Request for Proposal for
Network Infrastructure Installation
I-25: 120th Street, Northglenn, CO to Wyoming Border
by EAGLE-Net Alliance
for the Colorado Community Anchor Broadband Consortium Project

RFP # 107057-08

G4S Technology LLC
12742 East Caley Avenue, Unit 2B
Centennial, CO 80111

Procurement Team Leader: Kenneth J. DeRose
RFP Issued: November 22, 2011
Deadline for Written Questions: November 30, 2011, 5:00PM Mountain
Pre-Bid Meeting: December 2, 2011, 10:00AM Mountain
Answers Posted: December 6, 2011, 5:00PM Mountain
Submission of Proposals Deadline: December 15, 2011, 12:00PM Mountain
TABLE OF CONTENTS

1. INTRODUCTION .................................................................................................................. 1

2. BACKGROUND .................................................................................................................. 1

2.1 CCABC Network Characteristics ...................................................................................... 1

3. INSTRUCTIONS TO BIDDERS ...................................................................................... 2

3.1 Labor and Wages ............................................................................................................ 2

3.2 Single Bidder Award ...................................................................................................... 5

3.3 Bond Requirements ........................................................................................................ 5

3.4 Insurance Requirements ................................................................................................. 5

4. SUBMISSION OF RESPONSES ....................................................................................... 6

4.1 Schedule .......................................................................................................................... 6

4.2 Pre-Bid meeting ............................................................................................................. 6

4.3 Questions ........................................................................................................................ 6

4.4 Interviews & Selection Finalists .................................................................................... 7

4.5 Instructions for Submission of Responses ...................................................................... 7

4.6 Information Required .................................................................................................... 7

5. EVALUATION PROCESS AND CRITERIA .................................................................... 8

6. OTHER PROVISIONS ....................................................................................................... 8

6.1 General Information ....................................................................................................... 8

6.2 Waiver ............................................................................................................................. 9

6.3 Disclaimer ....................................................................................................................... 9

6.4 Changes/Amendments to RFP ...................................................................................... 10

Attachment A: Scope of Work ............................................................................................. 11
Attachment B: Prime Contract Flow-Down Provisions ....................................................... 42
Attachment C: Pricing Sheet .................................................................................................. 43
Attachment D: Bidder’s Capabilities Matrix ......................................................................... 44
Attachment E: Sample Bond and Insurance Forms ............................................................. 45
Attachment F: G4S Technology LLC Subcontract Agreement ............................................ 48
1. **INTRODUCTION**

G4S Technology LLC (“G4S Technology”) has been contracted by EAGLE-Net Alliance (“EAGLE-Net”) to, amongst other responsibilities, issue this request for proposal (“RFP”) seeking price quotations for the construction of a fiber optic communications network along the I-25 interstate corridor from 120th Street in Northglenn, CO to the Wyoming border, approximately 75 miles.

EAGLE-Net, an intergovernmental entity created pursuant to Colorado statute, is currently undertaking the design and construction of a new middle-mile fiber optic network in Colorado in a project called the Colorado Community Anchors Broadband Consortium (“CCABC”). The project was awarded by the National Telecommunications and Information Administration (NTIA) during Round 2 of the American Recovery and Reinvestment Act (ARRA) Broadband Stimulus Funding to fulfill the requirements of the Broadband Technology Opportunities Program (BTOP) Grant.

EAGLE-Net has designated G4S Technology LLC (formerly Adesta, LLC) as the design-build contractor to provide network design and build services for deployment of the EAGLE-Net network. EAGLE-Net will partner with G4S Technology and other partners to fulfill the requirements of the $100.6 million Broadband Technology Opportunities Program (BTOP) grant that was awarded in September 2010.

2. **BACKGROUND**

EAGLE-Net will be working collaboratively with public-private partners to construct a broadband network across the state of Colorado that will connect 234 community anchor institutions. Included in the grant application are all 178 public school districts, 26 libraries, 15 community colleges, 3 institutions of higher education and 12 Boards of Cooperative Educational Services (BOCES).

The expansion of broadband connectivity and services through EAGLE-Net benefits the entire state of Colorado. With its Round 2 BTOP funding, EAGLE-Net is focused on fostering and expanding educational opportunities in the K-12 public school sector. EAGLE-Net is also working with higher education institutions and libraries to expand their broadband connectivity options and access to research and education networks like Internet2 and TransitRail.

EAGLE-Net’s fully collaborative and secure high-speed broadband network will continue to expand and enhance available services for education, research, healthcare, workforce development, local government and public safety.

2.1 **CCABC Network Characteristics**

The CCABC network is currently expected to have the following characteristics, subject to further adjustment as its design is finalized:
• Hundreds of miles of new fiber construction in Colorado and Wyoming ("EAGLE-Net-Owned Fiber");
• Hundreds of miles of IRU leased and/or purchased fiber throughout Colorado;
• Connections to Community Anchor Institutions ("CAIs"), including but not limited to schools (K-12) and libraries;
• Connections to carrier-neutral “hotels” to serve as core Internet connection sites;

3. INSTRUCTIONS TO BIDDERS

3.1 Labor and Wages

There is a prevailing wage requirement for the Scope of Work included within this RFP in accordance with the following:

Broadband Technology Opportunities Program

Davis-Bacon Act Requirements

Overview


Notwithstanding any other provision of law and in a manner consistent with other provisions in this Act, all laborers and mechanics employed by contractors and subcontractors on projects funded directly by or assisted in whole or in part by and through the Federal Government pursuant to this Act shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code. With respect to the labor standards specified in this section, the Secretary of Labor shall have the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.) and section 3145 of title 40, United States Code.

Scope of the Davis-Bacon Act

The Davis-Bacon Act prevailing wage requirements apply to laborers and mechanics employed under contracts or subcontracts in excess of $2,000 for construction, alteration, or repair activities (including but not limited to painting and decorating) that are funded, in whole or in part, under BTOP grant awards. In general:
• Laborers and mechanics – Are workers whose duties are manual or physical in nature, including apprentices, trainees and helpers, but do not include workers whose duties are primarily managerial, administrative, executive, or clerical. See 29 C.F.R. § 5.2(m).

• The $2,000 threshold – Pertains to the amount of the prime construction contract, not to the amount of individual subcontracts. Accordingly, if the prime construction contract exceeds $2,000, all construction work on the project (including subcontracts) is covered by the Davis-Bacon Act. See 29 C.F.R. § 5.5(a)(6).

• Construction, alteration, or repair activities – Are those occurring at the “site of the work” that involve the alteration, remodeling, or installation of items fabricated off-site; painting and decorating; manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work; and, in certain cases, transportation between the site of the work and other points. See 29 C.F.R. § 5.2(j).

• Site of the work – Is the physical place or places where the building or work called for in the contract will remain, and any other site where a significant portion of the building or work is constructed, provided that such site is established specifically for the performance of the contract or project, and includes job headquarters, tool yards, batch plants, borrow pits, etc., if they are dedicated exclusively, or nearly so, to performance of the contract or project, and are adjacent or virtually adjacent to the site of the work. The site of the work does not include permanent home offices, branch plant establishments, fabrication plants, tool yards, etc., of a contractor or subcontractor whose location and continued operation are determined wholly without regard to a particular Federal or Federally-assisted contract or project. See 29 C.F.R. § 5.2(l).

• Application to Governmental Agencies – Governmental agencies, such as states or their political subdivisions, are not subject to the Davis-Bacon Act requirements when construction work is being performed by their own employees on a "force account" basis. See 29 C.F.R. § 5.2(h).

Davis-Bacon Act Requirements

Required contract provisions (appearing at 29 C.F.R. § 5.5) and the applicable wage determination(s) for the activities contemplated by a construction project must be included in any contract or subcontract to which the Davis- Bacon Act applies providing, among other items, that:

• Laborers and mechanics must be paid the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) at least once a week;

• No paycheck deductions or rebates are permitted, except as permitted under Department of Labor (DOL) regulations (29 C.F.R. §§ 3.5-3.6); and

• Wage and fringe benefit rates must be no less than those contained in DOL wage determination for the labor classification for the work actually performed.

In cases where state wage rates (determined under state statutes often called “Mini-Davis- Bacon Acts”) are higher than the Federal wage rates, the state wage rates take precedence and should be included in contracts in lieu of the lower, Federal wage rates.
In cases of construction projects on tribal lands, the recipient should contact its assigned Federal Program Officer (FPO) for guidance on the interplay among the Davis-Bacon Act, state Mini-Davis-Bacon acts and the Tribal Employment Rights Ordinance (TERO).

