiber shall be wound using the industry standard figure eight coiling method.

Cable lubrication shall be used in accordance with the manufacturer's recommendation.

Ground the fiber optic cable in accordance with NEC Article 770.

Fiber optic cable tags/labels shall be placed within forty-eight hours of the cable installation at all handhole locations. All labels shall be self-laminated.

Owner identification tags shall be placed on all fiber optic cables within twenty-four inches of the conduit ends in a handhole. Labels stating fiber optic cable name and direction shall be placed within twelve inches of the fiber optic splice enclosure.

Fibers shall be labeled with direction and nearest splice/termination point. Fibers shall be color coated at the fiber optic splice enclosure and within three feet of the handhole entry point. Buffer tubes shall be labeled within two inches of the splice tray entry/termination.

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.

11. 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 both fiber optic splices and connectorized cable assemblies, 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.

The Contractor shall submit shop drawings of the proposed fiber optic splice enclosure materials 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. The Contractor is responsible for supplying and submitting any shop drops for any ancillary hardware not listed below.

Splice Enclosure

CommScope BUDI-FM-TL148-US00

Cable Skirt

BUDI-M-SKIRT-12-BTTM-KIT

Splice Tray

CommScope FOSC-ACC-D-TRAY-12-KIT

Splice Storage Basket

CommScope F-BASKET-TOWER

C Construction

The Contractor shall provide the Engineer with the following information at least five business days prior to performing any splicing work:

- Date and time fiber optic splicing work is proposed to be performed
- Expected downtime of the existing fiber optic network
- On-site contact information including name, company, and phone number

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 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 years of work experience in the last five years with splicing, termination, and testing of fiber optic cable.

The Contractor shall install the enclosure next to the existing vehicle gate cabinets as shown in the plans or as otherwise approved by the Engineer. The Contractor shall use strut framing channel segments and fittings to mount the enclosure.

The contractor shall create an umbilical cable by securing all fiber optic cables at the splice location into one cable using Scotch Super 33+ Vinyl Electrical Tape or Scotch Vinyl Electrical Tape Super 88.

The length of cable to be exposed within an enclosure must be cut according to the manufacturer's specification. Cables prepped into a splice enclosure must be clean, secured, and labeled.

A label maker must be used for all labels. All labels shall be installed inside the enclosure. Label the enclosure as follows:

- Label the cables entering the splice enclosure with the following information:
 - Direction of the cable
 - Cable count
 - Cable name (or location being served if applicable)
- Label the fibers within two inches of termination
 - Direction of the cable
 - Fiber count
 - Location being served (if applicable)
- Label the buffer tubes within two inches of entering the splice tray with the following information:

- Direction of the cable
- Cable count
- Cable name (or location being served if applicable)
- Label the splice trays with the following information:
 - Butter tube color on cover over splice holder
 - Strand color of both strands being spliced over splice chip
- Label the ground wire with the following information:
 - Direction of the cable
 - Cable count

Splice the fiber optic cables within the fiber optic splice enclosure in accordance with fiber optic splice enclosure manufacturer's instructions and the "Fiber Optic Splice" requirements. Terminate fiber optic cables within the enclosure in accordance with manufacturer's instructions.

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

D Measurement

These items shall be measured as units complete in place and accepted in accordance with the contract. The strut framing channel segments and fittings used for mounting the enclosures shall be paid for separately as one unit per site.

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 labeling; for grounding; and for all labor, tools, equipment and incidentals necessary to complete these items of work.

12. Fiber Optic Splice

A Description

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

B Materials

The Contractor shall furnish fiber optic enclosure with both splice and patch capacity. The Contractor shall furnish all equipment necessary to perform the fiber optic splicing.

C Construction

The Contractor shall provide the Engineer with the following information at least five business days prior to performing any splicing work:

- Date and time fiber optic splicing work is proposed to be performed
- Expected downtime of the existing fiber optic network
- On-site contact information including name, company, and phone number

All splicing operations shall occur within the allowable timeframe noted in the plans or as approved by the Engineer.

