

Division 1:

General Conditions

For

Elkhart Redundancy Fiber Optic Project

OWNERS:

ELKHART COUNTY, INDIANA, ACTING THROUGH
ITS BOARD OF COUNTY COMMISSIONERS
ELKHART COUNTY HIGHWAY DEPARTMENT
ENGINEERING SECTION
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GOSHEN, IN 46528



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DEFINITIONS

The following terms, as used in these Contract Documents, are defined as follows:

"ADDENDA"	Written or graphic instruments issued prior to the opening of Bids, which clarify, correct, or change the bidding documents or Contract Documents.
"APPROVED"	The words "approved", "acceptable", "satisfactory", "in the judgment of", and words of like import, shall mean approval by, acceptable to, satisfactory to, or in the judgment of, the Engineer or Owner.
"BONDS"	Bid, Performance, or Maintenance Bonds, and other instruments of security.
"CHANGE ORDER"	A document recommended by ENGINEER, which is signed by CONTRACTOR and OWNER and authorizes an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time, issued on or after the Effective Date of the Agreement.
"CONTRACTOR"	The person, firm, or corporation to whom the enclosed contract is awarded by the Owner and who is subject to the terms hereof.
"COUNTY SPECIFICATIONS"	The current Elkhart County roads guidelines and standards for design and public improvements.
"DIRECTED"	The words "directed", "required", "permitted", "ordered", "designated", and words of like import shall imply the direction, requirement, permission, order of designation of the Engineer or Owner.
"ENGINEER"	The Elkhart County Highway Division, or, the Elkhart Co. Manager of Engineering, or duly authorized representative designated by the Owner.
"FIELD ORDER"	A written order issued by ENGINEER which orders minor changes in the Work in accordance with paragraph 7.5 but which does not involve a change in the Contract Price or the Contract Time.
"GENERAL REQUIREMENTS"	Sections of Division A of the Specifications.
"LAWS AND REGULATIONS;"	Laws, rules, regulations, ordinances, codes

LAWS OR REGULATIONS"	and/or orders.
"MUTCD"	Manual of uniform traffic control devices.
"NOTICE TO PROCEED"	A written notice given by OWNER to CONTRACTOR (with a copy to ENGINEER) fixing the date on which the Contract Time will commence to run and on which CONTRACTOR shall start to perform CONTRACTOR'S obligations under the Contract Documents.
"OWNER"	The public body or authority, corporation, association, firm or person with whom CONTRACTOR has entered into the Agreement and for whom the Work is to be provided. This typically being Elkhart County, Indiana, acting through its Board of County Commissioners.
"PARTIAL UTILIZATION"	Placing a portion of the Work in service for the purpose for which it is intended (or a related purpose) before reaching Substantial Completion for all the Work.
"PREP COST"	The total cost for all work preparing and completing all work for new road surface through the milling or grinding process as outlined in DIVISION 3.
"PROJECT"	The total construction of which the Work to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.
"RESIDENT PROJECT REPRESENTATIVE"	The authorized representative of ENGINEER who is assigned to the site or any part thereof
"SHOP DRAWINGS"	All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for CONTRACTOR to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a Supplier and submitted by CONTRACTOR to illustrate material or equipment for some portion of the Work.
"SPECIFICATIONS"	Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.

"STANDARD DETAILS"	The current INDOT standard sheets with standard details.
"STANDARD SPECIFICATIONS"	The Indiana Department of Transportation 1999 Standard Specifications and current Technical Specifications.
"STOP ORDER or STOP WORK ORDER"	Written order from OWNER or ENGINEER to stop all work covered by the Contract Documents.
"SUPPLEMENTARY CONDITIONS"	The part of the Contract Documents which amends or supplements these General Conditions.
"SUBCONTRACTOR"	An individual, firm or corporation having a direct contract with CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the site.
"SURETY"	Financial guarantee that insures the CONTRACTORS obligation.
"UNDERGROUND FACILITIES"	All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments. In addition, any encasement containing such facilities which have been installed underground to furnish any of the following services or materials; electricity, gases, steam, liquid petroleum products, telephone or other communication means, cable television, sewage and drainage removal, traffic or other control systems or water.
"UNIT PRICE WORK"	Work to be paid for on the basis of unit prices.
"WORK"	Work to be done under this Contract at the site of the improvement.
"WORK DIRECTIVE CHANGE"	A written directive to CONTRACTOR, issued on or after the Effective Date of the Agreement and signed by OWNER and recommended by ENGINEER, ordering an addition, deletion or revision in the Work, or responding to differing or unforeseen physical conditions under which the Work is to be performed.

"WRITTEN AMENDMENT"

A written amendment of the Contract Documents, signed by OWNER and CONTRACTOR on or after the Effective Date of the Agreement and normally dealing with the non-engineering or non-technical rather than strictly Work-related aspects of the Contract Documents

ARTICLE 1 - PRELIMINARY MATTERS

1.1 Delivery of Bonds

When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as called for in the Contract Documents.

1.2 Copies of Documents

OWNER shall furnish to CONTRACTOR up to three (3) copies (unless otherwise specified in the Supplementary Conditions) of the Contract Documents as are reasonably necessary for the execution of the Work. Additional copies will be furnished, upon request, at the cost of reproduction.

1.3 Contract Documents

These Contract Documents are complementary and what is called for in one shall be as binding as if called for in all. The intention of these Contract Documents is to include in the Contract Price the costs of all labor and materials, water, fuel, tools, plant, equipment, light, transportation, taxes, bonds, and all other expense and profit as may be necessary for the proper and complete execution of the work.

1.4 Commencement of Contract Time; Notice to Proceed

The Contract Time will commence as per Technical Provision "TP2 – Time of Completion" of Division 2.

1.5 Starting the Project

CONTRACTOR shall start to perform the Work on the date when the Contract Time commences to run, but no Work shall be done at the site prior to the date on which the Contract Time commences to run, unless such work is specifically approved by the owner/engineer.

1.6 Before Starting Construction

Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. CONTRACTOR shall promptly report in writing to ENGINEER any conflict, error or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from ENGINEER before proceeding with any Work affected thereby; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error or discrepancy in the Contract Documents, unless CONTRACTOR had actual knowledge thereof or should reasonably

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have known thereof.

1.7 Submission for Review

Within ten (10) days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), CONTRACTOR shall submit to ENGINEER for review:

1.7.1 An estimated progress schedule indicating the starting and completion dates of the various stages of the Work; and

1.7.2 A preliminary schedule of Shop Drawings and/or sample submissions.

1.8 Delivery of Certificates

Before any Work at the site is started, CONTRACTOR shall deliver to OWNER, with a copy to ENGINEER, certificates (and other evidence of insurance requested by OWNER) which CONTRACTOR is required to purchase and maintain.

1.9 Subcontracts

The Contractor shall not execute an Agreement with any Subcontractor or permit any Subcontractor to perform any work in this Contract until he has received written approval of such Subcontractor from the Owner or Owner's appointed designee.

1.10 Preconstruction Conference

Following the Effective Date of the Agreement, but before CONTRACTOR starts the Work at the site, a conference attended by CONTRACTOR, ENGINEER and others, as appropriate, will be held to discuss the schedules referred to in paragraph 1.7, as well as the Subcontractors proposed by Contractor for certain portions of the work, to discuss procedures for handling Shop Drawings and other submittals and for processing Applications for Payment, and to establish a working understanding among the parties as to the Work.

1.11 Non-Discrimination

In compliance with the Acts of Indiana General Assembly, 1933, Chapter 270, the Contractor hereby agrees:

1.11.1 That in the hiring of employees for the performance of work under this Contract or any Subcontract hereunder, no Contractor, Subcontractor, nor any person acting on behalf of such Contractor or Subcontractor shall, by reason of race or color, discriminate against any citizen qualified to do work to which the employment relates;

1.11.2 That no Contractor, Subcontractor, nor any person on his behalf shall, in

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any manner, discriminate against or intimidate any employee hired for the performance of work under this Contract on account of race or color;

1.11.3 That there may be deducted from the amount payable to the Contractor by the Owner under this contract, a penalty of Five Dollars (\$5.00) for each person for each calendar day during which such person was discriminated against or intimidated in violation of the provisions of this Contract; and

1.11.4 That this Contract may be canceled or terminated by the Owner and all money due or to become due hereunder may be forfeited for a second or any subsequent violation of the terms or conditions of this section of the Contract.

1.12 Insurance

1.12.1 Contractor's Liability Insurance:

a) The Contractor shall maintain such insurance as well as protect himself from claims under Workmen's Compensation Acts and other employee benefit acts; from claims for damages because of bodily injury, including death, to his employees and all others; and from claims for damages to property, any or all of which may arise out of or result from the Contractor's operation under the Contract, whether such operations be by himself or by any subcontractor, or anyone directly or indirectly employed by either of them. This insurance shall be written for not less than any limits of liability specified herein and shall name Elkhart County as an additional insured.

1.12.2 Contractor's Insurance:

The types and minimum amount of insurance to be provided for by the Contractor shall be as follows:

a) Workmen's Compensation and Occupational Disease Insurance

The Contractor shall provide Workmen's Compensation and Occupational Disease Insurance as required by law. Such policy shall specifically include coverage for the State of Indiana, and such adjoining states as required by the Contractor's operations.

b) Employer's Liability Insurance

The Contractor shall provide Employer's Liability with a minimum coverage of \$1,000,000.

c) Comprehensive General Liability Insurance

The Contractor shall maintain a Comprehensive General Liability form of

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Insurance of not less than \$1,000,000 for any one (1) person in any one (1) occurrence, and \$2,000,000 aggregate. The insurance policy shall include the following:

1. Premises Operations: The policy shall include coverage for the following special hazards when applicable to the project:

i) Property damage arising out of blasting or explosion.

ii) Property damage arising out of collapse of or structural injury to any building or structure due to grading of land, excavation, borrowing, filling, backfilling, tunneling, pile driving, cofferdam work or caisson work or to moving, shoring, underpinning, raising, or demolition of any building or structure or rebuilding of any structural support thereof.

iii) Injury to or destruction of wires, conduits, pipes, mains, sewers, and other similar property of any apparatus in connection therewith below the surface of ground, if caused by use of mechanical equipment.

2. Contractual (Broad Form Indemnification): The Contractor agrees to indemnify and save harmless the Owner and the Engineer, their agents and employees, from and against all loss or expense (including costs and attorneys' fees) by reason of liability imposed by law upon the Owner or the Engineer for damages because of bodily injury, including death, at any time resulting there from, sustained by any person or persons or an account of damage to property is due or claimed to be due to negligence of the Contractor, his Subcontractors, employees or agents.

3. Contractor's Protective: The Contractor shall maintain this type of coverage on a "Blanket" basis to cover the operations of any subcontractors.

d) Automobile Liability Insurance

The Contractor shall maintain Comprehensive Automobile Liability Insurance with liability limits of not less than \$1,000,000 for one (1) occurrence and \$2,000,000 aggregate. This coverage may be provided either as a separate policy or as part of the Comprehensive General Liability Policy described previously. The automobile insurance must include coverage for all owned, non-owned and hired vehicles.

e) Furnish Indiana State Forms No. 19 (Workmen's Compensation) and No.105 (Occupational Disease Act).

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f) Umbrella Policy Insurance

The Contractor shall maintain a minimum \$5,000,000 Umbrella Policy in addition to their primary insurance.

g) See Special Provisions for excess coverage policy.

1.13 Proof of Carriage Insurance

1.13.1 Contractor shall not commence work until he has obtained all insurance specified herein, has filed with the Owner one (1) copy of Certificate of Insurance, and such insurance has been approved by the Owner.

1.13.2 Should any Coverage approach expiration during the Contract period, it shall be renewed prior to its expiration, and certificate again filed with the Owner.

1.13.3 If any of such policies are canceled or are changed so as to reduce the coverage evidenced by the Certificate, at least ten (10) days prior written notice by registered mail of such cancellation or change shall be sent to the Owner.

1.13.4 All insurance provided for under this Section shall be written by Insurance Companies licensed to do business in Indiana and Countersigned by resident Indiana agent. The insurance company shall file with the Owner, one (1) copy of Affirmation of Authority, on the form furnished by the Engineer, as verification of the resident agent.

1.13.5 All insurance shall be maintained in full force and effect until the Contract has been fully and completely performed.

ARTICLE 2 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

2.1 Intent

The Contract Documents comprise the entire agreement between OWNER and CONTRACTOR concerning the Work. The Contract Documents are complimentary; what is called for by one is as binding as if called for by all. The Contract Documents will be construed in accordance with the law of the place of the Project.