Contracts for amounts over $100,000 that are covered by the Davis-Bacon Act must include additional standard clauses (also appearing in 29 C.F.R. § 5.5) providing, among other things, that overtime for laborers and mechanics must be paid at a rate 1.5 times the basic rate of pay for time worked in excess of 40 hours per week. These additional standard clauses can be found at: http://www.rurdev.usda.gov/mi/cp/Davis%20Bacon%20Labor%20Standards%20Contract%20Document.pdf.

In addition, the DOL Davis-Bacon poster (WH–1321) must be prominently posted at the site of the work. Refer to: www.dol.gov/whd/regs/compliance/posters/fedprojc.pdf.

**Davis-Bacon Wage Rate Determinations**

DOL conducts statewide surveys seeking payment data on wage and fringe benefit rates from construction contractors and other interested parties, such as labor unions. Wage determinations are issued by locality, typically on a county-by-county basis. Davis-Bacon Act wage determinations are published on DOL’s Wage Determinations OnLine (WDOL) website accessible at: www.wdol.gov. The Davis-Bacon Act prevailing wages are determined by DOL based on wages paid to various classes of laborers and mechanics employed on specific types of construction projects in an area.

If DOL has not published a wage determination for work that is needed to complete a BTOP construction project, the recipient may seek a Conformance. The recipient must submit a Conformance request using Standard Form (SF) 1444. Please go to www.wdol.gov/library.aspx to obtain a copy of the form and instructions.

To complete the form, the recipient must describe the work to be done (identified with a classification that is used in the subject area in the construction industry) and propose a wage rate that bears a reasonable relationship to existing wage determinations. Typically, the rate must not be less than the wage determination for an unskilled laborer and, for a skilled craft, must be at least equal to the lowest wage determination for any other skilled craft.

Infrastructure and CCI recipients should submit the completed SF-1444 through Grants Online as an “Other Action Request.” The SF-1444 will be routed to the National Oceanic and Atmospheric Administration (NOAA) Grants Officer and transmitted to the DOL Wage and Hour Division for review and approval. The Wage and Hour Division has committed to act on Conformance requests within 30 days.

**Recordkeeping and Monitoring Obligations**

Subcontractors must prepare weekly certified payroll documentation using Form WH-347 (available at: www.dol.gov/whd/forms/wh347.pdf), properly completed for laborers and mechanics performing activities covered by the Davis-Bacon Act requirements of the Recovery
Subcontractors must submit this information to G4S Technology on a weekly basis within seven days of the regular payment date of the Subcontractor’s payroll period. Subcontractor’s Davis-Bacon certified payroll and other records are subject to and may be audited by EAGLE-Net Alliance to ensure compliance.

**Enforcement and Penalties**

Violation of the requirements of Section 1606 of the Recovery Act and the Davis-Bacon Act and related acts is a serious offense. Compliance is subject to audit during OMB Circular A-133 audits (including program-specific audits) of BTOP grant recipients and subrecipients, as well as audits and investigations by the DOC Office of Inspector General, the Government Accountability Office (GAO), the DOL Wage and Hour Division, and other duly authorized officials.

A violation of the Davis-Bacon Act wage requirements may lead NTIA to impose appropriate enforcement action in connection with a BTOP grant award, up to and including suspension or termination of the award. In addition, contracting parties are subject to payment of back wages, and suspension or debarment from future contracts for a period of up to three years. Monetary damages may also apply.

Falsification of certified payroll records or the required kickback of wages may subject a violator to civil or criminal prosecution, the penalty for which may include fines and/or imprisonment.

**Bidders must make their own determination of applicable prevailing wage rates and wage classifications.**

**3.2 Single Bidder Award**

Pricing as set forth in this RFP is applicable to the segment described in Attachment A. It is the intent of G4S Technology and EAGLE-Net Alliance to award this segment to one Bidder.

**3.3 Bond Requirements**

The Bidder shall include in their response to this RFP the cost associated for providing the Performance and Payment Bond as specified in Section 4 of the G4S Technology Subcontract Agreement. See Attachment E for a sample bond form. No substitute bond forms will be allowed.

**3.4 Insurance Requirements**

In order to be awarded any work on this project, the Bidder will be required to comply with the Insurance Requirements specified in Section 11 of the G4S Technology Subcontract Agreement. Please ensure that you have reviewed these requirements and are capable of meeting such requirements upon execution of the Subcontract Agreement. A Sample Insurance Certificate has been provided in Attachment E for review.
4. SUBMISSION OF RESPONSES

4.1 Schedule

(a) This RFP process will proceed according to the following anticipated schedule:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 22, 2011</td>
<td>RFP Issued</td>
</tr>
<tr>
<td>November 30, 2011</td>
<td>5:00 p.m. Mountain time deadline for all questions and clarification</td>
</tr>
<tr>
<td></td>
<td>inquiries, submitted via e-mail to <a href="mailto:ken.derose@usa.g4s.com">ken.derose@usa.g4s.com</a></td>
</tr>
<tr>
<td>December 2, 2011</td>
<td>10:00 a.m. Mountain time Pre-bid meeting held at G4S Technology office:</td>
</tr>
<tr>
<td></td>
<td>12742 East Caley Avenue,</td>
</tr>
<tr>
<td></td>
<td>Centennial, CO 80111</td>
</tr>
<tr>
<td>December 6, 2011</td>
<td>5:00 p.m. Mountain time deadline for all answers to respondent’s</td>
</tr>
<tr>
<td></td>
<td>questions.</td>
</tr>
<tr>
<td>December 15, 2011</td>
<td>Proposals due by 12:00 p.m.</td>
</tr>
<tr>
<td></td>
<td>Mountain time</td>
</tr>
</tbody>
</table>

(b) The responses will be evaluated pursuant to the evaluation criteria set forth in this RFP. Notification of selection or non-selection of all respondents who submitted conforming responses will be transmitted when the selection process is final.

4.2 Pre-Bid Meeting

A mandatory pre-bid meeting will be held in accordance with Section 4.1(a). All Bidders interested in participating via teleconference must register with G4S Technology by 5:00 p.m. Mountain on November 30, 2011 in order to obtain the conference call information. To register, please email Ken DeRose at ken.derose@usa.g4s.com. G4S will transmit the conference call information to all registered bidders in advance of the teleconference. Questions addressed at the pre-bid meeting will be added to all other questions received.

4.3 Questions

Questions regarding this RFP, if any, should be submitted by electronic mail to ken.derose@usa.g4s.com. All questions must be received by the deadline noted in Section 4.1(a). Please include the RFP number in the subject heading. It is the responsibility of the respondent to inquire about any requirement of this RFP that is not understood. Responses to
all questions received will be distributed to all RFP recipients on or before the deadline noted in Section 4.1(a). G4S Technology will not be bound by oral responses to inquiries or written responses other than those formally distributed.

4.4 Interviews & Selection of Finalists

As part of the selection process, G4S Technology may invite finalists to answer questions regarding their proposal in person or in writing. G4S Technology may also choose to enter into a negotiation period with one or more finalist respondents and then ask the finalist respondent(s) to submit a best and final offer.

4.5 Instructions for Submission of Responses

Respondents are cautioned to read carefully and conform to the requirements of this RFP.

All proposals must be submitted in writing, including all required submissions. Should respondent submit hard copies of their response, then only one (1) copy is required.

Electronic mail submittals are acceptable. Should respondent submit their response via electronic mail, G4S Technology will “reply” with a confirmation receipt.

Proposals must be delivered to:

RFP No. 107057-08

CCABC Project

Kenneth J. DeRose

G4S Technology LLC

12742 East Caley Avenue, Unit 2B

Centennial, CO  80111

Email: ken.derose@usa.g4s.com

4.6 Information Required

All responses must include all of the following information in the order set forth below:

1. Attachment C – Bidder’s Pricing Sheet

This must be completed and returned as part of your response in order for Bidder to submit a qualifying proposal. Each category in the pricing sheet must be fully completed to comply. All bids received that do not comply will be disqualified without notice.
2. **Attachment D – Bidder’s Capabilities Matrix**

A Bidder’s Capabilities Matrix must be completed and returned as part of your response. Since this RFP constitutes a single bidder award, it is intent of G4S Technology that Bidder’s must be capable of performing the entire scope of work within this RFP. Should Bidder have to employ subcontractors for a portion of the project performance, Bidder shall note on this Attachment which work is being performed by Bidder and which work is being completed by a subcontractor.