A certified fiber optic technician shall perform all work for fiber optic splicing and termination. Prior to the preconstruction meeting, submit materials indicating the certified technician has attended and successfully completed at least one four 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 years of work experience in the last five years with splicing, termination, and testing of fiber optic cable.

Document the entire splicing and termination process by taking the following pictures:

- Inside of the splice enclosure before beginning any work
- Inside of the splice enclosure once work is complete
- All pictures shall be supplied to the Engineer in JPEG format on a USB Flash drive

The length of cable to be exposed within an enclosure must be cut according to the manufacturer's specification. Cables prepped into a splice enclosure must be clean, secured, and labeled.

At each splice enclosure, the following requirements apply:

- Cables must have the outer jacket cut back in such a way that the proper amount of cable splice is in the splice enclosure. There must always be at least fifty inches of prepped strand length per buffer tube for the splice tray.

A label maker must be used for all labels. Label in accordance with the "Fiber Optic Splice Enclosure" specification.

Splice the fiber optic cables within the fiber optic splice enclosure in accordance with fiber optic splice enclosure manufacturer's instructions and the following requirements:

- All splice enclosures shall be clean from dirt, cable grease, or any other foreign objects.
- Strength members must be fastened down tightly, including any Kevlar wraps if they exist. Any coating on strength members must be removed prior to securing it under the clamp. Tighten all nuts and bolts.
- Clean and organize the buffer tubes within the case according to the manufacturer's instructions. Approved cleaning materials are isopropyl alcohol, D-Gel, or Fiber Clean. Do not use kerosene, gasoline, acetone, or any other chemical.
- Secure the splice trays within the case. Tighten all nuts and bolts.
- Tubes that enter a tray must be protected from the tie wraps per the manufacturer's instructions.
- Dress and organize the fiber neatly into a splice tray. All buffer tubes must be felted individually with at least one eighth of an inch of color showing on the stripped side of the buffer tube. At no time is it acceptable to secure the buffer tubes together with felt wrap or tape in the splice tray. Buffer tubes must be individually wrapped with felt tape, but may be secured together at the tray tie-wrap points with multiple tubes at those points. All tie wraps must be flush cut.
- Completely shrink fusion heat shrinks and secure the fiber in the splice chips properly so that whether the protective bar or fiber faces up it will be uniform. All

exposed glass must be centered properly in the heat shrink. At no time is it acceptable to use silicone gel to secure the splice sleeves. Scotch Super 33+ Vinyl Electrical Tape or Scotch Vinyl Electrical Tape Super 88 are the only acceptable tapes allowed to secure splice sleeves in the holders.

- Fiber cross-connections made between trays shall use the following materials:
 - 12 count: Tuff-Nut 250µm SM 12-fibre 3mm Cable PBT on 6,500 foot reel
- Fibers that are not to be spliced but are in the splice tray should be dressed last into the tray and labeled as to which tube/cable the fiber is from.
- The overall appearance of the splice enclosure must be clean and organized.

The following requirement shall also apply to mid-sheath splices:

- Place the reverse spiral wrap in the center of the loop.
- Evenly coil and loosely tie wrap together the tubes not cut in a mid-sheath. Place the coil under the splice tray and security it.
- All slack in a mid-sheathed buffer tube must be unwrapped as much as possible up to the entry of the buffer tube.
- Except in cases of emergency repair of fiber, slack cable shall not be taken from existing umbilical tails at existing splice locations for the addition of a new mid-sheath splice. All new mid-sheath splice locations must be approved by the Engineer.

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

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.

13. Pre Terminated/Integrated Fiber Optic Patch Assemblies

A Description

This item consists of furnishing and installing pre-terminated/integrated fiber optic patch assemblies.