2.1.1 It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any Work, materials or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result will be supplied whether or not specifically called for.

2.1.2 If during the performance of the Work, CONTRACTOR finds a conflict, error or discrepancy in the Contract Documents, CONTRACTOR shall so report to ENGINEER in writing at once and before proceeding with the Work affected thereby shall obtain a written interpretation or clarification from ENGINEER; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error or discrepancy in the Contract Documents unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof.

2.2 Amending and Supplementing Contract Documents:

The Contract Documents may be amended to provide for additions, deletions and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways:

2.2.1 A formal Written Amendment,

2.2.2 A Change Order, or

2.2.3 A Work Directive Change (pursuant to paragraph 8.1).

In addition, the requirements of the Contract Documents may be supplemented and minor variations and deviations in the Work may be authorized, in one or more of the following ways:

2.2.4 A Field Order,

2.2.5 ENGINEER's approval of a Shop Drawing or sample, or

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2.2.6 ENGINEER's written interpretation or clarification.

ARTICLE 3 - AVAILABILITY OF LANDS; PHYSICAL CONDITIONS; REFERENCE POINTS

3.1 Availability of Lands

OWNER shall indicate, as shown in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for the use of CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by OWNER, unless otherwise provided in the Contract Documents. If CONTRACTOR believes that any delay in OWNER's furnishing these lands, rights-of-way or easements entitles CONTRACTOR to an extension of the Contract Time, CONTRACTOR may make a claim for an extension of Contract Time.

3.2 Physical Conditions - Underground Facilities

The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site is based on information and data furnished to OWNER or ENGINEER by the owners of such Underground Facilities or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

3.2.1 OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and,

3.2.2 CONTRACTOR shall have full responsibility for reviewing and checking all such information and data, for locating all Underground Facilities shown or indicated in the Contract Documents, for coordination of the Work with the owners of such Underground Facilities during construction, for the safety and protection thereof, and repairing any damage thereto resulting from the Work, the cost of all of which will be considered as having been included in the Contract Price.

3.3 Not Shown or Indicated

If an Underground Facility is uncovered or revealed at or contiguous to the site which was not shown or indicated in the Contract Documents and which CONTRACTOR could not reasonably have been expected to be aware of, CONTRACTOR shall, promptly after becoming aware thereof and before performing any Work affected thereby (except in an emergency) as permitted by paragraph 4.21, identify the owner of such Underground Facility and give written notice thereof to that owner and to OWNER and ENGINEER. ENGINEER will promptly review the Underground Facility to determine the extent to which the Contract Documents should be modified to reflect and document the consequences of the existence of the Underground Facility, and the Contract Documents will be

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amended or supplemented to the extent necessary. During such time, CONTRACTOR shall be responsible for the safety and protection of such Underground Facility. CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, to the extent that they are attributable to the existence of any Underground Facility.

3.4 Assignment of Contract

The Contractor shall not assign this Contract or any part hereof without prior consent of the Owner.

ARTICLE 4 - CONTRACTOR'S RESPONSIBILITIES

4.1 Supervision and Superintendence

4.1.1 CONTRACTOR shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of others in the design or selection of a specific means, method, technique, sequence or procedure of construction which is indicated in and required by the Contract Documents. CONTRACTOR shall be responsible to see that the finished Work complies accurately with the Contract Documents.

4.1.2 CONTRACTOR shall keep on the Work at all times during its progress a competent resident superintendent, who shall not be replaced without written notice to OWNER and ENGINEER except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the site and shall have authority to act on behalf of CONTRACTOR. All communications given to the superintendent shall be as binding as if given to CONTRACTOR.

4.2 Labor, Materials and Equipment

4.2.1 CONTRACTOR shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the site, particularly in connection with the safety or protection of persons or the Work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents.

4.2.2 Unless otherwise specified in the General Conditions, CONTRACTOR shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel,

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power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the Work.

4.2.3 All materials and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable Supplier except as otherwise provided in the Contract Documents.

4.3 Substitutes or "Or-Equal" Items

4.3.1 Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier the naming of the item is intended to establish the type, function and quality required. Unless the name is followed by words indicating that no substitution is permitted, materials or equipment of other Suppliers may be accepted by ENGINEER if sufficient information is submitted by CONTRACTOR to allow ENGINEER to determine that the material or equipment proposed is equivalent or equal to that named. The procedure for review by ENGINEER will include the following as supplemented in the General Conditions. Requests for review of substitute items of material and equipment will not be accepted by ENGINEER from anyone other than CONTRACTOR. If CONTRACTOR wishes to furnish or use a substitute item of material or equipment, CONTRACTOR shall make written application to ENGINEER for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified and be suited to the same use as that specified. The application will state that the evaluation and acceptance of the proposed substitute will not prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents. All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which shall be considered by ENGINEER in evaluating the proposed substitute. ENGINEER may require CONTRACTOR to furnish at CONTRACTOR's expense additional data about the proposed substitute.

4.3.2 If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to ENGINEER, if CONTRACTOR submits sufficient

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information to allow ENGINEER to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents.

4.3.3 ENGINEER will be allowed a reasonable time within which to evaluate each proposed substitute. ENGINEER will be the sole judge of acceptability, and no substitute will be ordered, installed or utilized without ENGINEER's prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute. ENGINEER will record time required by ENGINEER and ENGINEER's consultants in evaluating substitutions proposed by CONTRACTOR and in making changes in the Contract Documents occasioned thereby. Whether or not ENGINEER accepts a proposed substitute, CONTRACTOR shall reimburse OWNER for the charges of ENGINEER and ENGINEER's consultants for evaluating each proposed substitute.

4.4 Contractor Responsibility

CONTRACTOR shall be fully responsible to OWNER and ENGINEER for all acts and omissions of the Subcontractor, Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions. Nothing in the Contract Documents shall create any contractual relationship between OWNER or ENGINEER and any such Subcontractor, Supplier or other person or organization, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any monies due any such Subcontractor, Supplier or other person or organization except as may otherwise be required by Laws and Regulations.

4.5 Subcontractor Responsibility

All Work performed for CONTRACTOR by a Subcontractor will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and ENGINEER.

4.6 Permits

Unless otherwise provided in the General Conditions, CONTRACTOR shall obtain and pay for all construction permits and licenses.

4.7 Laws and Regulations

4.7.1 CONTRACTOR shall give all notices and comply with all Laws and Regulations applicable to furnishing and performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither OWNER nor ENGINEER shall be responsible for monitoring CONTRACTOR's compliance

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with any Laws or Regulations.

4.7.2 If CONTRACTOR observes that the Specifications or Drawings are at variance with any Laws or Regulations, CONTRACTOR shall give ENGINEER prompt written notice thereof, and any necessary changes will be authorized by one of the methods indicated in paragraph 2.4. If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to such Laws or Regulations, and without such notice to ENGINEER, CONTRACTOR shall bear all costs arising therefrom; however, it shall not be CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings are in accordance with such Laws and Regulations.

4.8 Taxes

CONTRACTOR shall pay all sales, consumer, use and other similar taxes required to be paid by CONTRACTOR in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

4.9 Use of Premises

4.9.1 CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workers to the Project site and land and areas identified in and permitted by the Contract Documents and other land and areas permitted by Laws and Regulations, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any land or areas contiguous thereto, resulting from the performance of the Work. Should any claim be made against OWNER or ENGINEER by any such owner or occupant because of the performance of the Work, CONTRACTOR shall promptly attempt to settle with such other party by agreement or otherwise resolve the claim by arbitration or at law. CONTRACTOR shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold OWNER and ENGINEER harmless from and against all claims, damages, losses and expenses (including, but not limited to, fees of engineers, architects, attorneys and other professionals and court and arbitration costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any such other party against OWNER or ENGINEER to the extent based on a claim arising out of CONTRACTOR's performance of the Work.

4.9.2 During the progress of the Work, CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the Work. At the completion of the Work CONTRACTOR shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery, and surplus materials, and shall leave the site clean and ready for occupancy by OWNER. CONTRACTOR shall restore to original condition all property not designated for alteration by the Contract

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Documents.

4.9.3 CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

4.10 Record Documents

CONTRACTOR shall maintain in a safe place at the site one (1) record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work Directive Changes, Field Orders and written interpretations and clarifications issued in good order and annotated to show all changes made during construction. These record documents together with all approved samples and a counterpart of all approved Shop Drawings will be available to ENGINEER for reference. Upon completion of the Work, these record documents, samples and Shop Drawings will be delivered to ENGINEER for OWNER.

4.11 Safety and Protection

4.11.1 CONTRACTOR shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

- a) All employees on the Work and other persons and organizations who may be affected thereby;
- b) All the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and
- c) Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and Underground Facilities not designated for removal, relocation or replacement in the course of construction.

4.11.2 CONTRACTOR shall comply with all applicable Laws and Regulations of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and of Underground Facilities and utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property. All damage, injury or loss to any property referred to in paragraph caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, shall be remedied

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by CONTRACTOR.

4.11.3 CONTRACTOR shall designate a responsible representative at the site whose duty shall be the prevention of accidents. This person shall be CONTRACTOR's superintendent unless otherwise designated in writing by CONTRACTOR to OWNER.

4.12 Emergencies

In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, CONTRACTOR, without special instruction or authorization from ENGINEER or OWNER, is obligated to act to prevent threatened damage, injury or loss. CONTRACTOR shall give ENGINEER prompt written notice if CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby. If ENGINEER determines that a change in the Contract Documents is required because of the action taken in response to an emergency, a Work Directive Change or Change Order will be issued to document the consequences of the changes or variations.

4.13 Shop Drawings and Samples

4.13.1 After checking and verifying all field measurements and after complying with applicable procedures specified in the General Conditions, CONTRACTOR shall submit to ENGINEER for review and approval three (3) copies of all Shop Drawings. All submissions will be identified as ENGINEER may require. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to enable ENGINEER to review the information as required.

4.13.2 CONTRACTOR shall also submit to ENGINEER for review and approval with such promptness as to cause no delay in Work, all samples required by the Contract Documents.

4.13.3 At the time of each submission, CONTRACTOR shall give ENGINEER specific written notice of each variation that the Shop Drawings or samples may have from the requirements of the Contract Documents, and, in addition, shall cause a specific notation to be made on each Shop Drawing submitted to ENGINEER for review and approval of each such variation.

4.13.4 ENGINEER will review and approve with reasonable promptness Shop Drawings and samples, but ENGINEER's review and approval will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, techniques, sequences or procedures of construction.

4.13.5 ENGINEER's review and approval of Shop Drawings or samples shall not

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relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of submission.

4.13.6 Where a Shop Drawing or sample is required by the Specifications, any related Work performed prior to ENGINEER's review and approval of the pertinent submission will be the sole expense and responsibility of CONTRACTOR.

4.14 Continuing the Work

CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by paragraph 13.4 or as CONTRACTOR and OWNER may otherwise agree in writing.

4.15 Indemnification:

To the fullest extent permitted by Laws and Regulations CONTRACTOR shall indemnify and hold harmless OWNER and ENGINEER and their consultants, agents and employees from and against all claims, damages, losses, and expenses, direct, indirect or consequential (including but not limited to fees and charges of engineer, architects, attorneys and other professionals and court and arbitration costs) arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense:

4.15.1 (a) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting there from and (b) is caused in whole or in part by any negligent act or omission of CONTRACTOR, any Subcontractor, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder or arises by or is imposed by Law and Regulations regardless of the negligence of any such party.

4.15.2 In any and all claims against OWNER or ENGINEER or any of their consultants, agents or employees by any employee of CONTRACTOR, any Subcontractor, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 1.12.2 (c)2 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for CONTRACTOR or any such Subcontractor or other person or organization under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

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4.16 Sanitation

4.16.1 The Contractor shall introduce and enforce among his employees, such regulations in regard to cleanliness and the disposal of garbage and wastes as shall comply with the Local ordinances. The Contractor shall take such means as the Owner may direct to effectually prevent the creation of a nuisance at the work site or any part of the property of the Owner. Under no circumstances shall the Contractor create or maintain a nuisance. The Contractor shall construct toilets and maintain them in a sanitary condition, properly secluded from public observation at such points as shall be approved.

4.16.2 All waste, rubbish and debris – whether personal or from construction related processes – shall be removed from the job site and adjacent properties by hauling away and shall not be buried or discarded.