3. **Response to Sample Contract Documents**

Attachment F includes a G4S Technology sample subcontract agreement which the successful bidder will be expected to enter into following contract award. This agreement is provided for your information only. If the agreement is acceptable as is please provide a positive statement that you have read and are willing to comply with this agreement. Attachment E contains a sample Performance and Payment Bond and an Insurance Certificate form showing bonding and insurance requirements if awarded a contract. Please provide a positive statement that you have reviewed are willing to comply with the bonding and insurance provisions.

5. **EVALUATION PROCESS AND CRITERIA**

G4S Technology will evaluate each response. Responses will be evaluated on many criteria deemed to be in EAGLE-Net’s best interest, including but not limited to, price; schedule; bidder’s capabilities; compliance with bonding, subcontract, and insurance requirements; minority affiliation; and such other factors that G4S Technology and EAGLE-Net determine. The order of these factors does not denote relative importance.

G4S Technology and EAGLE-Net reserve the right to consider such other relevant factors as it deems appropriate in order to obtain the best value.

This RFP does not commit G4S Technology and/or EAGLE-Net to select any firm, enter into any agreement, pay any costs incurred in preparing a response, or procure or contract for any services or supplies. G4S Technology and/or EAGLE-Net reserves the right to accept or reject any or all submittals received, cancel or modify the RFP in part or in its entirety, or change the RFP guidelines, when it is in the best interests of G4S Technology and/or EAGLE-Net to do so. G4S Technology reserves the right to request additional information from one or more respondents whose response best meet EAGLE-Net’s needs and business objectives without requesting such information from all respondents.

6. **OTHER PROVISIONS**

6.1 **General Information**
(a) Unless otherwise specified in this RFP, all communications, responses, and documentation must be in English. All responses must be submitted in accordance with the specific terms of this RFP. Notwithstanding anything contained herein to the contrary, all respondents understand that EAGLE-Net is a governmental entity. Any confidential information provided in accordance with this RFP shall be subject to the requirements of the Colorado Open Records Act.

(b) The Procurement Team Leader may provide reasonable accommodations, including the provision of material in an alternative format, for qualified respondents with disabilities or other hardships. Respondents requiring accommodations shall submit requests in writing, with supporting documentation justifying the accommodations, to the Procurement Team Leader. The Procurement Team Leader reserves the right to grant or reject any request for accommodations.

(c) The respondent may not alter the RFP or its components except for those portions intended to collect the respondent’s response. Modifications to the body of this RFP, specifications, terms and conditions, or which change the intent of this RFP are prohibited. Any modifications other than where the respondent is prompted for a response will disqualify the response.

(d) G4S Technology is relying on the truth and accuracy of statements made in respondent’s submitted response. Should any statement asserted by respondent prove to be inaccurate or untrue, such inaccuracy or untruth shall constitute sufficient cause for rejection of the response and/or of any resulting Agreement. The RFP evaluation committee will rule on any such matters and will determine appropriate action.

(e) If G4S Technology determines that it is necessary to revise any part of this RFP, or if additional data is necessary to clarify any of its provisions, a supplement will be distributed. The RFP evaluation committee reserves the right to amend the RFP at any time prior to the deadline for submission of responses.

(f) Submitted responses must be valid in all respects for a minimum period of thirty (30) days after the deadline for submission.

6.2 Waiver

G4S Technology and EAGLE-Net reserves the right, at its sole discretion, to waive minor irregularities in submittal requirements, to request modifications of the response, to accept or reject any or all responses received, and/or to cancel all or part of this RFP at any time prior to awards.

6.3 Disclaimer
This RFP does not commit G4S Technology and/or EAGLE-Net to award any funds, pay any costs incurred in preparing a response, or procure or contract for services or supplies. G4S Technology and/or EAGLE-Net reserves the right to accept or reject any or all responses received, negotiate with all qualified respondents, cancel or modify the RFP in part or in its entirety, or change the response guidelines, when it is in its best interests.

6.4 Changes/Amendments to RFP

This RFP has been distributed electronically using EAGLE-Net's website and other electronic solicitation distribution websites. It is the responsibility of respondents to check these websites for any addenda or modifications to a RFP to which they intend to respond. G4S Technology and/or EAGLE-Net accept no liability and will provide no accommodation to respondents who submit a response based on an out-of-date RFP document.
ATTACHMENT A

SCOPE OF WORK

1. GENERAL PROVISIONS
   1.1. Statement of Work
   1.2. Description of Work

2. GENERAL CONDITIONS
   2.1. Definitions
   2.2. General Requirements
   2.3. Materials and Services
   2.4. Permits
   2.5. Protection of Right-of-way
   2.6. Submittal Requirements
   2.7. Daily Project Clean Up Requirements
   2.8. Inspection and Acceptance
   2.9. Traffic Control
   2.10. Utility Locations and Subsurface Obstructions
   2.11. Supervision and Superintendents
   2.12. Project Meeting Requirements
   2.13. Environmental Conditions

3. CONSTRUCTION SPECIFICATIONS
   3.1. Clearing and Grubbing
   3.2. Plowing
   3.3. Grass/Sod Trench Installation
3.4. Pavement Trench Installation
3.5. Trenching in Rock
3.6. Bore/Directional Drilling Installation
3.7. Bore/Directional Drilling in Rock
3.8. Bridge & Wall Attachment Installation
3.9. Rodding, Roping And Conduit Proofing (New & Existing Conduit)
3.10. Manhole Installation
3.11. Handhole Installation
3.12. Route Markers
3.13. Fiber Optic Cable (FOC) Installation
3.14. Grounding And Bonding (Splice Locations)
3.15. Fiber Optic Cable (FOC) Splicing and Acceptance Testing

4. SAFETY

5. CONTRACT DRAWINGS
1. GENERAL PROVISIONS

1.1 STATEMENT OF WORK – Bidder shall supply all labor supervision, construction equipment, transportation, licenses, taxes, safety and consumable supplies, materials not furnished by Contractor as shown in Section 2.3 and all other incidental cost required for the completion of work as specified in the Subcontract Documents. Bidder shall install conduit and fiber optic cable. The installation shall be conducted in any standard industry method deemed most suitable, economical and/or efficient by Bidder, except where a specific construction method is specified herein, by the Contract Drawings, by a permit, or by an authority having jurisdiction. Bidder shall direct plow (conventional and/or “spider”), trench, excavate, erect, bore, rock saw, attach, or utilize other methods approved by Contractor to install conduit, manholes, handholes, fiber warning tape, route markers and other appurtenances as indicated on the construction drawings and as specified in the Subcontract Documents. Bidder shall install the fiber optic cable as specified in the construction drawings. During the course of conduit installation, Bidder shall protect the right-of-way to minimize damage from construction activities including taking special precautions in environmentally sensitive and cultural resource sites. Bidder shall provide all methods for handling traffic to the satisfaction of Contractor, CDOT, and agencies having jurisdictional authority of the area of work. The Bidder shall backfill, replace, resurface and restore all affected areas of construction including but not limited to, sidewalks, asphalt, grass, pavement, highway right-of-way and wetland areas to original or better condition in accordance with the Subcontract Documents, permits, and to the satisfaction of Contractor, and any agencies having jurisdictional authority of the area of work.

1.2 DESCRIPTION OF WORK

1.2.1 Bidder shall construct a multi-duct, multi-cable fiber optic communications network within the I-25 interstate corridor in the State of Colorado from approximately 120th Street to the Wyoming border (approximately 75 miles). The construction shall consist of underground conduit system and fiber optic cable along with communications system components as per G4S Technology construction design and typicals. This segment will include installation of the following approximate quantities:

- 67.5 miles of plowing and trenching three 1.25" HDPE SDR 11 and three 2" HDPE SDR 11 conduits in a common trench.
- 4.9 miles of directional boring three 1.25" HDPE SDR 11 and three 2" HDPE SDR 11 conduits.
- 78 each 48" x 48" x 48" outside diameter precast concrete manholes
- 250 each 24" x 36" x 18" polymer concrete handholes with adjacent route markers and concrete monolithically poured around.
- 125 each 30" x 48" x 36" polymer concrete handholes with adjacent route markers and concrete monolithically poured around.
- 50 dome-type route marker posts placed independently of handhole locations.
- 83 miles of one 96-count single sheath, single armor, loose buffer tube fiber optic cable
- 83 miles of one 168-count single sheath, single armor, loose buffer tube fiber optic cable.