B Materials

The contractor shall furnish a pre-terminated/integrated fiber optic patch assembly. FiberC Part Number G320UVX6FRB-YY-1 is approved to meet this specification where X is the tail connector type (MTP male or Female) and YY is the length of the fiber optic cable supplied to distribution terminal in meters.

MTP to LC fan out cables shall be used to provide connectors inside the fiber splice enclosures. Contractor is responsible for determining the appropriate length and fan-out "step" needed in each enclosure.

The Contractor shall submit shop drawings of the proposed fiber optic termination/patch panel prior to the preconstruction meeting. Fiber optic termination/patch panel enclosure proposed for use shall be approved in writing by the Engineer prior to beginning work on the project.

The following fiber optic splice pre-terminated/integrated fiber optic patch assembly and MTP adapter are approved for use on this project:

Pre-Terminated/Integrated Fiber Optic Patch Assembly
FiberC Part Number G320UVX6FRB-YY-1

MTP Adapter
FiberC Part Number MTP-ADPT-2

C Construction

A certified fiber optic technician shall perform all work for fiber optic termination/patch panels. Prior to the preconstruction meeting, submit materials indicating the certified technician has attended and successfully completed at least one four 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 years of work experience in the last five years with splicing, termination, and testing of fiber optic cable.

Fiber access in equipment cabinets shall use factory terminated fiber distribution terminals. Fiber distribution terminals shall be installed using either screw retainers into an existing backpanel or DIN rails using an existing back panel. Install the pre-terminated/integrated fiber optic patch assembly per the manufacturer's instructions.

Contractor shall supply male-to-female MTP adapters where shown in the plans.

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.

14. Fiber Optic Termination

A Description

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

B Materials

The Contractor shall furnish all equipment necessary to perform the fiber optic termination including connectors and patch cords.

C Construction

A certified fiber optic technician shall perform all work for fiber optic termination. Prior to the preconstruction meeting, submit materials indicating the certified technician has attended and successfully completed at least one four 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 years of work experience in the last five years with splicing, termination, and testing of fiber optic cable.

Terminate the fiber optic cable per the manufacturer's instructions.

Terminate the fibers on the termination/patch panel with LC/UPC connectors.

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

Install the patch cords in the enclosure and cabinet as indicated on the plans and as directed by the engineer.

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.

15. Fiber Optic System Testing

A Description

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

B Materials

The Contractor 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 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 years of work experience in the last five years with splicing, termination, and testing of fiber optic cable.

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

- A. Test each individual fiber for event losses using an optical time-domain reflectometer (OTDR). Conduct the test using the standard operating procedure as defined by the manufacturer of the test equipment.
- B. 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.
- C. 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.
- D. Conduct both tests, OTDR and optical source/power meter, at 1310 nm and 1550 nm for each fiber in the cable.
- E. Conduct both tests bi-directionally for each fiber in the cable.

After completing the tests, the Contractor 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 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/km 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.

The Contractor 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 the Contractor 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, the Contractor shall replace the cable run at the Contractor's expense.

- The dB/km loss shall not exceed three percent to the factory test or one 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.

The Contractor, solely at the Contractor's expense, shall re-splice all fusion splices and re-terminate all terminations that have test results exceeding acceptable attenuation values. The Contractor, solely at the Contractor's expense, shall retest all fiber links that have been re-spliced and shall retest all fiber links that have been re-terminated.

The Contractor, solely at the Contractor's expense, shall bring all links not meeting the requirements of this specification into compliance.

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, incidentals necessary to complete this item of work in accordance with the contract, and all retesting.

16. Redline As-Builts

The Contractor shall submit a complete set of redline as-builts to the Engineer. These documents will be reviewed and shall be approved in writing by the Engineer prior to project completion and final payment. Any redlines found to be incomplete or incorrect will be returned to the Contractor to be rectified.