4.17 Road Closing Requirements

Work within the road right-of-way that necessitates a full closure of the road or any lane restrictions requires that the contractor notify **48 hours prior to the commencement of work** all that apply from the following list:

ROAD CLOSING – NOTIFICATION NUMBERS

Fax, call, or mail notification of road/bridge closing to the appropriate people

Please note date of successful notification

POLICE, FIRE, EMS

Elkhart County PSCC (911 Center) 533-4151

SCHOOLS

Baugo	293-8583	fax:
Concord	875-6577	fax: 875-1617
.....		fax: 875-8762
Elkhart	262-5695	fax: 262-5750
Fairfield.....	831-2188	fax:
Goshen	533-8631	fax:
Middlebury	825-9410	fax:
Northwood	574-773-3131	fax:

POST OFFICES

Bristol.....	848-4713	fax: 533-9998
Elkhart	293-5502	fax: 293-5501
Goshen	533-3915	fax: 533-8077
Middlebury	825-2505	fax:
Wakarusa.....	862-2010	fax:

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NEWS MEDIA

Elkhart Truth294-1661 fax: 294-3895

Goshen News533-2151 fax: 534-8830

Channel 16574-631-1616 fax: 293-3297

..... fax: 631-1639

Channel 22574-293-3148 fax: 289-0622

Channel 28574-679-4545 fax: 522-7609

OTHERS:

Elkhart County Hwy..... 533-0538

Elkhart County Eng.....534-9394

Elkhart County requires a written notification of the agencies notified, including time and date of successful notification. This notification must be given to Elkhart County Highway 24 hours prior to road closings or lane restrictions. This may be faxed to Elkhart County Highway.

The Contractor shall notify all applicable offices, agencies, media and schools, including Elkhart County Highway 24 hours prior to the removal of any lane restrictions or closures.

The Contractor shall coordinate the specific timing of the activation of any new signalization system, reopening, etc. When practical, the Contractor shall provide access through the site for emergency vehicle traffic.

ARTICLE 5 - OTHER WORK

5.1 Related Work at Site

OWNER may perform other work related to the Project at the site by OWNER's own forces, have work performed by utility owners, or let other direct contracts.

5.1.1 CONTRACTOR shall afford each utility owner and other contractor who is a party to such a direct contract (or OWNER, if OWNER is performing the additional work with OWNER's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work, and shall properly connect and coordinate the Work with theirs, CONTRACTOR shall do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and integrate with such other work.

ARTICLE 6 - OWNER'S RESPONSIBILITIES

6.1 Communication

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OWNER shall issue all communications to CONTRACTOR through ENGINEER.

6.2 Appointment of Engineer

In case of termination of the employment of ENGINEER, OWNER shall appoint an engineer whom CONTRACTOR makes no reasonable objection to, whose status under the Contract Documents shall be that of the former ENGINEER. Any dispute in connection with such appointment shall be subject to arbitration.

6.3 Payment

OWNER shall furnish the data required of OWNER under the Contract Documents promptly and shall make payments to CONTRACTOR promptly after they are due.

6.4 Change Orders

OWNER is obligated to execute Change Orders as indicated in paragraph 8.4.

6.5 Inspection

OWNER's responsibility in respect of certain inspections, tests and approvals is set forth in paragraph 11.4.

6.6 Service Termination

In connection with OWNER's right to stop Work or suspend Work, see paragraphs 11.5 and 13.1. Paragraph 13.2 deals with OWNER's right to terminate services of CONTRACTOR under certain circumstances.

ARTICLE 7 - ENGINEER'S STATUS DURING CONSTRUCTION

7.1 Owner's Representative

ENGINEER will be OWNER's representative during the construction period. The duties and responsibilities and the limitations of authority of ENGINEER as OWNER's representative during construction are set forth in the Contract Documents and shall not be extended without written consent of OWNER and ENGINEER.

7.2 Visits to Site

ENGINEER will make visits to the site at intervals appropriate to the various stages of construction to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. ENGINEER will not be required to make exhaustive or continuous on-site inspections to

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check the quality or quantity of the Work. ENGINEER's efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform to the Contract Documents. On the basis of such visits and on-site observations as an experienced and qualified design professional, ENGINEER will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against defects and deficiencies in the Work.

7.3 Project Representation

If OWNER and ENGINEER agree, ENGINEER will furnish a Resident Project Representative to assist ENGINEER in observing the performance of the Work.

7.4 Clarifications and Interpretations

ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents (in the form of Drawings or otherwise) as ENGINEER may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents.

7.5 Authorized Variations in Work

ENGINEER may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Time and are consistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order and will be binding on OWNER, and also on CONTRACTOR who shall perform the Work involved promptly.

7.6 Rejecting Defective Work

ENGINEER will have authority to disapprove or reject Work which ENGINEER believes to be defective, and will also have authority to require special inspection or testing of the Work at CONTRACTOR'S expense.

7.7 Decisions on Disputes

7.7.1 ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the performance and furnishing of the Work and claims under Articles 9 and 10 in respect to changes in the Contract Price or Contract Time will be referred initially to ENGINEER in writing with a request for a formal decision in accordance with this paragraph, which ENGINEER will render in writing within a reasonable time. Written notice of each such claim, dispute and other matter will be delivered by the claimant to ENGINEER and the other party to the Agreement promptly (but in no event later than thirty (30) days) after the occurrence of the event giving rise thereto, and written supporting

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data will be submitted to ENGINEER and the other party within sixty (60) days after such occurrence unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim.

7.7.2 When functioning as interpreter and judge under paragraphs 7.7.1 ENGINEER will not show partiality to OWNER or CONTRACTOR and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

7.8 Limitations on Engineer's Responsibilities

Neither ENGINEER's authority to act under this Article 7 or elsewhere in the Contract Documents nor any decision made by ENGINEER in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of ENGINEER to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization performing any of the Work, or to any surety for any of them.

7.8.1 ENGINEER will not be responsible for CONTRACTOR's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, and ENGINEER will not be responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents.

7.8.2 ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work.

ARTICLE 8 - CHANGES IN THE WORK

8.1 Work Modifications

Without invalidating the Agreement and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions or revisions in the Work; these will be authorized by a Written Amendment, a Change Order, or a Work Directive Change. Upon receipt of any such document, CONTRACTOR shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

8.2 Disagreement

If OWNER and CONTRACTOR are unable to agree as to the extent, if any, of an increase or decrease in the Contract Price or an extension or shortening of the Contract Time that should be allowed as a result of a Work Directive Change, a claim may be made therefore as provided in Article 9 or Article 10.

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8.3 Contract Price and Time

CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Time with respect to any Work performed that is not required by the Contract Documents.

8.4 Change orders

OWNER and CONTRACTOR shall execute appropriate Change Orders covering:

8.4.1 Changes in the Work which is ordered by OWNER.

8.4.2 Changes in the Contract Price or Contract Time which are agreed to by the parties.

8.4.3 Changes in the Contract Price or Contract Time which embody the substance of any written decision rendered by ENGINEER.

8.5 Notification of Change

If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be CONTRACTOR's responsibility, and the amount of each applicable Bond will be adjusted accordingly.

ARTICLE 9 - CHANGE OF CONTRACT PRICE

THE CONTRACT PRICE CONSTITUTES THE TOTAL COMPENSATION (SUBJECT TO AUTHORIZED ADJUSTMENTS) PAYABLE TO CONTRACTOR FOR PERFORMING THE WORK. ALL DUTIES, RESPONSIBILITIES AND OBLIGATIONS ASSIGNED TO OR UNDERTAKEN BY CONTRACTOR SHALL BE AT HIS EXPENSE WITHOUT CHANGE IN THE CONTRACT PRICE.

9.1 Change Order

The Contract Price may only be changed by a Change Order or by a Written Amendment.

9.2 Determination of Contract Price

The value of any Work covered by a Change Order (extra work order) for an increase or decrease in the Contract Price shall be determined in one of the following ways:

9.2.1 Where the Work involved is covered by unit prices contained in the Contract

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Documents, by application of unit prices to the quantities of the items involved.

9.2.2 On the basis of the actual Cost of the Work, plus the allowable Contractor's mark-up as per INDOT Specification 109.05 added thereon for overhead and profit.

9.3 Cost of the Work:

The term Cost of the Work means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work.

The term Cost of the Work shall **not** include any of the following:

9.3.1 Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnership and sole proprietorships), general managers, attorneys, auditors, accountants, purchasing and contracting agents, CONTRACTOR whether at the site or in CONTRACTOR's principal or a branch office for general administration of the Work.

9.3.2 Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the site.

9.3.3 Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.

9.3.4 Cost of premiums for all Bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same.

9.3.5 Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied and making good any damage to property.

ARTICLE 10 - CHANGE OF CONTRACT TIME

The Contract Time may only be changed by a Change Order or a Written Amendment. Any claim for an extension or shortening of the Contract Time shall be based on written notice delivered by the party making the claim to the other party and to ENGINEER promptly (but in no event later than fifteen (15) days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with supporting data shall be delivered within thirty (30) days after such occurrence (unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the claimant's written

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statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Time shall be determined by ENGINEER.

ARTICLE 11 - WARRANTY AND GUARANTEE; TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

11.1 Warranty and Guarantee

CONTRACTOR warrants and guarantees to OWNER and ENGINEER that all Work will be in accordance with the Contract Documents and will not be defective. Prompt notice of all defects shall be given to CONTRACTOR. All defective Work, whether or not in place, may be rejected, corrected or accepted as provided in this Article 11.

11.2 Access to Work

ENGINEER and ENGINEER's representatives, other representatives of OWNER, testing agencies and governmental agencies with jurisdictional interests will have access to the Work at reasonable times for their observation, inspecting and testing. CONTRACTOR shall provide proper and safe conditions for such access.

11.3 Tests and Inspections

CONTRACTOR shall give ENGINEER timely notice of readiness of the Work for all required inspections, tests or approvals.

11.3.1 If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) to specifically be inspected, tested or approved, CONTRACTOR shall assume full responsibility therefore, pay all costs in connection therewith and furnish ENGINEER the required certificates of inspection, testing or approval.

11.3.2 The Contractor shall assume full responsibility for paying all costs in connection with testing or certification of materials required under INDOT Standard Specifications. In the case of failed or rejected materials or product used in construction of the project either by CONTRACTOR or SUBCONTRACTORS, independent third party testing may be used at CONTRACTOR'S expense.

11.3.3 If any Work (including the work of others) that is to be inspected, tested or approved is covered without written concurrence of ENGINEER, it must, if requested by ENGINEER, be uncovered for observation. Such uncovering shall be at

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CONTRACTOR's expense unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR's intention to cover the same and ENGINEER has not acted with reasonable promptness in response to such notice.

11.3.4 Neither observations by ENGINEER nor inspections, tests or approvals by others shall relieve CONTRACTOR from CONTRACTOR's obligations to perform the Work in accordance with the Contract Documents.

11.4 Uncovering Work

11.4.1 If any Work is covered contrary to the written request of ENGINEER, it must, if requested by ENGINEER, be uncovered for ENGINEER's observation and replaced at CONTRACTOR's expense.

11.4.2 If ENGINEER considers it necessary or advisable that covered Work be observed by ENGINEER or inspected or tested by others, CONTRACTOR, at ENGINEER's request, shall uncover, expose or otherwise make available for observation, inspection or testing as ENGINEER may require, that portion of the Work in question, furnishing all necessary labor, material and equipment.

11.5 Owner May Stop the Work

If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated.

11.6 Correction or Removal of Defective Work

If required by ENGINEER, CONTRACTOR shall promptly, as directed, either correct all defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by ENGINEER, remove it from the site and replace it with nondefective Work. CONTRACTOR shall bear all direct, indirect and consequential costs of such correction or removal (including but not limited to fees and charges of engineers, attorneys and other professionals) made necessary thereby.

11.7 Three Years Correction Period

If, within three (3) years after the date of Final Completion, any Work is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions, either correct such defective Work, or, if it has been rejected by OWNER and/or Engineer remove it from the site and replace it with non-defective work. If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or the rejected Work removed and

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replaced, and all direct, indirect and consequential costs of such removal and replacement (including but not limited to fees and charges of engineers, attorneys and other professionals) will be paid by CONTRACTOR.

11.8 Maintenance Bond

Each Contractor shall furnish prior to final acceptance a Maintenance Bond (form attached) in an amount at least equal to thirty percent (30%) of the Contract Price, guaranteeing for a period of three (3) years after the date of acceptance by the Owner, that all workmanship and materials entered into the Contract are in accordance with the Plans and Specifications. Each Contractor shall remove any defects due to faulty workmanship and/or materials and shall pay for any damage to other work resulting therefrom which shall appear within the guarantee period. Should such quality assurance tests as are called for in the contract Plans and Specifications (e.g., roll test, density, concrete strength, etc.) not be performed or if the work is not performed within reasonable conformity to the Plans and Specifications the maintenance bond period may be extended to six (6) years.