1.2.1.1 With conduits in place, Bidder shall place fiber optic cable as specified in the plan documents.

1.2.1.2 The lengths of individual construction methods (bore, plow, etc.) indicated on the plan drawings are for Bidder reference and approximation only. Bidder shall substantiate their own construction methods and quantities to arrive at their own lump sum bid for this project. Contractor recognizes certain construction methods and lengths may not currently be shown on the plans (e.g. tie-in trenches, dig downs, etc.) that would be qualified as operations other than indicated. Authorized on-site Contractor representatives shall have the authority to verbally approve the construction method.

1.2.1.3 Bidder agrees to furnish pricing using the Bidder’s rate sheet included in Attachment C as the basis of compensation for operations. The lump sum value calculated on Attachment C will be entered as an estimated total project value on the successful Bidder’s subcontract based on the estimated quantities of construction and unit rates on Attachment C.

1.2.1.4 Bidder shall only be paid for the lengths of each construction type that the on-site representatives from Bidder and Contractor agreed upon. The contract value will be adjusted via a change order to reconcile differences between the quantities listed on the rate sheet and actual quantities constructed.

2. GENERAL CONDITIONS

2.1 DEFINITIONS:

2.1.1 CDOT shall mean Colorado Department of Transportation.

2.1.2 Owner shall mean EAGLE-Net Alliance (ENA).

2.1.3 Contractor shall mean G4S Technology, LLC.
2.1.4 Right-of-way (ROW) shall mean the surface, the areas below the surface and the air space above the surface of the I-25 roadway.

2.1.5 OSHA shall mean the Occupational Safety and Health Administration.

2.1.6 EPA shall mean the Environmental Protection Agency.

2.1.7 ACOE shall mean the Army Corps of Engineers.

2.1.8 ANSI shall mean the American National Standards Institute.

2.1.9 AASHTO shall mean the American Association of State Highway and Transportation Officials.

2.1.10 NEC shall mean the National Electric Code. NECA shall mean the National Electric Code of America.

2.1.11 ACCEPTANCE OR COMPLETION shall mean that Bidder has completed all work contained in and in accordance with the Subcontract Documents and when Bidder has corrected all deficiencies to the satisfaction of Contractor, Owner and the jurisdictional authorities.

2.1.12 EDGE OF PAVEMENT (EOP) shall mean the outside edge of the pavement. When applicable, a curb or driveway shall also be defined as the EOP or as otherwise determined by the Contractor’s field representative.

2.2 GENERAL REQUIREMENTS

2.2.1 All work described herein shall be performed in strict accordance with the construction drawings, construction typicals, specifications and all applicable Federal, State, County, City, Local laws, ordinances, rules and regulations of all authorities having jurisdiction over construction related to the Project. The aforementioned laws, ordinances, rules and regulations are hereby incorporated and become a part of the Subcontract Documents as though they were written herein.

2.2.2 All work shall meet or exceed appropriate Owner, Contractor, Utility, Railroad, OSHA, CDOT, Army Corps of Engineers, ANSI, AASHTO, National Electric Code, Federal, State and Local standards.

2.2.3 Bidder is required to excavate test pits (potholes) to verify locations of existing utilities prior to conduit placement.

2.2.4 All areas affected by the Work shall be restored to original or better condition.
2.2.5 Supplied engineering plans are for informational purposes only. The Bidder must verify actual field conditions.

2.2.6 No work shall commence until Contractor has issued Bidder a written Notice to Proceed.

2.2.7 No work shall commence until Bidder has provided Contractor with certification of insurance compliance with the project insurance requirements as per Section 11. Insurance of the G4S Technology Subcontract and any Additional Provisions. Bidder shall be held responsible that their subcontractors provide certification of compliance per the project insurance requirements and submit such certification to Contractor prior to the Bidder beginning work.

2.2.8 No work shall commence until Bidder has provided Contractor with a 100% performance and payment bond in the amount of the total subcontract price and on a form supplied by Contractor (Attachment E).

2.2.9 Bidder has full responsibility for the advance stake/mark out of the conduit system running line, in accordance with and as shown in the construction drawings, aiding utility owners to determine conflicts prior to construction operations.

2.2.10 Bidder may make field adjustments in the running line with prior approval from Contractor, with any such adjustments being shown on the red line drawings. On-site Contractor personnel may provide verbal approvals to Bidder for the adjustments. Bidder is encouraged to suggest alternate installation methods in an effort to avoid excessive traffic control, increase productivity, and/or provide additional protection of all associated patrons and construction personnel.

2.2.10.1 Subsequent to utility mark-outs in response to a valid One Call dig ticket; Bidder shall verify the planned conduit placement location remains viable. If the running line requires adjustment to avoid such utilities G4S Technology’s representative shall be immediately notified. Bidder and G4S Technology shall verify that the proposed adjustment remains in compliance with any applicable permits prior to commencement of activities.

2.2.11 Bidder shall ensure that the work sites are accessible for work including but not limited to, preventing vehicles from parking on site, removing snow, pumping manholes, and scheduling work to avoid delays by road construction, repair, or other outside party projects.

2.2.12 Bidder’s employees shall limit their activities to the construction site and governing rights-of-way. Trespassing in other areas shall not be permitted.

2.2.13 Bidder shall have the responsibility to make their own investigation as to the availability of public or private roads and of clearances, restrictions, bridge load limits, bond requirements, permits and other limitations that may affect Bidder’s transportation for equipment, materials and manpower ingress and egress to the job site.

2.2.14 Bidder shall not begin any out of scope work without the written authorization of the designated individual from Contractor.
2.2.15 Bidder shall be responsible for and shall pay all applicable taxes relating to unemployment, social security and worker's compensation, franchise taxes (including taxes assessed on Bidder’s net income), levies, duties, work-in-progress and assessments of every nature due in connection with any Work under this RFP and shall make any and all payroll deductions required by law. Bidder hereby indemnifies and holds harmless Contractor from any liability on account of any and all such taxes, levies, duties, assessments and deductions.

2.2.16 Bidder shall be responsible for any fines, tolls, tickets or additional costs associated with the work directly related to Bidder. The Bidder is aware of all existing and potential restrictions to construction that have been or may be placed by the jurisdiction authorities, including, but not limited to, traffic control, fuel and/or oil leakage and noise pollution.

2.2.17 The captions and attachments stated in this Attachment A are for convenience only and are to be given no weight in construing the provisions of Attachment A.

2.2.18 Pursuant to EAGLE-Net’s Special Award Conditions of the CCABC Grant, Bidder shall be responsible for constructing, erecting, and maintaining in good condition throughout the construction period a sign(s) satisfactory to the NTIA that identifies the project and indicates that the project is Federally funded. The NTIA also recommends signage decals on work vehicles.

2.3 MATERIALS AND SERVICES

2.3.1 Bidder shall coordinate with Contractor, after subcontract award, for material pick up of Contractor supplied materials. Contractor shall supply personnel and equipment at G4S Technology’s storage facilities to load and unload contractor supplied materials. Bidder shall be responsible for personnel for loading/off-loading and equipment at construction activity site locations, and if materials are drop-shipped to a Bidder-furnished storage area.

2.3.2 Contractor shall supply the materials as specified herein. Bidder shall supply all other materials necessary for the completion of this Work.

Contractor supplied material:

- 2" HDPE SDR 11; 3,750LF/reel; single wrapped; 96" diameter reels; no pre-installed rope
- 1.25" HDPE SDR 11; 8000LF/reel; single wrapped; 96" diameter reels; no pre-installed rope
- 4" steel bore casing
- 6" steel bore casing
- 1.25" aluminum reverse threaded low profile couplings
- 2" aluminum reverse threaded low profile couplings
- 36” x 36” x 36” inside diameter precast concrete manholes complete with pulling irons, frame, lids, and manhole racking. AASHTO HS20 rating with knockouts on all four walls.
- 30" x 48" x 36" polymer concrete handholes with single piece lids with hex-head bolts.
- 24" x 36" x 18" polymer concrete handholes with single piece lids with hex-head bolts.
- All necessary 2" and 1.25" blank and split waterproofing plugs.
- Proofing slugs for 1.25" HDPE and 2" HDPE.
- 6 foot dome-type polyethylene marker posts with labeling.
- 168 count, single jacket, single armor, loose tube buffer fiber optic cable on approx. 22,000LF reels.
- 96 count, single jacket, single armor, loose tube buffer fiber optic cable on approx. 22,000LF reels.