All redline drawings must be made in red ink on the construction drawings. All redline information must be legibly printed on the drawings. Do not scribble or place unrelated information on the drawings.

Redline as-builts shall include the following information:

- Detailed description of all changes to the original construction drawings including the reason for the change and the person who approved it
- Conduit type, size, and quantity if different than specified on the original construction drawings

- Conduit offset distance at a minimum of every 100 feet:
 - From the edge of pavement, sidewalk, or curb
 - From other underground utilities
 - From above ground structures (buildings, guard rail, utility poles, etc.)
- Beginning and end location of all conduit runs
- Beginning and end location of all changes in conduit type, size, or quantity
- Location and offset for the beginning and end of all running line changes
- Depth of cover every 50 feet and at all road crossing and other utility crossings
- Plan and profile drawing including offsets, depth of cover, and angle of crossing at all road crossings.
- Handhole offset distance from the edge of pavement, sidewalk, or curb
- Location of all duct splices
- Suggested Optical Cable Code (SOCC) (i.e. SR-38N2LT-048) stamped on cable
- Cable length marking at all entry and exit points (handholes, buildings, etc.)

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.

SCHEDULE B

Pricing Structure and Payment

Invoices/Payment:

PROVIDER shall issue an invoice upon completion of services and/or delivery of such deliverables, except to the extent otherwise specified in Schedule A. Invoices must reference the Dane County purchase order number issued for the services/deliverables described herein. Email delivery of invoices is encouraged and preferred – see the Bill To section of the purchase order. Payment shall be made within 30 days of COUNTY’s receipt of accepted invoice unless otherwise noted in Schedules A and/or B.

Pricing is inclusive of all labor, delivery costs, and other expenses necessary to provide product in accordance with the specifications and terms and conditions of this Agreement.

FIBER INSTALLATION PRICING TABLE

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total
1	CONDUIT - 2INCH - TRENCHED	900	LF	\$14.50	\$13,050.00
2	CONDUIT - 2 INCH - BORED	300	LF	\$35.00	\$10,500.00
3	RIGID STEEL CONDUIT	100	LF	\$70.34	\$7,034.00
4	FIBER OPTIC CABLE 48-CT	42,500	LF	\$4.17	\$177,225.00
5	FIBER OPTIC SPLICE ENCLOSURE	17	EACH	\$3,108.00	\$52,836.00
6	FIBER OPTIC TERMINATION	816	EACH	\$122.00	\$99,552.00
7	FIBER OPTIC SYSTEM TESTING	1	LS	\$79,156.00	\$79,156.00
8	PRE-TERMINATED/INTEGRATED FIBER OPTIC PATCH ASSEMBLIES	17	EACH	\$1,104.00	\$18,768.00
9	FIBER OPTIC FAN-OUT KITS	17	EACH	\$697.00	\$11,849.00
10	FIBER OPTIC PATCH CABLES	221	EACH	\$52.00	\$11,492.00
11	STRUT FRAMING CHANNEL SEGMENTS AND FITTINGS	17	EACH	\$1,311.00	\$22,287.00
TOTAL					\$503,749.00

SCHEDULE C

Title VI List of Pertinent Nondiscrimination Acts and Authorities

During the performance of this contract, the Provider, for itself, its assignees, and successors in interest (hereinafter referred to as the "Provider") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 USC § 2000d *et seq.*, 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination in Federally-Assisted programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 USC § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973 (29 USC § 794 *et seq.*), as amended (prohibits discrimination on the basis of disability); and 49 CFR part 27 (Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance);
- The Age Discrimination Act of 1975, as amended (42 USC § 6101 *et seq.*) (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982 (49 USC § 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987 (PL 100-259) (broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990 (42 USC § 12101, *et seq.*) (prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities) as implemented by U.S. Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration's Nondiscrimination statute (49 USC § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations);
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs [70 Fed. Reg. 74087 (2005)];
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC § 1681, *et seq.*).