11.9 Acceptance of Defective Work:

If instead of requiring correction or removal and replacement of defective Work, OWNER prefers to accept it, OWNER may do so. CONTRACTOR shall bear all direct, indirect and consequential costs attributable to OWNER's evaluation of and determination to accept such defective Work. If any such acceptance occurs prior to ENGINEER's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price.

11.10 OWNER May Correct Defective Work:

If CONTRACTOR fails within a reasonable time after written notice of ENGINEER to proceed to correct and to correct defective Work or to remove and replace rejected Work as required by ENGINEER in accordance with paragraph 11.6, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven (7) days' written notice to CONTRACTOR, correct and remedy any such deficiency. All direct, indirect and consequential costs of OWNER in exercising such rights and remedies will be charged against CONTRACTOR in an amount approved as to reasonableness by ENGINEER, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price.

ARTICLE 12 - PAYMENTS TO CONTRACTOR AND COMPLETION

12.1 Schedule of Values

The schedule of values (itemized proposal) established at contract unit prices will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to ENGINEER. Progress payments on account of Unit Price Work will be based on the number of units completed.

12.2 Application for Progress Payment

At least fifteen (15) days before each regularly scheduled County Commissioners Meeting, CONTRACTOR shall submit to ENGINEER for review an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.

12.3 Contractor's Warranty of Title

CONTRACTOR warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER no later than the time of payment free and clear of all Liens.

12.4 Review of Applications for Progress Payment

12.4.1 ENGINEER will, within ten (10) days after receipt of each Application for Payment, will either indicate in writing a recommendation of payment to the OWNER, or return the Application to CONTRACTOR indicating in writing ENGINEER's reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the Application. Ten (10) days after presentation of the Application for Payment with ENGINEER's recommendation, the amount recommended will become due and when due will be paid by OWNER to CONTRACTOR. All progress payments will be subject to a ten Percent (10%) retainage that will not be released until Maintenance Bond is received.

12.4.2 ENGINEER's recommendation of any payment requested in an Application for Payment will constitute a representation by ENGINEER to OWNER, based on ENGINEER's on-site observations of the Work in progress as an experienced and qualified design professional and on ENGINEER's review of the Application for Payment and the accompanying data and schedules that the Work has progressed to the point indicated; that, to the best of ENGINEER's knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents and that CONTRACTOR is entitled to payment of the amount recommended. However, by recommending any such payment ENGINEER will not thereby be deemed to have represented that exhaustive or continuous on-site inspections have been made to

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check the quality or the quantity of the Work beyond the responsibilities specifically assigned to ENGINEER in the Contract Documents or that there may not be other matters or issues between the parties that might entitle CONTRACTOR to be paid additionally by OWNER or OWNER to withhold payment to CONTRACTOR.

12.4.3 ENGINEER's recommendation of final payment will constitute an additional representation by ENGINEER to OWNER that the conditions precedent to CONTRACTOR's being entitled to final payment as set forth in paragraph 12.9 have been fulfilled.

12.4.4 ENGINEER may refuse to recommend the whole or any part of any payment if, in ENGINEER's opinion, it would be incorrect to make such representations to OWNER. ENGINEER may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended, to such extent as may be necessary in ENGINEER's opinion to protect OWNER from loss because:

- a) The Work is defective, or completed Work has been damaged requiring correction or replacement.
- b) The Contract Price has been reduced by Written Amendment or Change Order.
- c) OWNER has been required to correct defective Work or complete Work in accordance with paragraph 11.10, or
- d) Of ENGINEER's actual knowledge of the occurrence of any of the events enumerated in paragraphs 13.2.1 through 13.2.9 inclusive.

OWNER may refuse to make payment of the full amount recommended by ENGINEER because claims have been made against OWNER on account of CONTRACTOR's performance or furnishing of the Work or Liens have been filed in connection with the Work or there are other items entitling OWNER to a set-off against the amount recommended, but OWNER must give CONTRACTOR immediate written notice (with a copy to ENGINEER) stating the reasons for such action.

12.5 Substantial Completion

When CONTRACTOR considers the entire Work ready for its intended use (that is, use by the public) CONTRACTOR shall notify OWNER and ENGINEER in writing that the entire Work is substantially complete (except for items specifically listed by CONTRACTOR as incomplete) and request that ENGINEER issue a certificate of Substantial Completion. Within a reasonable time thereafter, OWNER, CONTRACTOR and ENGINEER shall make an inspection of the Work to determine the status of

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completion. If ENGINEER does not consider the Work substantially complete, ENGINEER will notify CONTRACTOR in writing giving the reasons therefore. If ENGINEER considers the Work substantially complete, ENGINEER will prepare and deliver to OWNER a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment.

12.6 Partial Utilization

Use by OWNER of any finished part of the Work, which has specifically been identified in the Contract Documents, or which OWNER, ENGINEER and CONTRACTOR agree constitutes a separately functioning and useable part of the Work that can be used by OWNER without significant interference with CONTRACTOR's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following:

12.6.1 OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees, CONTRACTOR will certify to OWNER and ENGINEER that said part of the Work is substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. CONTRACTOR at any time may notify OWNER and ENGINEER in writing that CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time after either such request, OWNER, CONTRACTOR and ENGINEER shall make an inspection of that part of the Work to determine its status of completion. If ENGINEER does not consider that part of the Work to be substantially complete, ENGINEER will notify OWNER and CONTRACTOR in writing giving the reasons therefore. If ENGINEER considers that part of the Work to be substantially complete, the provisions of paragraph 12.8 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

12.6.2 OWNER may at any time request CONTRACTOR in writing to permit OWNER to take over operation of any such part of the Work although it is not substantially complete. A copy of such request will be sent to ENGINEER and within a reasonable time thereafter OWNER, CONTRACTOR and ENGINEER shall make an inspection of that part of the Work to determine its status of completion and will prepare a list of the items remaining to be completed or corrected thereon before final payment. If CONTRACTOR does not object in writing to OWNER and ENGINEER that such part of the Work is not ready for separate operation by OWNER, ENGINEER will finalize the list of items to be completed or corrected and will deliver such list to OWNER and CONTRACTOR together with a written recommendation as to the division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety,

Elkhart Redundancy Fiber Optic Project

maintenance, utilities, insurance, warranties and guarantees for that part of the Work which will become binding upon OWNER and CONTRACTOR at the time when OWNER takes over such operation (unless they shall have otherwise agreed in writing and so informed ENGINEER). During such operation and prior to Substantial Completion of such part of the Work, OWNER shall allow CONTRACTOR reasonable access to complete or correct items on said list and to complete other related Work.

12.7 Final Inspection

Upon written notice from CONTRACTOR that the entire Work or an agreed portion thereof is complete, ENGINEER will make a final inspection with OWNER and CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to remedy such deficiencies.

12.8 Final Application for Payment

After CONTRACTOR has completed all such corrections to the satisfaction of ENGINEER and delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, marked-up record documents and other documents--all as required by the Contract Documents, and after ENGINEER has indicated that the Work is acceptable, CONTRACTOR may make application for final payment following the procedure for progress payments.

12.9 Final Payment and Acceptance

12.9.1 If, on the basis of ENGINEER's observation of the Work during construction and final inspection, and ENGINEER's review of the final Application for Payment and accompanying documentation--all as required by the Contract Documents, ENGINEER is satisfied that the Work has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled, ENGINEER will, within ten (10) days after receipt of final Application for Payment, indicate in writing ENGINEER's recommendation of payment and present the Application to OWNER for payment. Thereupon ENGINEER will give written notice to OWNER and CONTRACTOR that the Work is acceptable subject to the provisions of paragraph 12.10. Otherwise, ENGINEER will return the Application to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application. Thirty (30) days after presentation to OWNER of the Application and accompanying documentation, in appropriate form and substance, and with ENGINEER's recommendation and notice of acceptability, the amount recommended by ENGINEER will become due and will be paid by OWNER to CONTRACTOR.

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12.9.2 If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed and if ENGINEER so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted.

12.10 Contractor's Continuing Obligation

CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or final payment by ENGINEER, nor the issuance of a certificate of Substantial Completion, nor any payment by OWNER to CONTRACTOR under the Contract Documents, nor any use or occupancy of the Work or any part thereof by OWNER, nor any act of acceptance by OWNER nor any failure to do so, nor any review and approval of a Shop Drawing or sample submission, nor the issuance of a notice of acceptability by ENGINEER, nor any correction of defective Work by OWNER will constitute an acceptance of Work not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents (except as provided in paragraph 12.11).

12.11 Waiver of Claims

The making and acceptance of final payment will constitute:

12.11.1 A waiver of all claims by OWNER against CONTRACTOR, except claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to paragraph 12.10 or from failure to comply with the Contract Documents or the terms of any special guarantees specified therein; however, it will not constitute a waiver by OWNER of any rights in respect of CONTRACTOR's continuing obligations under the Contract Documents; and

12.11.2 A waiver of all claims by CONTRACTOR against OWNER other than those previously made in writing and still unsettled.

ARTICLE 13 - SUSPENSION OF WORK AND TERMINATION

13.1 OWNER May Suspend Work

OWNER may, at any time and without cause, suspend the Work or any portion thereof for a period of not more than one hundred eighty (180) days by notice in writing to CONTRACTOR and ENGINEER which will fix the date on which Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be allowed an increase in the extension of the Contract Time directly attributable to any suspension.

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13.2 Conditions of Termination by Owner

Upon the occurrence of any one or more of the following events:

13.2.1 If CONTRACTOR commences a voluntary case under any chapter of the Bankruptcy Code (Title 11, United States Code), as now or hereafter in effect, or if CONTRACTOR takes any equivalent or similar action by filing a petition or otherwise under any other federal or state law in effect at such time relating to the bankruptcy or insolvency;

13.2.2 If a petition is filed against CONTRACTOR under any chapter of the Bankruptcy Code as now or hereafter in effect at the time of filing, or if a petition is filed seeking any such equivalent or similar relief against CONTRACTOR under any other federal or state law in effect at the time relating to bankruptcy or insolvency;

13.2.3 If CONTRACTOR makes a general assignment for the benefit of creditors;

13.2.4 If a trustee, receiver, custodian or agent of CONTRACTOR is appointed under applicable law or under contract, whose appointment or authority to take charge of property of CONTRACTOR is for the purpose of enforcing Lien against such property or for the purpose of general administration of such property for the benefit of CONTRACTOR's creditors;

13.2.5 If CONTRACTOR admits in writing an inability to pay its debts generally as they become due;

13.2.6 If CONTRACTOR persistently fails to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 1.7 as revised from time to time);

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13.2.7 If CONTRACTOR disregards Laws or Regulations of any public body having jurisdiction;

13.2.8 If CONTRACTOR disregards the authority of ENGINEER; or

13.2.9 If CONTRACTOR otherwise violates in any substantial way any provisions of the Contract Documents;

OWNER may terminate the Agreement in accordance with paragraph 13.3.

13.3 Termination by Owner

13.3.1 OWNER may, after giving CONTRACTOR and the surety, if there be one, seven (7) days' written notice and to the extent permitted by Laws and Regulations, terminate the services of CONTRACTOR, exclude CONTRACTOR from the site and take possession of the Work and of all CONTRACTOR's tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct, indirect and consequential costs of completing the Work (including but not limited to fees and charges of engineers, attorneys and other professionals and court and arbitration costs) such excess will be paid to CONTRACTOR. If such costs exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such costs incurred by OWNER will be approved as to reasonableness by ENGINEER and incorporated in a Change Order, but when exercising any rights or remedies under this paragraph OWNER shall not be required to obtain the lowest price for the Work performed.

13.3.2 Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of monies due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

13.3.3 Upon seven (7) days' written notice to CONTRACTOR and ENGINEER, OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the Work and terminate the Agreement. In such case, CONTRACTOR shall be paid for all Work executed and any expense sustained plus reasonable termination expenses, which will include, but not be limited to, direct, indirect and consequential costs (including, but not limited to, fees and charges of engineers, architects, attorneys and other professionals and court and arbitration

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costs).