2.3.3 If Contractor and Bidder agree to direct ship any Contractor supplied materials to Bidder, Bidder shall forward via facsimile or email legible copies of the packing list, bill of lading, and any shipping discrepancies to the Contractor office with the original documents to be followed by mail.

2.3.4 Bidder shall be solely responsible for all materials upon and after the receipt, during storage and delivery to the job site, and after installation until acceptance of the work by Contractor.

2.3.5 Bidder shall pick up and sign for materials supplied by Contractor, which are not directly shipped to the Bidder, at the Contractor storage facility. It is the Bidder’s responsibility to make arrangements to pick up materials from the Contractor. Contractor requires a minimum of twenty-four (24) hour notice prior to all material pick-ups. The Bidder shall dispose of any associated packing crates and shipping materials taken from Contractor’s warehouse or storage facility when receiving materials.

2.3.6 Bidder shall maintain an inventory of all Contractor supplied materials for Contractor’s periodic inspection and for Bidder’s weekly submittal to Contractor. Upon completion of the work, the Bidder at their sole cost shall return excess Contractor furnished material to the Contractor’s storage facility.

2.3.7 For reels that do not have to be returned to material vendors, Bidder shall dispose of all empty reels. For reels that have to be returned, Bidder shall return to Contractor’s storage facility in a timely manner.

2.3.8 Bidder supplied materials shall comply with specifications and requirements provided by Contractor or other agencies having jurisdiction of the area.

2.3.9 Bidder shall not be entitled to extensions of time for any delays caused by the delivery of Bidder furnished material.
2.3.10 Bidder is responsible for warranty on all Bidder supplied materials conforming to warranty requirements of Subcontract. Any warranties that extend for greater periods than contractually obligated shall be passed along to Contractor.

2.4 PERMITS

2.4.1 Contractor shall secure the required CDOT Utility Permit(s), environmental permits, railroad crossing permits, ditch/canal crossing permits/agreements, and right-of-way agreements to allow for the placement of the conduit system.

2.4.2 Prior to the start of work, Bidder shall obtain and pay for any applicable permits and other permits required for Bidder’s construction operations including but not limited to contractor’s licenses, construction bonds, transportation, traffic control, equipment, labor and/or other general permits in order to legally perform the Work in accordance with this RFP.

2.5 PROTECTION OF RIGHT-OF-WAY

2.5.1 Right-of-way lines provided on the construction drawings are for informational purposes only. Bidder shall be responsible to repair any damage to the right-of-way, sidewalks, roadways, utilities, or any other public or private property damaged by Bidder’s forces.

2.5.2 Bidder shall be responsible for the safety and protection of the public and of public and private property on and around the construction sites during the Subcontract operational period. Bidder shall notify Contractor immediately of any damage to any public or private properties on or around construction sites.

2.5.3 Bidder shall protect all Work until Contractor acceptance. Conduit shall be accepted when installed and the area restored as necessary. Fiber optic cable (FOC) installation shall be accepted when full reels of FOC have been fully placed within the conduit system. Any such acceptance and payment for the Work does not waive any warranty responsibilities by Bidder.

2.5.4 Bidder shall repair all damage to the Work caused as a result of Bidder’s negligence. In the event damage is irreparable, Bidder shall remove and replace such items at no additional cost to Contractor.

2.6 SUBMITTAL REQUIREMENTS
2.6.1 RED-LINE DRAWINGS (AS-BUILT DRAWINGS): On a daily basis, Bidder shall red-line drawings during the course of construction to show the actual alignment or other variances of all installations required by the construction drawings. The drawings shall be available for review by the Contractor’s representative when requested. Additionally, Bidder shall submit all redline drawings to the Contractor’s project office on a weekly basis. Failure to provide redline drawings may result in a stop work notice being issued until all such drawings have been received. Work shutdowns incurred by Bidder due to the failure to provide acceptable redline drawings per this section shall not become the basis for an extension of time or additional compensation to complete the Subcontract. Bidder shall not submit any application for payment prior to submitting the associated redline drawings. Contractor shall not make payment for work prior to receiving the associated redline drawings. Such drawings shall indicate the location of the installed conduit referenced from permanent landmarks such as mileposts, edge of pavement, bridges, underpasses, handholes, manholes or other permanent markers. Additionally, Bidder shall measure offsets from EOP to the installed conduit location at intervals sufficient to document any changes in the running line that differs from the indicated location on the plan drawings. All utilities crossed shall be identified including type, diameter, and depth of utility. Redline drawings shall indicate the depth of the installation, at or below finished grade, changes, and notes referencing any special construction such as irregular depth, steel plating, insulation barriers, concrete encasement, etc.

2.6.2 DAILY PROGRESS REPORT: Bidder’s progress shall be tracked by utilizing Daily Progress Reports. Daily Progress Reports shall be completed by a Contractor’s field representative and signed by the Bidder’s supervisor with a copy available for the Bidder. A signed form shall represent Bidder’s agreement to the progress reported. If applicable, the Bidder shall indicate disagreements in the progress reported on these forms by adding a note prior to signing.

2.6.3 BIDDER’S CONSTRUCTION SCHEDULE: Bidder shall submit a detailed construction schedule with their bid response. The construction schedule shall include the method(s) by location with the associated quantities, manpower, equipment and production to complete the work within the goals set by the Project Schedule prepared by Contractor. Bidder’s construction schedule shall be prepared in Microsoft Project software program. Bidder shall provide Contractor this schedule in soft and/or hard copy form as requested by Contractor. The schedule shall contain sufficient detail to ensure that Contractor can measure Bidder’s progress on a weekly basis throughout the project duration. Contractor shall utilize the Daily Progress Report to validate the progress shown in Bidder’s schedule. Bidder shall update the schedule as required to reflect any changes due to unscheduled delays or otherwise and provide a recovery plan.

2.6.4 CERTIFIED PAYROLL: This project is a public works project with Federal funding. For the applicable pay periods, Bidder shall provide a certified payroll for all Bidders’ employees involved in the project work in accordance with the wage requirements of the Davis-Bacon Act for Broadband Technology Opportunity Program Projects.
2.6.5 Bidder shall also keep a weekly log of the following documents and furnish them to Contractor upon request:

2.6.5.1 A Utility Location Log

2.7 DAILY PROJECT CLEAN UP REQUIREMENTS

2.7.1 Bidder shall maintain a clean and hazard free work area including but not limited to, daily removal of all spoils and sweeping of all affected roadway and sidewalk areas.

2.7.2 Bidder shall remove from the site and dispose of all spoil, waste, and other unused excavated materials in accordance with all Federal, State, Local, OSHA, EPA, ACOE, and Owner’s standards and regulations.

2.7.3 Where excavation is required in asphalt areas, restoration shall be completed immediately and prior to removal of traffic control. Bidder shall not leave any sections of the trench open during non-work hours. Bidder shall backfill all segments of the trench in adherence with the trench typicals.

2.7.4 As necessary and approved by Owner, Contractor, and all other agencies having jurisdiction, Bidder shall cover the excavation with steel plating.

2.7.5 Bidder shall store all equipment, tools, material in a manner so as not to inhibit traffic flow or parking during working or non-working hours. All staging areas must receive final approval from Contractor and other jurisdictional authorities. Contractor shall assume no responsibility for Bidder’s equipment or materials. Security for the job areas is the responsibility of the Bidder. Bidder shall comply with the security requirements of the right-of-way owners or other jurisdictional authorities.

2.7.6 No material, equipment, or refuse shall be stored in any recovery zones of all roadways without authorization by the jurisdictional authority. A recovery zone shall be defined as an area where vehicular traffic may leave the roadway without protection. Bidder shall verify the location of recovery zones with Contractor and the jurisdictional authority. All restoration in recovery zones shall be performed immediately following installation. Restoration shall be performed pursuant to the Contract Drawings.

2.7.7 All unused materials and empty reels shall be removed from the right-of-way on a daily basis, unless authorized by Contractor and jurisdictional authority to leave stored in place or another storage area within the ROW.

2.8 INSPECTION AND ACCEPTANCE
2.8.1 All work shall be subject to the inspection and approval of CDOT, Contractor, and other
governing agencies having jurisdiction. Bidder shall schedule the work and provide adequate
notifications to comply with any and all requirements for inspection.