13.4 Conditions of Termination by Contractor

13.4.1 If, through no act or fault of CONTRACTOR, the Work is suspended for a period of more than one hundred eighty (180) days by OWNER or under an order of court or other public authority, or ENGINEER fails to act on any Application for Payment within thirty (30) days after it is submitted, or

13.4.2 If OWNER fails for thirty (30) days to pay CONTRACTOR any sum finally determined to be due, then CONTRACTOR may, upon seven (7) days' written notice to OWNER and ENGINEER, terminate the Agreement and recover from OWNER payment for all Work executed and any expense sustained plus reasonable termination expenses. In addition and in lieu of terminating the Agreement, if ENGINEER has failed to act on an Application for Payment or OWNER has failed to make any payment as aforesaid, CONTRACTOR may upon seven (7) days' written notice to OWNER and ENGINEER stop the Work until payment of all amounts then due. The provisions of this paragraph shall not relieve CONTRACTOR of the obligations under paragraph 4.14 to carry on the Work in accordance with the progress schedule and without delay during disputes and disagreements with OWNER.

ARTICLE 14 - MISCELLANEOUS

14.1 Giving Notice

Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

14.2 Computation of Time

When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

14.2.1 A calendar day of twenty-four hours measured from midnight to the next midnight shall constitute a day.

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14.3 Bid Submission

Each bidder who submits a proposal for any portion of the work included in the Project Manual must submit with its bid this form fully completed and signed by an authorized officer of the bidder and must provide the data requested by the form. Unless this form is fully completed and signed by the bidder, the proposal made by that bidder will be incomplete and will not be considered by the Board of County Commissioners.

1. Name of Bidder _____

2. Business Address _____

3. Number of years engaged in contracting business under present firm's name: _____ years.

4. *Experience in the contracting work generally similar to this project, including list of complexes, locations and approximate contract cost thereof.

5. Have you ever defaulted on a contract? _____ Yes _____ No
If Yes, when, with whom and why? _____

6. *It is a necessary requirement of this Specification that each Contractor show evidence for five (5) jobs guaranteed for one (1) year on workmanship, unconditionally, and where Contractor has agreed to return and repair this work at no expense to the Owner.

7. *Have you ever filed bankruptcy or been adjudged bankruptcy?
_____ Yes _____ No

8. Do you employ any black, Hispanic, female or oriental minority persons? If yes, please state the number of each of such minority persons you presently employ.
_____ Yes _____ No

If no, please state reasons.

9. Have you encouraged minority building subcontractors to submit proposals in connection with your bid? ____ Yes ____ No. If yes, state the name(s) of the minority subcontractors who have been contacted by you for the purpose of submitting a bid/proposal. If no, please state reasons.

10. Do you intend to use any minority subcontractors in performing the work or providing the materials contained within your bid? ____ Yes ____ No. If yes, please state the name of the subcontractor. If no, please state reasons.

11 Have you been involved in any complaints or litigation relative to the use of minority subcontractors? ____ Yes ____ No. If yes, what is the status of the complaints of the litigation?

12 Additional pertinent comments:

BY: _____

(Signature of official completing this form)

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned _____

_____ as PRINCIPAL, and _____

_____ As SURETY, are held and firmly bound unto the Elkhart County Board of County Commissioners, hereinafter called the "Owner", in the penal sum of

_____ Dollars (\$_____) lawful

money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents:

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has Submitted the accompanying Bid, dated _____

For: _____

NOW, THEREFORE, if the Principal shall not withdraw said bid within the period specified herein after the opening of the same, or if no period be specified within or sixty (60) days after the said opening, and shall within the period specified therefore, or, if no period be specified within ten (10) days after the prescribed forms are presented to him for signature, enter into a written contract with the Owner in accordance with the bid as accepted, and give Bond for faithful performance and proper fulfillment of such Contract; or in the event of the withdrawal of said bid within the period specified, or the failure to enter into such Contract and give such Bond within the time specified if the Principal shall

pay the Owner the difference between the amount specified in said Bid and the amount for which the Owner may procure the required work or suppliers or both, if the latter amount be in excess of the former, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their several seals this _____ day of _____, _____ the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

IN PRESENCES OF:

INDIVIDUAL PRINCIPALS:

_____ (SEAL)

_____ (SEAL)

ATTEST:

CORPORATE PRINCIPAL:

_____ (SEAL)

_____ (SEAL)

Business Address _____

By: _____

Title: _____

ATTEST:

CORPORATE SURETY:

_____ (SEAL)

_____ (SEAL)

Business Address _____

By: _____

Title: _____

Power-of-Attorney for person signing for Surety Company must be attached to Bond.

Elkhart Redundancy Fiber Optic Project CERTIFICATE AS TO CORPORATE PRINCIPAL

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____
certify that I am the _____
Secretary of the Corporation named as Principal in the within Bond; that _____
_____ who signed the said Bond on behalf of the Principal
was then _____ of the corporation, that I know
his signature, and his signature thereto is genuine; and that said Bond was duly signed,
sealed, and attested to, for and in behalf of said corporation by authority of its governing
body.

_____ (SEAL)

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS,
 That _____ as principal and
 _____ as surety, are firmly bound unto Elkhart
 County, Indiana, acting through its Board of County Commissioners (OWNER) in the
 penal sum of an amount equal to one hundred percent (100%) the amount of his bid or
 the contract price, if the proposal is accepted, for the payment of which, well and truly to
 be made, we bind ourselves, jointly and severally, and our joint and several heirs,
 executors, administrators, and assigns, firmly by these presents, this ____day
 of _____, 2022.

THE CONDITIONS OF THE ABOVE OBLIGATION ARE SUCH that, whereas, the
 principal is herewith submitting a bid and proposal for the erection, construction and
 completion of Bristol to Middlebury Fiber Optic Project
 in accordance with the plans and specifications approved and adopted by said OWNER,
 which are made a part of this bond.

NOW, THEREFORE, if the said OWNER shall award said principal the contract for work
 and said principal shall promptly enter into a contract with said OWNER for the said work
 and shall well and faithfully do and perform the same in all respects according to the plans
 and specifications provided by the said OWNER, and according to the time, terms, and
 conditions specified in said contract to be entered into, and in accordance with all
 requirements of law, and shall promptly pay all debts incurred by him or any subcontractor

in the construction of said work, including labor, service, and materials furnished, then this obligation shall be void; otherwise to remain in full force, virtue and effect.

IT IS AGREED that no modifications, omissions, or additions in or to the terms of such contract or in or to the plans or specifications therefore shall in any wise affect the obligation of such sureties on its bond.

IN WITNESS WHEREOF, we hereunto set our hands and seal this _____ day of _____, 2022.

NAME_____

NAME_____

ADDRESS_____

ADDRESS_____

BY_____

BY_____

Signature_____

Signature_____

Title_____

(Printed)_____

Surety

(Printed or Typed)

Principal

State of Indiana, County of _____ ss:

Personally appeared before me, _____

as principal and _____

as surety and each acknowledged the execution of the above bond this _____ day
of _____, 2022.

BY _____
Signature Notary Public

(Printed or Typed)

Witness my hand and notarial seal the said last named date.

My Commission Expires _____, 20_____.

(County of Residence)

Accepted and approved this _____ day of _____, 2022.

Suzanne M. Weirick, President

Frank Lucchese, Vice President

Bradley D. Rogers, Member

ATTEST: _____
Patricia A. Pickens, Auditor

MAINTENANCE BOND

KNOW ALL MEN BY THESE PRESENT: That we, _____
_____, as

Principal, _____ and

_____ as Surety, are held and firmly bound to the _____

_____ in

the sum of _____

_____ Dollars (\$ _____)

for the payment of which sum well and truly to be made, we jointly and severally bind ourselves, our heirs, executors, administrators, and successors, firmly by these present.

THE CONDITIONS OF THE ABOVE OBLIGATION are that, whereas the Principal, entered into a contract with the Owner on the _____ day of _____, _____, to construct _____ according to the Plans and Specifications, and also warranting the work and materials as provided in the aforesaid Contract and Specifications, for a period of three (3) years from the date of final acceptance of work by the Owner.

Now, if the said Principal shall faithfully perform and fulfill all the requirements of said Warranty and Guaranty, and make all repairs required under said Guaranty and, in the manner provided for, then this Bond to be null and void, otherwise to be in full force and effect.

IN WITNESS WHEREOF, this statement is executed in two (2) counterparts, each one of which shall be deemed an original, this _____ day of _____, 2022.

(SEAL)

Principal

ATTEST:

_____ BY: _____

Title

Title

(SEAL)

ATTEST:

_____ BY: _____

Title

Title

APPROVED this _____ day of _____, 2022.

ELKHART COUNTY, INDIANA
By and Through Its
BOARD OF COUNTY COMMISSIONERS

Suzanne M. Weirick, President

Frank Lucchese, Vice President

Bradley D. Rogers, Member

ATTEST: _____
Patricia A. Pickens, Auditor

AGREEMENT

THIS AGREEMENT, made and entered into this ____ day of _____, 2022, by and between _____ (a corporation organized and existing under the laws of the State of Indiana), hereinafter referred to as the “CONTRACTOR,” and “ELKHART COUNTY, INDIANA,” acting through the Board of Commissioners, hereinafter referred to as the “OWNER.”

WITNESSETH, that the Contractor and the Owner, for the considerations stated herein, mutually agree as follows:

ARTICLE 1 -- STATEMENT OF WORK

The Contractor shall furnish all supervision, technical personnel, labor, materials, machinery, tools, equipment and services, including utility and transportation services, and traffic control, and perform and complete all work required for **Elkhart Redundancy Fiber Optic Project**, in Elkhart County, Indiana, as more particularly described in the Specifications, Special Provisions, General Requirements, Supplementary Conditions, Terms for Bidding, plans and drawings, and other items contained therein prepared by Elkhart County (“ENGINEER”) and referred to herein as the “Construction Documents.” All such Construction Documents have been reviewed and approved by the parties hereto and all are incorporated herein by reference as a part of this Agreement consistent with Article 4 below. All undertakings, duties, obligations, and performance required of Contractor by the Construction Documents and this Agreement are hereinafter referred to as the “Work.”

ARTICLE 2 -- CONTRACTOR REPRESENTATIONS

The Contractor represents to Owner that it is fully experienced and properly qualified as an expert to render the performance required for the Work, and that it is properly equipped,

organized and financed for performance of this Agreement. Contractor further represents and acknowledges that it is an independent contractor, and that Contractor IS NOT, in any manner or form, an agent, employee, or representative of Owner.

CONTRACTOR INDEMNIFICATION

The Contractor agrees to indemnify and save harmless the Owner and Engineer, their agents and employees, from and against all loss or expense (including court costs and attorneys' fees of defense or enforcement) by reason of liability imposed by law or otherwise upon the Owner or Engineer, for (1) damages because of bodily injury, including death at any time resulting therefrom, sustained by any person or persons, or (2) on account of damage to property or property rights or interests, including loss of use thereof, arising out of or in consequence of the performance of the Work, provided such injury to persons or damage to property is due or claimed to be due to negligence of the Contractor, its subcontractors, employees or agents, or in violation of this Agreement.

REQUIREMENTS FOR CONTRACTORS ON PUBLIC WORKS PROJECTS

The provisions of Indiana Code Section 5-16-13 are hereby incorporated by reference including, but not limited to, the following specific provisions:

- Contractor must contribute in work performed by its employees, materials supplied directly by Contractor, and services supplied directly by its employees of at least fifteen percent (15%) of the total contract price.
- Contractor must maintain general liability insurance in the amounts provided in the Construction Documents but in no event less than One Million Dollars (\$1,000,000.00) for the each occurrence limit and Two Million Dollars (\$2,000,000.00) for the general

aggregate limit.

- Contractor must implement and comply with the requirements of Indiana Code Section 22-5-1.7 concerning the E-Verify system with respect to its employee hiring. Contractor must submit, before work begins on the Agreement, the E-Verify case verification number for each individual who is required to be verified under Indiana Code Section 22-5-1.7. An individual who is required to be verified under Indiana Code Section 22-5-1.7 whose final case result is final non-confirmation may not be employed on this Work.
- Contractor may not pay cash to any individual employed by the Contractor for work done by the individual on this Work.
- Contractor must be in compliance with the Federal Fair Labor Standards Act of 1938, as amended (29 USC 201-209) and Indiana Code Section 22-2-2-1 through Indiana Code Section 22-2-2-8.
- Contractor must be in compliance with Indiana Code Section 22-3-5-1 and Indiana Code Section 22-3-7-34.
- Contractor must be in compliance with Indiana Code Section 22-4-1 through Indiana Code Section 22-4-39.5.
- Contractor must be in compliance with Indiana Code Section 4-13-18-1 through Indiana Code Section 4-13-18-7.
- Drug Testing of Employees. Indiana Code Section 4-13-18 regarding the drug testing of employees of public works contractors applies to the Agreement as the estimated cost hereof is at least One Hundred Fifty Thousand Dollars (\$150,000.00) and has been awarded after June 30, 2015.

- Nondiscrimination. Pursuant to Indiana Code Section 22-9-1-10, Contractor and its subcontractors, if any, shall not discriminate against any employee or applicant for employment to be employed in the performance of the Agreement with respect to hire, tenure, terms, conditions or privileges of employment or any matter directly or indirectly related to employment, because of race, religion, color, sex, disability, national origin, ancestry, or veteran status. Breach of this covenant may be regarded as a material breach of the Agreement.
- Anti-nepotism. Contractor is aware of the provisions of Indiana Code Section 36-1-21 et seq. with respect to anti-nepotism in contractual relationships with governmental entities. Contractor certifies that none of the owners of Contractor is a relative of any elected Council Member or Commissioner of the County of Elkhart, Indiana.
- Investment Activity. Pursuant to Indiana Code Section 5-22-16.5-13, Contractor certifies that Contractor is not engaged in investment activities in Iran.

ARTICLE 3 -- THE CONTRACT PRICE

The Owner will pay the Contractor for the performance of the Work subject to additions and deductions provided herein, in current funds, and per applicable Indiana law and the required procedures for payments by Owner, the sum of _____. The Contractor shall start the Work on or after **June 6, 2022** with an intermediate completion between County Road 6 and Mishawaka Street by **July 11, 2022** AND COMPLETE THE Work on or before **September 9, 2022**. Any Work remaining to be completed after **September 9, 2022** is subject to the following damages:

For each and every day Work contemplated in this Agreement remains uncompleted,

and/or unsatisfactorily completed or unaccepted, beyond the completion date herein established (**September 9, 2022**), Contractor shall owe and pay to Owner the sum of One Thousand Dollars (\$1000.00) per day, as liquidated damages and not as penalty. In establishing said One Thousand Dollars (\$1000.00) sum per day as and for liquidated damages owed by the Contractor to Owner, the parties hereto stipulate and agree that the actual damages that would be suffered by Owner because of the failure of Contractor to timely complete the Work contemplated are indefinite and uncertain; however, the parties hereto stipulate that the sum herein established is a reasonable estimate by the parties of the probably damages to be suffered by the Owner upon the failure of the Contractor to timely complete the Work contemplated. The liquidated damages herein established shall be deducted daily from the Contract Price herein established, thereby reducing the same for the total amount of liquidated damages as herein stipulated, and hence reducing payments of the Contract Price Owner would otherwise make. If an intermediate date is specified for one or more of the items or phases of the contract, liquidated damages will apply for that particular item or phase as if the intermediate date specified for said item or phase is conclusion of said portion of project or contract.

ARTICLE 4 -- CONTRACT DOCUMENTS

The Contract Documents forming a part of this Agreement by reference shall consist of the following:

- a. This Agreement.
- b. Memos:
- c. Invitation for Bids.
- d. Instructions to Bidders.

- e. Signed copy of Bid and Itemized Bid Form.
- f. General Conditions and Supplementary Conditions.
- g. Construction Specifications and Related Documents.
- h. Plans.
- J. Addendums

ARTICLE 5 -- PROJECT CONTROL

The Contractor will carry out this project and complete the Work under the direction of the Owner and the Owner's agents, the Engineer, or other consultant designated by the Owner. The Owner's designated representative during the construction period will make visits to the site at intervals appropriate to the various states of construction to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents.

This Agreement, to include the Contract Documents enumerated in Article 4 above, constitutes the full agreement and understanding of the parties hereto, and save for change orders and procedures therefore set forth within the Contract Documents, shall not be amended by the parties, other than by instrument executed by each party hereto.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed in various counterparts effective as of the date and year first above written.

CONTRACTOR:

By _____ Signature

_____ Printed Name

_____ Title

OWNER: **ELKHART COUNTY, INDIANA**, by and through its Board of County Commissioners

Suzanne M. Weirick, President

Frank Lucchese, Vice President

Bradley D. Rogers, Member

ATTEST: _____
Patricia A. Pickens, Auditor

Division 2:

Bid Documents

For

Elkhart Redundancy Fiber Optic Project

OWNERS:

ELKHART COUNTY, INDIANA, ACTING THROUGH
IT'S BOARD OF COUNTY COMMISSIONERS
ELKHART COUNTY HIGHWAY DEPARTMENT
ENGINEERING SECTION
610 STEURY AVENUE
GOSHEN, IN 46528



Elkhart County Highway Department
610 Steury Avenue, Goshen, Indiana 46528
Phone: 574-534-9394 • Fax: 574-533-7103

NOTICE TO BIDDERS

Notice is hereby given that the Board of County Commissioners of Elkhart County, Indiana, will receive bids up to **9:00 A.M. on May 23rd, 2022**, for the **Elkhart Redundancy Fiber Optic Project**. It is the responsibility of the bidder to insure that its bid is delivered on time to the Office of the Elkhart County Commissioners, County Administration Building, 117 N. Second Street, Goshen, IN 46526.

Plans, Specifications and bidding documents may be obtained from the **Elkhart County Highway Department, website at elkcohwj.dreamhosters.com on May 6th, 2022**. Plans, Specifications and Bidding Documents may not be obtained prior to this date.

Plans, Specifications and Bidding Documents will be available for inspection at the Elkhart County Highway Department Office, 610 Steury Ave, Goshen, Indiana starting on **May 6th, 2022**. A **pre-bid meeting** will be held at **10:00 A.M. on May 19th, 2022** at the Elkhart County Highway Department, 610 Steury Ave, Goshen, IN 46528. The pre-bid meeting is not mandatory, however attendance is recommended to receive the latest updates and have questions answered in the timeliest manner. Bidders who fail to participate in the pre-bid meeting and submit a bid do so at the risk of not having the best information.

Proposals shall be properly and completely executed on proposal forms furnished by the County in accordance with Revised Indiana Form 96 and shall be accompanied by the Contractor's Financial Statement form taken from Form 96A for any proposal of \$5,000 or more.

The Contractor shall submit an itemized proposal of the approximate quantities and components of labor and materials to complete the contract. Said proposal shall be upon the standard bid sheets used by Elkhart County, and said sheet must contain an authorized signature of the Contractor, or the bid of the Contractor may, at the discretion of Elkhart County, be rejected and declared invalid. Each proposal shall be accompanied by a non-collusion affidavit as required by the Statutes of Indiana. Bids shall be enclosed in a sealed envelope, bearing the title of the project and name and address of bidder.

Bids will be accepted only from bidders who have sufficient and qualified experience. Proof of qualifications must be submitted with the bid.

A current Contractor's Financial Statement taken from Form 96A and the Indiana Department of Transportation pre-qualification certificate may be placed on file with the Board of County Commissioners of Elkhart County at the Highway Department annually in lieu of executing these documents for each project.

Work may begin on **June 6, 2022**, with an intermediate completion of **July 11, 2022** and shall be completed by **September 9, 2022**. Please find intermediate completion information in the specifications. Delays in completion beyond that date shall result in liquidated damages levied against the Contractor by Elkhart County. The damage charges shall be one-thousand dollars (\$1000) per day per beyond the above stated date and any intermediate completion dates noted in the specifications.

A satisfactory bid bond (10% of bid), payable to the Board of County Commissioners of Elkhart County, Indiana executed by the bidder shall be submitted with each bid.

No bids shall be withdrawn after the opening of the bids without the consent of the Board of Commissioners of Elkhart County for a period of thirty (30) days after the scheduled time of closing.

Said work shall be subject to all the provisions of the plans and specifications therefore herein above referred to including the completion date thereof and penalty clause as therein set forth.

Dated this 2nd day of May, 2022
Board of County Commissioners of Elkhart County
By Patricia A. Pickens, Auditor

Advertise: May 4th and May 11th, 2022 - Elkhart Truth and Goshen News

The approximate quantities for this contract are as shown on the itemized bid tab included on the attached pages. If extra work is necessary due to shifting of any of the items of construction or if additional work is called for in accordance with these specifications, such work shall be paid for on the basis of the following itemized unit prices. In addition to the above, the said unit prices shall also be the basis of payment to the Contractor. The attached sheet (s) must be completely filled out and submitted with the sealed bid or Elkhart County may at its discretion, reject the bid and declare the same invalid. An authorized signature of the Contractor is mandatory upon the bid sheets. All other items necessary to properly complete this project or specifically outlined, shall be included within the line items provided and will be considered as incidental.

The award of this contract will be based on the sum of the items listed below for the Bae Bid. Please recognize that the quantities provided are estimated.

This Bid shall be so prepared as to properly indicate:

One (1) total lump sum to furnish labor, materials, services and equipment to perform the work indicated in the bid materials (drawings, specifications and or as specified herein). The Award of this project will be based on the "Total" Base bid, being the total sum of the items on the itemized bid tab. Please indicate this total below. The Alternate Items will not be part of the basis for award.

NOTE: Any Item may be withdrawn by Elkhart County at any time prior to the placement of the material.

ELKHART COUNTY

BID TOTAL: _____ dollars

(\$ _____)

Acknowledge Receipt of Addenda No.(s) _____.

Submitted by: _____
Company

Authorized Signature

Date: _____ **Phone:** _____

ATTEST: _____

Bristol to Middlebury Fiber Optic Project

Elkhart County

Base Bid

No.	Item	Qty	Unit	Unit Price	Extended Price
1	Mobilization and Demobilization	1	LS		
2	Maintenance of Traffic	1	LS		
3	Fiber Optic Cable, 144 Strand SMF	39,040	LF		
4	Communication Conduit, 1.25 inch	31,581	LF		
5	Communication Conduit, 2 inch	31,581	LF		
5	ATMS Handhole	39	EA		
Base Bid Total					

Division 3:

Project Technical Specifications

For

Elkhart Redundancy Fiber Optic Project

OWNERS:

ELKHART COUNTY, INDIANA, ACTING THROUGH
IT'S BOARD OF COUNTY COMMISSIONERS
ELKHART COUNTY HIGHWAY DEPARTMENT
ENGINEERING SECTION
610 STEURY AVENUE
GOSHEN, IN 46528



Elkhart County Highway Department
610 Steury Avenue, Goshen, Indiana 46528
Phone: 574-534-9394 • Fax: 574-533-7103

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TP1 - GENERAL PROVISIONS

GENERAL

The following Technical Provisions are in addition to the Indiana Department of Transportation 2016 "STANDARD SPECIFICATIONS", which Standard Specifications shall apply to this contract. Where the words "Standard Specifications" and also where reference consisting of a number or numbers are used, they shall be construed as referring to the Indiana Department of Transportation 2016 Standard Specifications and current supplemental specifications and standard detail drawings.

The term "State" as used in the Standard Specifications shall be deleted and replaced with the term "County".

The term "Engineer" as used in the Standard Specifications shall be the person, firm, or corporation named as such in the written Agreement between the OWNER and CONTRACTOR.

TP2 - TIME OF COMPLETION

GENERAL

Work on this Contract shall not begin prior to notice to proceed. The Contractor shall begin on or after **June 6, 2022**, with an intermediate completion of **July 11, 2022** between County Road 6 and Mishawaka Street and shall complete all work no later than **September 9, 2022**.

This completion date is a 'fixed calendar date' as defined by INDOT Standard Specifications section 108

Determination and Extension of Contract Time for Completion and Failure to Complete on Time shall be in accordance with the Agreement and all applicable requirements of 108.08 and 108.09 respectively, and modified as follows.

No extension of Contract Time shall be allowed for weather or changes in quantities placed. Contract time and completion dates do not pause December 1 (or any other date) for winter and are calculated continuously until time of completion.

Changes in Contract Time will only be considered if requested in writing by the Contractor in accordance with Article 10 of the General Conditions.

The Contractor shall notify the Owner at least two (2) weeks in advance of his intention to perform any Work on the project. The contractor shall give the owner/inspector updated schedules of work on a bi-weekly basis or as the schedule changes. The Contractor shall also notify the appropriate agencies of his intention to close any County Road in connection with the project. See ROAD CLOSING REQUIREMENTS.

Note that "Road Construction Ahead" signage shall be installed prior to any other work, and shall be

removed only upon final acceptance of the project or initial acceptance of the segment for paving packages. These signs shall be checked on a daily basis and promptly reset as needed.

Substantial completion is defined as the conduit and fiber in place, spliced as needed, and useable by the Owner for their purposes.

TP3 - UTILITIES

GENERAL

The Contractor shall determine the location of all underground and overhead utility lines within the project limits. If proper clearances cannot be obtained, affected planned structures shall be placed as otherwise directed and approved by the adjacent utility representatives (and as accepted by the Engineer).