2.8.2 Contractor’s representatives shall inspect workmanship and progress of work being
performed. Where workmanship or installation deficiencies are observed (e.g. improper
installation per Contract Drawings), Contractor’s representative shall discuss them immediately
with the Bidder’s supervisors. Bidder shall then take measures to immediately and
expeditiously correct any deficiencies to the satisfaction of Contractor without impacting the
installation schedule at no additional cost to Contractor. If any deficiency is not rectified by the
end of the workday, the deficiency shall be recorded in writing on the Daily Progress Report.
Contractor shall prepare a complete list of deficiencies to be corrected and update with a date of
discovery and date of correction.

2.8.3 The integrity of the conduit and conduit system shall be tested for continuity by use of a
Contractor supplied slug. For the 1.25" HDPE, slug shall be six inches (6") long by one-inch (1")
diameter aluminum with one and one quarter inch (1-1/4") rubber washers at each end. A
different, appropriate sized slug for proofing of the 2" HDPE will also be supplied by Contractor.
Bidder shall install a Bidder supplied pull tape/rope in each installed conduit. Bidder shall notify
Contractor in writing forty-eight (48) hours prior to conduit testing. All testing shall be performed
after the trench has been backfilled and compacted. Unless otherwise permitted by Contractor,
any testing shall be performed in the presence of a Contractor representative. Any deficiencies
found in the tested conduit shall be repaired at Bidder’s cost.

2.8.3.1 If Bidder will utilize a blowing method to install the fiber optic cable (FOC) under this
Project, see Section 3.13 below, after confirming the conduit’s integrity, the conduit designated
for FOC placement can remain without a pull tape/rope installed.

2.8.4 Upon notification to Contractor by Bidder of completing all work within a given Segment,
a Contractor representative, Bidder’s representative, and a representative of the jurisdictional
authorities shall jointly perform a “walk through” inspection of the work within ten (10) days. The
Contractor Representative shall, during this inspection, prepare a punch list of observed
deficiencies. Bidder shall then correct all deficiencies in a timely manner. Final acceptance
shall be granted when all deficiencies have been corrected to the satisfaction of Contractor and
all jurisdictional authorities. Following final acceptance, Bidder may submit an application for
payment of retain monies.

2.9 TRAFFIC CONTROL

2.9.1 It is the responsibility of the Bidder to provide all necessary methods for handling traffic
(MHT) for the performance of the Project.
2.9.2 All traffic control shall meet or exceed the requirement placed on the Project by the applicable jurisdictional authorities. The information contained herein shall supplement and not replace any such requirements.

2.9.3 Bidder shall conform to all traffic control requirements per the Contract Drawings. In absence of a detail in the drawings, traffic control should conform to the requirements of the applicable jurisdictional authority or as included in any permits obtained for the Project.

2.9.4 Bidder shall be responsible for the safety of the general public and shall always give right-of-way to all other vehicular traffic on the roadway. Bidder shall not detour traffic, close a lane, or impede traffic flow without approval from the jurisdictional authority or local police.

2.9.5 As required, Contractor or a member of the jurisdiction authority shall inspect traffic control devices prior to use.

2.9.6 Bidder shall be responsible to conform to all traffic control requirements contained in these Contract Documents for safely entering, exiting, and use of installed traffic control devices. If Bidder commits an act of gross traffic control negligence, or fails to comply with safe operating rules, Contractor shall issue a stop work notice. This stop work notice shall continue until such requirements have been achieved. Bidder shall not be entitled to compensation in time or money for delays lost during this stop work order. If Bidder further continues to violate traffic control requirements, Contractor reserves the right to terminate this Subcontract.

2.9.7 All work operations including plowing, trenching, boring, paving, rolling, grading, supplying of material to the work zone and the travel of supervisory personnel shall always be in the direction of normal traffic.

2.9.8 All vehicles, including delivery vehicles, and equipment shall have lights, light lenses, and reflectors in accordance with the jurisdictional authority standards and shall be operational and cleaned as often as necessary.

2.9.9 Equipment shall be under the full control of the operator when equipment is in use, and operators shall be familiar with their use.

2.9.10 Any slow-moving Bidder vehicle and/or equipment that is to be moved between separated work sites shall be hauled on a trailer.

2.9.11 Bidder shall avoid having slow-moving equipment traveling on the roadway after dark or during twilight hours.

2.9.12 Bidder shall never pull up beside another vehicle parked on the roadway. Bidder shall pull onto the shoulder and/or away from the pavement either in front of or behind the other vehicle(s) or off the roadway.

2.9.13 As required by the jurisdictional authority, equipment necessary for construction may only be parked in a closed lane or closed shoulder as far as practical from traffic. Parked vehicles shall display simultaneous flashing directional signals (“4-way flashers”) and flashing amber light. Parked vehicles shall not display single directional flashing lights.
2.9.14 When a vehicle is parked on the shoulder, the door adjacent to the roadway pavement shall not be left open. An open vehicle door shall never be allowed to project over the roadway pavement.

2.9.15 No vehicle or equipment shall be stopped or parked where it shall interfere with the visibility of any sign.

2.9.16 Vehicles or equipment shall not be backed onto the roadway pavement.

2.9.17 At the end of each workday, all Bidder’s equipment and any extraneous traffic protection devices shall be removed from closed traffic lanes, shoulders, other sites.

2.9.18 A closed lane is a refuge for disabled vehicles or emergencies. Hazards, such as patches or excavated shoulders, shall be highlighted in lanes left closed overnight by the Bidder.

2.9.19 A stopped or slow-moving truck on the pavement shall never be used as the first warning a motorist receives of a work area restriction ahead.

2.9.20 During the progress of the work under this Subcontract, operations of loading and unloading of materials, equipment and personnel shall of necessity be conducted in the various closed lanes and shoulders or off the roadway. To minimize the hazard to the traveling public, the Bidder’s operations shall be governed by the following requirements:

2.9.21 Bidder, when approaching a work area, shall reduce speed of the vehicle and indicate by directional signals intent to drive out of the traffic stream and into the work area. Flashing signals shall be kept on while parked within the work zone.

2.9.22 All vehicles re-entering the traffic stream from the work areas, except when exiting the downstream end of a closed lane, shall have the assistance of traffic observer.

2.9.23 All vehicles re-entering the traveling public, vehicles shall attain a reasonable speed before pulling into the travel lane after making sure that no vehicle is approaching in that lane. Approaching vehicles shall be allowed pass.

2.9.24 Equipment that Contractor feels could damage any roadway facilities shall not be allowed to operate until adequate protective measures are provided such as wooden mats, bridging devices or rubber pads. Contractor’s approval of such protective devices shall not relieve the Bidder from responsibility for damage.

2.10 UTILITY LOCATIONS AND SUBSURFACE OBSTRUCTIONS

2.10.1 Bidder shall recognize that utilities shown on Contract Drawings are for informational purposes only. Contractor assumes no responsibility for the accuracy of the utilities shown.
2.10.2 Bidder shall contact the Utility Notification Center of Colorado (UNCC) in the time prescribed by UNCC. Bidder is responsible to locate and avoid all subsurface obstructions. It is the Bidder’s responsibility to verify the locations of subsurface obstructions shown on the drawings as well as any additional obstructions not identified on the drawings. Bidder is responsible for contacting and confirming the location of utilities or other entities not taking part in the UNCC program.

2.10.3 Bidder shall be responsible to verify the exact location of every pipeline, utility, drainage facility, or other buried facility by pot holing prior to working in the area. Hand digging or other methods approved by Contractor shall be utilized for pot holing. Bidder is responsible for receiving jurisdictional authority approval prior to excavation where applicable. Bidder shall then make any adjustments, in the field or otherwise, to install the conduit or duct where it shall not interfere with other conduits or utility systems. Contractor must approve any adjustments to the running line requested by Bidder. Authorized on-site Contractor representatives shall have the authority to verbally approve adjustments in the running line.

2.10.4 Bidder shall be solely responsible for any and all direct and indirect costs and consequences arising from damage to utilities.

2.10.5 During performance of the Work, if Bidder or any of its Bidders hits a gas line or has reason to believe it has hit a gas line, Bidder shall immediately call 9-1-1 and then make all other appropriate notifications.

2.10.6 Bidder shall maintain a Utility Location Log of all telephone contacts to notify existing utilities of pending excavation. Such a log shall include date, time, name of individual contacted, name of agency or company contacted, telephone number, and confirmation number. The Utility Location Log shall be made available to Contractor for review prior to construction and submitted on a weekly basis.