COORDINATION WITH UTILITIES

The Contractor shall be responsible for utility property and services in accordance with 107.20 of INDOT's Standard Specifications. All of the permanent and temporary utility appurtenances in their present or relocated positions shall have been considered in the bid. No additional compensation will be allowed for any delays, inconvenience, or damage sustained by the Contractor due to any interference from the said utility appurtenances or the operations of moving them.

The plan drawings include a list of names for the known companies that may have utilities located within the limits of construction in this contract. If any of these utilities are affected, it shall be the Contractor's responsibility to identify and coordinate with that utility.

The prime contractor shall be ultimately responsible for the completeness and promptness of utility location(s) for subcontractors. Multiple locations of the same facilities may be required throughout the project time.

TP4 - STORAGE OF CONTRACTOR'S EQUIPMENT, MATERIALS AND TEMPORARY OFFICES

GENERAL

The Contractor will be permitted to store non-operating construction equipment, workmen's vehicles, materials and temporary offices within the limits of the Right-of-Way with approval from Owner.

In the event that the Right-of-Way is not available for storage, the Contractor shall procure an adequately secure operations site as an incidental item to the contract.

All areas within the limits of the Right-of-Way that are used by the Contractor for temporary storage of

materials, non-operating construction equipment, workmen's vehicles and temporary offices, when no longer required for such purpose, shall be restored to their original condition by the Contractor at his own expense.

The Contractor shall not use property adjacent to the project Right-of-Way for storage, parking or any other use without prior approval from the property owner.

PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE

The Contractor shall be responsible for preservation of all public and private property. All areas on the Right-of-Way that are used for storage of any kind shall be restored to their original condition when no longer required for that purpose. Generally, this shall comply with the requirements of Sections 107.14 and 107.19 of Standard Specifications.

TP5 - HAZARD COMMUNICATIONS PROGRAM

GENERAL

Pursuant to the latest requirement of OSHA the bidder is obligated to inform his employees concerning the health and safety hazards of chemical substance that may be required in the performance of this contract.

TP6 - ENVIRONMENTAL RESTRICTIONS

GENERAL

All trees or shrubs outside the construction limits shall not be disturbed.

Construction limit is defined as the Right-of-Way line unless otherwise shown on the plans.

PERMITS

Regulatory permits for this project to be obtained by the OWNER currently are as follows:

- NONE

The CONTRACTOR is responsible for securing all other permits that may be required for this project in accordance with the Standard Specifications.

TP7 - RIGHT-OF-WAY CLEARING

GENERAL

Clearing right-of-way shall include the removal and/or trimming of all trees and brush within the right-of-way unless specifically identified on the contract plans to remain. Stumps shall be entirely removed and filled with sand.

Incidental to the work shall be the removal of any miscellaneous obstructions within the right-of-way.

The work shall include the removal of portions of existing pavement as indicated by plan details and/or within the construction limits or to the r/w line, whichever is greater.

It is the Contractor's responsibility to adequately inspect the site and clarify the intent of the project prior to submitting a bid.

TP8 - MAINTENANCE OF TRAFFIC

GENERAL

All signs and traffic control devices shall be in accordance with the Indiana Department of Transportation Standard Specifications and the Indiana MUTCD so as to provide continuous, safe, 2-way traffic at all times.

The Contractor shall be totally responsible for the maintenance of traffic. Maintaining of traffic shall be the non-delegable duty of the Contractor to fulfill each and every responsibility and to accept full liability. All applicable provisions of 107.12 shall apply to work being done under traffic.

Access to residential and business driveways within the project limits shall be maintained at all times. Temporary closure of driveway access may be allowed upon approval of the Engineer and adequate notification of the property owner. All driveways shall be accessible at the end of each work day. Stone, gravel or other temporary materials needed to make driveways accessible will not be paid for directly but will be included in the Maintenance of Traffic pay item.

Construction signs and barricades shall be as per INDOT standard sheets and shall be in sufficient condition for good functioning (i.e. visible, readable, reflective, etc.).

The Contractor will be responsible for maintenance of traffic including all construction signs necessary or as directed by the Engineer for the duration of construction.

When necessary or as directed by the Engineer, the Contractor shall provide standard reflective barrels with approved weighting systems, flagmen, caution tape, temporary pavement markings, etc. Reflective barrels shall be placed to warn motorists of hazards. Maximum spacing of barrels shall be 30 ft.

The timing of any lane restrictions shall be subject to approval by the Engineer.

The Contractor shall keep lane restrictions to an absolute minimum, as reasonable in order to complete the work. When lane restrictions are necessary, the Contractor shall perform continuous work operations so as to lift the lane restrictions as soon as possible. Lane restrictions shall not remain in place while the

Contractor is not actively working.

All costs of maintaining traffic shall be paid for at the lump sum price, and such price shall include and be full compensation for all costs incurred by the Contractor for maintaining traffic, and as set forth in Sections 104.04 and 108.04 of the Standard Specifications.

The Contractor shall be responsible for safe driving of haul trucks, heavy equipment, etc. related to the project work, including subcontractors.

The Contractor shall give a 24 hr. /day emergency phone number to the owner and to local law enforcement authorities, for the prompt response to project-related concerns during non-work hours.

Lane restrictions shall be during daylight hours only unless otherwise approved by the Engineer.

Note that "Road Construction Ahead" signage shall be installed prior to any other work, and shall be removed only upon final acceptance of the project. These signs shall be checked on a daily basis and promptly reset as needed.

On roads that have an ADT of 5000 cars per day or greater, advance warning of road construction and / or closure shall be placed 1 week in advance of construction and detour route established.

TP9 - CONSTRUCTION STAKING

The Contractor shall provide construction layout/surveying under the direction of a licensed land surveyor for the improvements as shown in the project plans and specifications. The cost of this item shall be included in the cost of other items and shall include, but may not be limited to, determining the available right-of-way as needed.

TP10 - CONTRACTOR'S RESPONSIBILITY FOR MATCHING OLD WORK

GENERAL

Where new work is to be fitted to old work, the Contractor shall check all leading dimensions and conditions in the field and report any errors or discrepancies to the Engineer and assume responsibility for their correctness and the fit of new parts to old. If such parts do not fit properly, the Contractor shall make and pay for such alterations or new parts as may be necessary to assure proper fits and connections meeting the approval of the Engineer.

TP11 - DUST AND AIR POLLUTION CONTROL

DESCRIPTION

Provision shall be made for prompt removal from traveled roadways of all dirt and other materials that

have been deposited thereon by operations concerned with the project whenever the accumulation is sufficient to cause the formation of dust or mud, interfere with drainage, damage pavements, or create a traffic hazard. Construction methods and means shall be employed to keep flying dust and air pollution to a minimum. Provisions shall be made for the control of dust on the project and on the roads, streets and other areas affected by the project wherever traffic or buildings or construction materials are affected by such dust. The materials and methods used for dust control shall be subject to approval by the Engineer. The cost of controlling dust and air pollution shall be included in the costs of other pay items and no additional payment will be made.

TP12 - CONTAMINATION PRECAUTION

GENERAL

Contractor shall take all precautions to avoid the spillage of construction-related liquids and fuels during the project. All portable stationary fuel tanks shall have secondary containment.

TP13 - EARTHWORK

GENERAL

This work shall consist of all earthwork required for the completion of the project as detailed on the plans and in the specifications. This item includes excavation, embankment construction, hauling, disposal and/or compaction of all material not being removed under some other item which is encountered within the limits of the work and also from intersecting entrance approaches beyond the Right-of-Way limits necessary for the construction of the roadway in accordance with the Specifications and in reasonably close conformance with the lines, grades, thickness and typical cross section shown on the plans or as directed.

Excavation for culverts, ditches, sewers, tunnels, and other approach structures will not be paid for directly, but the cost thereof shall be included in the cost of other pay items. Removal and disposal of piles of broken concrete and similar debris located on the Right-of-Way shall be included in the cost of earthwork. Where surplus material is suitable for use in the roadway or bridge approach embankment, it may be used as allowed by the Engineer.

Borrow shall consist of approved material required for construction of embankments. No direct payment will be made for borrow required for embankment construction in accordance with lines, grades and typical cross sections specified.

The work shall include salvaging topsoil and replacement of topsoil for top dressing areas to receive sod or mulch seeding.

CONCRETE PAVEMENT REMOVAL

Removal of pavement shall consist of the removal and satisfactory disposal of portland cement concrete

pavement; portland cement concrete resurface with its base; or the total of any combination of base, binder, and surface course of any pavement on a portland cement concrete base, including the base. Each complete pavement removed will be considered as a separate item and paid for as such when removed. Pavement removal shall include only the removal and disposal of existing public road, driveway or street and alley pavement as required for the planned construction. Curb removal shall include curb that is separate from the pavement or removed separately. Integral curb that is removed with the adjacent pavement shall be paid for as pavement removal. Prior to performing the work of pavement removal at locations indicated on the plans or where directed, concrete pavement to be removed shall be cut with a power driven concrete saw along designated lines. Sawing shall be such that any portion of the pavement to remain in place will not be damaged. Any portion that is damaged or removed outside the designated lines shall be replaced with no additional payment. Sawing of pavement to be removed will not be paid for directly, but shall be included in the cost of pavement removal.

If no Pay Item has been established in the Proposal for Concrete Pavement Removal, and such work is necessary to perform the above, such work shall not be paid for directly, but shall be included in the costs of other pay items.

CONSTRUCTION

Excavation and embankment methods and testing shall conform to the INDOT standard specifications.

TP14 - DEWATERING

GENERAL

No pay item will be provided for dewatering. Any expenditure for equipment, labor, etc. to provide dewatering of an excavation should be included in the price of the other line items.

The Contractor shall arrange for dewatering discharge outfalls. Outfalls shall be acceptable to the Owner, the Elkhart County Drainage Board and the Indiana Department of Natural Resources.

TP15 - RECORD DRAWINGS

GENERAL

Record Drawings shall be required for all major projects.

Record Drawings shall be required for minor projects if they include, but not limited to, the following elements: change in road elevations, profile, alignment, small structure improvement, intersection improvement, drainage pipe and structures.

The Contractor shall provide the Owner with two (2) complete sets in PDF and KML format on a CD or DVD.

MINIMUM RECORD DRAWING REQUIREMENTS

Record drawings shall include the following, but not be limited to:

- 1) Installed structure locations (including GPS coordinates)
- 2) Installed conduit locations, with GPS coordinates at each change in direction, or every 500 feet along tangent runs.
- 3) Any other newly constructed or reconstructed features pertinent to the project
- 4) Bore logs with record depth and distance from the edge of pavement every 20 feet.

Record drawing preparation shall be incidental to the contract.

TP16 - MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)

Wherever in the Contract Documents reference is made to the Manual on Uniform Traffic Control Devices, MUTCD, it shall be interpreted to mean the 2011 Indiana Manual on Uniform Traffic Control Devices.

TP17 - COORDINATION CLAUSE

Contractor shall coordinate the work on this project with any other public works projects that may be taking place within the vicinity of the project site, or that are seen to, or are expected to, have an effect on this project or that this project has on another. This includes coordination with projects funded by Elkhart County, neighboring counties, municipalities, utilities or INDOT.

TP18 - EXISTING TRAFFIC CONTROL DEVICES

GENERAL

- (a) This work shall consist of the removal and delivery to the County of all roadway signs and delineators that are to be removed and not reused in this contract. These items are to be delivered to the location specified by the Engineer. This work will not be paid for separately, but shall be included in the cost of other items.
- (b) Signs not required to be removed, or are planned for reuse, that are damaged by the Contractor shall be replaced by the Contractor.
- (c) All existing regulatory signs shall be maintained at all times during construction. For questions that should arise, the Engineer will be notified.
- (d) For all other signs that are to be disturbed, the County will be notified as to the

reinstallation of these signs.

- (e) All existing traffic signals, masts, poles and other hardware if removed must be salvaged and maintained in good condition by the Contractor. The County has salvage rights for all removed items if not reused in the course of constructing this project.

TP19 - FIBER OPTIC CABLE

DESCRIPTION

This work consists of installing fiber provided by the County and all necessary equipment and materials to complete a fiber optic communications system in accordance with these Specifications and as shown on the plans or established by the Engineer. There will be the following types of fiber cable as part of the contract;

- 144 strand single mode dielectric Corning fiber that will be placed in communications conduit, bored or plowed under the ground or within existing conduit along roadways and paths outlined in the engineering drawings.

The Engineer's approval or acceptance of materials or work performed shall in no way lessen the Contractor's responsibility to provide a fully functioning system.

1. General Requirements

- A. Provide all new corrosion resistant materials to be furnished, assembled, fabricated, or installed under this section, , and in accordance with the details shown on the Plans and in the Specifications.
- B. Provide identical and completely interchangeable equipment at each field location.
- C. Provide equipment which protects personnel from exposure to high voltage during equipment operation, adjustments, and maintenance.
- D. Provide field equipment which performs to stated specifications over a temperature range of -29.2° to 165° F and a humidity range of 0 percent to 95 percent relative non-condensing.
- E. Comply with working clearances and dedicated spaces per NEC Articles 110, 384 and 800-5, as well as all current NEC articles, and Federal, State and Local regulations.

MATERIALS

Provide materials conforming to the following specifications:

1. Acceptable fiber cable manufacturers are (in alphabetical order):

- A. Alcatel.
- B. Avaya Communication.
- C. Belden.
- D. Berk-Tek.
- E. BICC General.
- F. CommScope.
- G. Corning
- H. Mohawk/CDT.
- I. Molex.
- J. Optical Cable Corporation.
- K. Superior Cable/Essex.
- L. West Penn Wire/CDT.
- M. Or approved equal.

2. Components:

A. Fiber Optic Conductors

(1) Single Mode Fiber Optic Cable.

(a) General

- (i) Use cable with individual strands that are 8.3/125 micrometers dual window single mode optical fiber.
- (ii) Use cable which meets or exceeds the following characteristics:

<u>Wavelength (nm)</u>	<u>Maximum Attenuation dB/km</u>
1310	0.4
1550	0.3

B. For Outdoor Fiber Cabling provide cable with the following characteristics:

- (1) Loose tube, break-out type
- (2) Rated for indoor/outdoor use, armored
- (3) Integral strength member
- (4) Core filled with dry water blocking compound or water blocking tape

C. For Outdoor Direct Burial Fiber Cabling provide cable with the following characteristics:

- (1) Loose tube, break-out type
- (2) Rated for outdoor direct burial, armored, rodent-resistant cabling.
- (3) Will meet or exceed ANSI/ICEA S-87-640-1999, standard for Optical Fiber Outside Plant Communications Cable.
- (4) Cable will have a crush resistance of 250 lbf/in minimum.

D. For Fiber Optic Patch Cords provide components with the following characteristics:

- (1) Riser rated, insulated, and jacketed.
- (2) Use connectors on equipment side that match provided equipment connector type.
- (3) Use connectors on patch panel side that are LC type.

- E. For Cross Connect Equipment provide components with the following characteristics:
- (1) Patch Panel for Fiber Optic Cable Termination:
 - (a) Fully outfitted with connector panels to match terminations and in quantity as required to house all strands
 - (b) Use single mode couplers that are blue in color if required
 - (c) Where mounted in exterior location (e.g. cabinet locations) use panels that are watertight, re-enterable, and corrosion resistant
 - (2) Fiber Splice Closure
 - (a) Sealed and capable of maintaining a pressure of 5 psig.
 - (b) Constructed of materials that can be submerged in 10 feet or less of water for indefinite periods without degradation or pressure loss.
 - (c) Fully outfitted with fusion splice trays in sufficient quantity as required to organize and contain all strands.

CONSTRUCTION

1. Installation.

- A. Install Fiber Optic Cable using the following requirements:
- (1) During installation, do not bend cable to a radius of the cable less than 20 times its outside diameter and do not install such that the installed bend radius of the cable is less than ten times its diameter
 - (2) Do not exceed the manufacturer's maximum recommended pulling tension of the cable
 - (3) Follow the manufacturer's guidelines and industry standards on handling and installing the cable
 - (a) Install fiber optic cable in conduit.
 - (b) Securely fasten arimid yarn and/or central strength member of fiber optic cable to termination equipment
 - (c) Provide 75 foot minimum service loop of fiber optic cable in all handholes and vaults
 - (d) Dress and secure all service loops in a neat and workmanship-like manner to the handhole rack or side structure. Do not place service loops on the handhole floor
- B. Outdoor Rated Cables.
- (1) Install to comply with NEC 800-11 and all other applicable regulations and practices, including bonding, grounding, and lightning protection according to the contract documents

2.

Document all installation activities, including the quantity, brand, model/part numbers, test results of all materials used. Provide installer signed list of the materials installed with the required documentation.

METHOD OF MEASUREMENT

The completed work as described for single mode fiber (SMF) cable will be measured by the linear

foot, installed, measured horizontally along the surface from center of handhole to center of handhole, vault, cabinet or other terminating point. Extra cable lengths for the required service loops at handholes, vaults and controller cabinets are considered incidental and will not be included in the measured quantity.

The completed work shall include all necessary excavation, site restoration, fiber, fiber installation, and other accessories necessary for a complete installation.

BASIS OF PAYMENT

Payment for the work included in this provision will be paid for at the contract unit price, measured as stated above. The cost of materials, labor, equipment, required service loops and necessary incidentals are included in the cost of this work.

Pay Item

Pay Unit

Fiber Optic Cable, 144 Strand SMF

LF

TP20 - COMMUNICATIONS CONDUIT

DESCRIPTION. This work shall consist of installing for the fiber optic communications system. The conduit shall be installed as shown on the plans, linking handholes, vaults, and controller cabinets. Installation methods may include trenching, plowing, and boring, as site conditions require. The County will provide conduit, pull tape, marker posts and tracer wire.

MATERIALS. Unless otherwise specified, all communications cable shall be installed in smooth, continuous, pre-lubricated conduit as shown in the plans and as approved by the Engineer. Conduit colors shall be approved by the Engineer.

Conduit shall be either Polyvinyl Chloride (PVC) conforming to NEMA TC-2 for electrical plastic conduit, EPC-80 or HDPE conforming to NEMA TC-7, EPEC 80. Conduit shall terminate without bends if possible. Bends greater than 10 degrees shall be rigid steel conduit; having a minimum radius of 10 times the nominal diameter of the conduit (30 degree maximum bends – 90 degree bends are prohibited). The exterior of the steel bends shall be double wrapped with

10-mil PVC tape.

Each conduit run shall have a tracing wire installed on the outside of the conduit(s) to facilitate locating the buried conduit in the future. The wire shall be a No. 10 AWG stranded copper Type USE wire. The wire shall be connected with a connector at each end to a lightning, gas-protecting arrester mounted in the vault which is attached to a ½-inch x 8-foot long ground rod placed in the floor of the vault. The tracing wire shall be green in color.

Underground warning tape shall be installed in all trenches where conduit is installed. The warning tape shall be installed approximately 12 inches below the surface. The tape shall be 4-inch wide polyethylene material, at least 0.004 inches thick. The tape shall be orange with black letters that say "Caution - Buried Fiber Optic Cable". The message shall be repeated continuously along the length of the tape. Other legends may be tendered for approval.

Above ground markers shall be Pro-Mark Model 301, Orange, 3.85"x72" or Pro-Mark Model 303, Orange, 3.5" x 6' with PM-TS3 Test Stations, or approved equals. Submit wording for markers for approval before ordering.

A pull tape for pulling future cable through the conduit shall be located inside the conduit, tied off and labeled at each terminus of the conduit.

Pull tape will be prefabricated woven polyester tape made from low friction, high abrasion resistant yarns providing a low coefficient of friction. Pull tapes will be prelubricated. Pull tapes will be printed with sequential footage markings for accurate measurement. Pull tapes will be ½ inch wide and have a minimum tensile strength of 1,250 pounds.

After installation the conduits shall be sealed / plugged with a suitable compound so as to prevent the entrance of moisture or gases.

CONSTRUCTION. Before commencing work, a complete schedule of materials and equipment proposed for installation shall be submitted to the Engineer for approval. This schedule shall include catalog cuts, diagrams, drawings, and other such descriptive data that may be required by the Engineer.

All submittals shall include the manufacturer brand name and part number where applicable. Where more than one item is present on a submittal sheet, the appropriate item or items shall be circled, not highlighted. In the event that any materials or equipment fail to comply with specification requirements, are not circled, or submittals are not packaged, such items may be rejected. New submittals on rejected items shall be supplied to the Engineer for approval.

When it is required by these specifications that a test be made of the material to be used on the project, the Contractor shall furnish the Engineer a certified copy of such test prior to the installation of such material.

Aboveground fiber optic conduit markers shall be installed to indicate fiber optic cable

routing. The markers shall be placed at handholes and vaults, and midpoint between adjacent fiber optic handholes and vaults and/or such that the spacings are no more than 500 feet between markers. Markers with test stations shall be installed at handholes and vaults with the test stations connected to the trace wires in the conduits. Markers without test stations shall be installed at locations between structures.

Pull tape shall be located inside the conduit, tied off and labeled at each terminus of the conduit. All conduit connected to handholes or vaults shall be installed flush with the inside wall and a minimum of 3 inches above the bottom of the floor. After installation the conduits shall be sealed / plugged with a suitable compound so as to prevent the entrance of moisture or gases.

The proposed path of the conduits shall be determined by the Contractor and approved by the engineer before installation commences. The Contractor shall bore the conduits under all existing roadways, creeks and ditches. A minimum separation of 36" between the bored conduit and creek or ditch bottoms shall be required. The contractor shall pass underneath any culverts or roadway drainage structures (including underdrains) in conflict with the conduit route by a minimum separation of 24". All conduit will be installed at a depth between 32"-48" unless approved by engineer.

The Contractor shall provide GPS coordinates of the completed conduit route at all changes of direction and termination points. These coordinates shall be indicated on the final as-built plans of the project and transmitted to the Owner in paper, AutoCad, and pdf formats. Depths of bores and distance from the edge of the road shall also be recorded and listed on the as-built plans.

METHOD OF MEASUREMENT. The completed work as described will be measured by the linear foot, installed, measured horizontally along the surface from center of handhole to center of handhole, vault or other terminating point. Pull tapes, warning tapes, trace wires, steel bends, cable markers and all other items necessary to make a complete installation as described in these contract documents are considered incidental and will not be measured or paid for directly, the costs of these items shall be included in the cost of the conduit.

BASIS OF PAYMENT. Payment for the work included will be at the contract unit price, measured as stated above, and under the following pay items:

<u>Pay Item</u>	<u>Pay Unit</u>
Communication Conduit, 2 inch	LF
Communication Conduit, 1.25 inch	LF

TP21 - ATMS VAULTS AND HANDHOLES

DESCRIPTION. This work consists of installing new Advanced Traffic Management System (ATMS) vaults and handholes. Vaults shall be placed as shown on the plans, with final approval of locations by the Engineer before installation. It is the contractor's responsibility to coordinate with and avoid, if possible, existing utilities. The County will provide the vaults

1. General

A. Install new ATMS vaults and handholes as necessary along the fiber route as noted on the plans or at the required spacing.

MATERIALS.

All handholes shall be:

- Quazite 24" x 36" PG Style, Cover: with bolts, part no. PG2436HA00. Box: PG2436BA36. All handholes must be ANSI Tier 15 rated. Not for use in pavement areas.
- INDOT precast signal handhole, see INDOT specifications. To be used under pavement areas.
- Other approved equals

All handhole and vault covers are required to be bolted into place to prevent accidental removal by mowing crews or other unintentional means. New continuous pull ropes/tapes will be placed into each run of conduit from structure to structure. Pull ropes/tapes will be made of high tensile, high tenacity, low shrink polyester fibers with a minimum tensile strength of 1200lbs. All covers shall bear the legend 'Traffic Management System'.

CONSTRUCTION. All conduit will be made continuous between each handhole or vault. Pull ropes or pull tape will be installed between each handhole or vault and anchored at each structure leaving 15' of slack in each location. The conduit will be verified continuous and free of dirt and debris between each structure and all other relevant connection points. Conduit will be verified water tight by performing an air pressure test before cable or pull ropes/tapes are installed within the conduit. Material surrounding the ATMS structures will be tamped and added in such a manner so that there are no voids or depressions formed. Conduit entrance and exit points in the new ATMS structures shall be sealed watertight and ends of the conduit shall contain bells to protect the cable being pulled into it. The contractor shall field adjust structures as necessary to avoid utility conflicts.

The Contractor shall provide GPS coordinates of the completed handhole and vault locations. These coordinates shall be indicated on the final as-built plans of the project and transmitted to the Owner in kml, csv or excel, and pdf formats.

METHOD OF MEASUREMENT. The completed work as described will be measured by the

unit of each and includes furnishing and installation of a new structure, connecting conduit or cable, a bolt down cover and all other accessories necessary for a complete installation.

BASIS OF PAYMENT. Payment for the work included in this item, as measured above, will be included in the following pay items. The cost of labor, equipment, and necessary incidentals are included in the cost of this work.

<u>Pay Item</u>	<u>Pay Unit</u>
ATMS Handhole	EA