2.10.7 When crossing buried pipes, cables, and other utility lines, the ducts placed shall maintain a minimum separation of twelve inches (12") or as specified by utility or as specified by the Contract Drawings while maintaining the project specified trench depth. When necessary, the conduit shall be placed at a greater depth to pass under the existing utility to maintain the minimum depth. Should Bidder not be capable of achieving a separation of twelve inches (12") with an existing utility, additional protection may be necessary as directed by the Contractor, utility, or jurisdictional authority. Contractor and Bidder shall agree to a unit rate to execute the required additional protection, if necessary and as required.

2.11 SUPERVISION AND SUPERINTENDENTS

2.11.1 Bidder shall provide a Supervisor that is English-speaking and has the proper skill, training, background knowledge, experience, rights, authorizations, character, and licenses as necessary to perform the Work in a competent, ethical, and professional manner. Bidder shall
designate this Supervisor to be on site at all times and act as the official Bidder on-site representative in connection with the Work with this Subcontract.

2.11.2 Bidder shall furnish to Contractor, in writing, all the names and numbers of the members of his/her organization and Sub-Bidders’ organizations who can be contacted in the event of out-of-hours emergency at the construction site.

2.12 PROJECT MEETING REQUIREMENTS

2.12.1 Bidder shall be required to attend weekly progress meetings as requested by Contractor and/or other Contractor scheduled coordination meetings with Owners, Contractor, and other Bidders during the progress of the work.

2.13 ENVIRONMENTAL CONDITIONS

2.13.1 Environmental BMPs as shown on the Contract Drawings and described in the Storm Water Management Plan shall be furnished and installed by Bidder to segregate environmentally sensitive areas from the construction operations prior to Bidder’s commencement. Bidder shall also be responsible for removal and disposal of these BMPs when directed by Contractor. Bidder shall limit activities outside of these zones. During operations, should Bidder observe deficiencies in the erosion control, the deficiencies shall be immediately communicated to a Contractor representative.

2.13.2 Bidder shall adhere to all environmental permits for activities around environmentally sensitive areas.

3. CONSTRUCTION SPECIFICATIONS

All materials and equipment shall be applied, installed, connected, erected, utilized, cleaned and conditioned in accordance with the Contract Drawings, instructions of the applicable manufacturer, fabricator or processor, except as otherwise provided in these Contract Documents. All conduits and cable shall be plugged or capped following the conduit installation process to prevent infiltration of any silt, water, or foreign substances. Bidder shall abide by the following acceptable practices to complete the installation:

3.1 CLEARING AND GRUBBING
3.1.1 This Work includes coordination with Contractor and Owner prior to the start of Work and shall involve the complete removal and disposal of trees and/or brush within the path of the conduit system installation as shown on the engineering and typical drawings. Bidder shall request permission to clear ROW and receive written approval from Contractor prior to any clearing being performed.

3.1.1.1 Should this work become necessary, an applicable unit rate shall be requested from successful Bidder in the future.

3.2 PLOWING

3.2.1 Plowing innerduct (conduit) includes the hauling of conduit from storage area to work location and any handling required to properly install (via direct burying) the innerduct in the ground to a minimum depth of forty eight inches (48”). This includes coordination with utility owners in locating their facilities prior to the installation of the innerduct.

3.2.2 The plowing equipment shall be subject to the approval of those authorities having jurisdiction over the ROW, roadway and/or railroad.

3.2.3 The equipment and construction methods used by the Bidder shall be such as to cause minimum displacement of the soil. The slot made in the soil by the cable plows shall be closed immediately by driving a vehicle track, wheel, or roller over the slot or by other suitable means.

3.2.4 Damage to banks, ditches, and roads caused by the equipment shall be immediately repaired and restored to original condition to the satisfaction of the jurisdictional authorities.

3.2.5 The Bidder shall promptly repair any damage to fences, lawns, shrubbery, drives and any other property damaged during construction to original condition.

3.2.6 The start pits, finish pits, and pits at points of intersections will be excavated in advance of plowing. Utility crossings will be exposed prior to start of plowing operations. The Bidder shall exercise care in the use of trenching equipment and shovels in joining slots and/or trenches to other slots/trenches to be certain of no damage to utilities.

3.2.7 Warning tape shall be installed eighteen inches (18”) below existing grade.

3.3 GRASS/SOD TRENCH INSTALLATION

3.3.1 Bidder shall excavate as required (i.e. machine trench, backhoe, hand dig, etc.) to install conduits as indicated in the Contract Drawings and typicals to a minimum trench depth of forty-eight inches (48”) below finished grade, or as specified on the Contract Drawings and/or
permits. The installation shall be complete with removal and disposal of excavated materials or materials not suitable for backfill after installation of the conduit.

3.3.2 Restoration shall include the placement of select or clean backfill properly compacted in six-inch (6") lifts. Clean backfill is defined as existing native soil containing material that is free of debris measuring in excess of 3 inches diameter or containing sharp edges that could damage the conduits. Restoration may also include shoring, bracing, road bore connections, and all other operations necessary to complete the installation.

3.3.3 Trenches shall be kept as straight as practical. The bottom of the trench shall be smooth and free from any sharp edges. The trench shall be kept clear of debris and loose rock. All changes in trench grade shall be gradual to the satisfaction of Contractor, CDOT, and Owner.

3.3.4 Bidder shall install the conduit(s) to prevent excessive waving within the trench including applying tension to the conduits prior to backfilling. Conduits shall be installed in such a manner as to keep conduit configuration consistent and prevent spiraling between access points.

3.3.5 Warning tape shall be installed eighteen inches (18") below existing grade.

3.3.6 Bidder shall be responsible to ensure tie-ins and conduit couplings are made to ensure the conduits remain as straight as possible without horizontal and/or vertical changes. These couplings shall be made provide an airtight and watertight seals. Contractor shall furnish duct couplers to achieve this requirement.

3.3.7 All trench sections must be closed at the end of each working day. Bidder shall restore the surface conditions to original or better conditions or as required by the jurisdictional authorities.

3.3.8 Bidder shall notify Contractor immediately of areas where minimum depth requirements cannot be met and the contributing circumstances in order to determine a course of action. Where minimum cover cannot be met and Bidder has obtained written variance from the Contractor, Bidder shall be required to add additional protection of the conduit pursuant to the Contract Drawing typicals. Depending upon the circumstances, the right to additional compensation as well as the unit rates to be utilized when calculating such compensation shall be determined at that time and prior to commencement of the activity.

3.4 PAVEMENT TRENCH INSTALLATION

3.4.1 Bidder shall excavate as necessary to install ducts as specified on the construction typicals or as specified on the Contract Drawings and typicals. The installation shall be completed by saw cutting the roadway surfaces, removing and disposing of excavated pavement and excess excavated material and installing the conduit.
3.4.2 Restoration shall include the placement of select fill or clean backfill compacted in six-inch (6") lifts. Clean backfill is defined as existing native soil containing material that is free of debris measuring in excess of 3 inches diameter or containing sharp edges that could damage the conduits. Restoration may also include shoring, bracing, road bore connections, and all other operations necessary to complete the installation.

3.4.3 Temporary pavement restoration shall be required when vehicular traffic is present prior to final pavement restoration. The jurisdictional authorities shall govern final pavement restoration. Final asphalt restoration shall conform to the Contract Drawings.

3.4.4 Trenches shall be kept as straight as practical. The bottom of the trench shall be smooth and free from any sharp edges. The trench shall be kept clear of debris and loose rock. All changes in trench grade shall be gradual to the satisfaction of Contractor and Owner. Conduits shall be placed in the excavation as straight as practical.

3.4.5 Bidder shall install the conduit(s) to prevent excessive waving within the trench including applying tension to the conduits prior to backfilling. Conduits shall be installed in such a manner as to keep conduit configuration consistent and prevent spiraling between access points.

3.4.6 Warning tape shall be installed eighteen inches (18") below existing grade.

3.4.7 Bidder shall be responsible to ensure tie-ins and conduit couplings are made to ensure the conduits remain as straight as possible without horizontal and/or vertical changes. These couplings shall be made provide an airtight and watertight seals. Contractor shall furnish duct couplers to achieve this requirement.

3.4.8 Driveways, lanes, or roadways when required to be open cut, shall be opened just prior to the conduit placing. In no case shall the drive or entire roadway be impassable without prior written approval. At no time shall open cutting take place without all applicable permits being obtained from jurisdictional authorities.

3.4.9 The general public safety is paramount and appropriate steps shall be taken to ensure safety at all times. Where a drive or roadway must be left open for traffic, Bidder must provide the material and a method to allow for movement of traffic.

3.4.10 Trenches shall be promptly backfilled with select material and placed so that final grade is restored to original grade to ensure no hazard to vehicular, animal or pedestrian traffic. Unless otherwise approved in writing, no trenches shall be left open overnight. Upon written approval any allowable open trenches shall be properly guarded or barricaded to prevent damage or injury.

3.4.11 In areas inaccessible to roller-type tampers where compaction is required, a mechanical tamper of a size suitable for the work involved shall be used. Pneumatic tampers shall be operated at pressures no less than those recommended by the manufacturer.

3.4.12 Bidder shall notify Contractor immediately of areas where minimum depth requirements cannot be met and the contributing circumstances in order to determine a course of action.
Where minimum cover cannot be met and Bidder has obtained written variance from the Contractor, Bidder shall be required to add additional protection of the conduit pursuant to the Contract Drawing typicals. Depending upon the circumstances, the right to additional compensation as well as the unit rates to be utilized when calculating such compensation shall be determined at that time and prior to commencement of the activity.

3.5 TRENCHING IN ROCK Not in Contract

3.5.1 Should Bidder encounter rock in the course of grass/sod or pavement trenching operations, as described above, the specifications of this section shall be adhered to in order to document the situation and basis for compensation.

3.5.2 Upon discovery of rock prior to reaching the specified minimum trench depth, Contractor and Owner representatives must be notified immediately and provided adequate time to respond to the site location to verify the rock determination and supervise the operation. Representatives shall response as soon as possible; however, a maximum of 24 hours shall be allowed by Bidder for response. Failure to notify Contractor and Owner representatives may delay response time. Proceeding with a rock trench without allowing confirmation of the rock pursuant to this section may void any claim Bidder may have for additional compensation.

3.5.3 The limits of the rock shall be documented including the depth and points between which minimum depth was not achieved.

3.5.4 Bidder shall then proceed to remove the rock utilizing appropriate personnel, tools, and additional safety measures to achieve this Project’s minimum trench depth.

3.5.5 The volume of rock shall be calculated and Bidder compensated for cubic yards of rock removed pursuant to Bidder’s unit rate schedule provided herein.

3.5.6 The placement of conduit shall proceed in accordance with the Contract Drawings.

3.6 BORE/DIRECTIONAL DRILLING INSTALLATION

3.6.1 Boring shall be completed with the excavation of bore launching and receiving pits, including any required shoring and the installation of the conduit at a depth no less than forty-eight inches (48”). Maximum depth of bore installation shall not exceed eight feet (8’) without prior authorization by Contractor. Bore installation shall include installation of casing pipes and/or conduit under roads, exit ramps, railroad tracks, driveways, sidewalks, trees, environmentally sensitive areas and other features indicated on the Contract Drawings or as
directed by jurisdictional authorities. Acceptable methods of boring include jack boring, dry auger boring, and directional drilling.

3.6.2 Conduit shall be installed in locations as shown on the Contract Drawings. Bidder shall plan all bores as to not exceed fifteen degrees (15°) of bends in the duct. Bore pits shall be placed to conform to regulations mandated by the jurisdictional authorities as necessary.

3.6.3 Before boring, Bidder shall check all obstructions and clearances. All existing utilities and facilities shall be located and remain open until the bore has been completed.

3.6.4 No bore pits or potholes shall be left open overnight. Upon approval, all open bore pits or potholes shall be properly guarded or barricaded and covered, as required with a steel plate or plywood to prevent damage or injury.

3.6.5 Bidders’ bore operator and navigator shall maintain communication at all times. When visual obstruction or distance precludes un-aided verbal communication, the operator and navigator shall utilize radio communication devices. An additional third person that has a clear view of the entire operation shall be used, wherever practical without creating an additional safety hazard.

3.6.6 The boring operator shall have full control of the direction of the boring tool at all times. Shallow, misdirected, unsuccessful bores and voids shall be abandoned and completely at Bidder’s expense. Under no circumstances shall the Bidder be allowed to cut or disturb pavement or asphalt, or excavate within the relative limits of any roadway surface to retrieve any lost boring apparatus.

3.6.7 All ends of bore casing shall be sealed using waterproof expanding foam sealant. All conduits shall be capped, sealed watertight and shall be well marked to accommodate locating. All bore pits shall be dewatered.

3.6.8 Restoration of bore pits shall include the placement of select or clean backfill properly compacted in six-inch (6”) lifts. Clean backfill is defined as existing native soil containing material that is free of debris measuring in excess of 3 inches diameter or containing sharp edges that could damage the conduits. Restoration may also include shoring, bracing, road bore connections, and all other operations necessary to complete the installation. Surfaces shall be restored to original or better condition or as mandated by the jurisdictional authorities.

3.6.9 Bidder is to use proper dewatering and containment methods for removal and disposal of bore water and any and all additives for wall stabilization.

3.6.10 Setup of directional boring equipment must be made in a manner to minimize damage to the surrounding area. Emphasis shall be placed on setup locations to ensure that the equipment, debris, and/or bore water overflow do not encroach onto private property or public drainage systems. Bidder shall be responsible for disposing of all waste.

3.6.11 All directional boring equipment shall have electrical protective devices to protect the operators from electrical shock. The devices shall be used in accordance with the equipment
manufacturer’s specifications. Contractor requires that these devices not be circumvented in any way and that all protective safety equipment is worn or used by all required individuals. Anyone not wearing or using protective equipment shall not approach or touch the directional drilling equipment.

3.6.12 No items attached to the backside of the reamer shall be allowed without the use of a free-moving swivel to eliminate the rotation of trailing stem. When adding additional stem or attachments where the addition/attachment is not within sight of the bore machine operator, all power providing any movement to stems shall be disengaged and the stems at the boring rig shall be locked down. Power shall only be reinstated after the item being attached to the stem is securely connected and all personnel are clear of moving components.

3.6.13 Bidder shall be responsible to ensure tie-ins and duct couplings are made to ensure elevations remain straight as possible and that the duct and conduit couplers provide an airtight seal.

3.6.14 Bidder shall notify Contractor immediately of areas where minimum depth requirements cannot be met and the contributing circumstances in order to determine a course of action. Where minimum cover cannot be met and Bidder has obtained written variance from the Contractor, Bidder shall install the conduit as specified by the written variance. Depending upon the circumstances, the right to additional compensation as well as the unit rates to be utilized when calculating such compensation shall be determined at that time and prior to commencement of the activity.

3.6.15 Should the construction method used include the installation of a casing conduit and then the installation of innerduct conduits, the following additional measures shall apply:

3.6.15.1 Bidder shall provide the labor and standard industry equipment required to pull innerduct conduits through the casing conduit.

3.6.15.2 The innerducts shall be secured to pulling equipment. A swivel shall separate the pulling equipment from the innerduct to ensure the conduits do not spiral during the pull-back operation. The conduit shall be pulled through the ducts.

3.6.15.3 A length of conduit shall be left protruding from each end of the casing to ensure adequate tie-ins without any coupling able to enter the casing rendering it in accessible.

3.6.16 For the performance of a bore, Bidder shall be paid the applicable unit rate for a bore with casing or without. The measured length of the bore shall be linear feet from the point the bore achieves the project required depth to the point it passes through the required depth at the exit location.

3.7——BORE/DIRECTIONAL DRILLING IN ROCK—— Not in Contract
3.7.1 Should Bidder encounter rock in the course of standard bore/directional drilling operations, as described above, the specifications of this section shall be adhered to in order to document the situation and basis for compensation.

3.7.2 If Bidder encounters an obstruction not allowing the placement operation to continue, the obstruction shall be identified as rock.

3.7.2.1 Contractor and Owner representatives must be notified immediately and provided adequate time to respond to the site location to verify the rock determination and supervise the operation. Representatives shall respond as soon as possible; however, a maximum of 24 hours shall be allowed by Bidder for response. Failure to notify Contractor and Owner representatives may delay response time. Proceeding with a rock bore without allowing confirmation of the rock pursuant to this section shall void any claim Bidder may have for additional compensation.

3.7.2.2 After notification has been made to Contractor’s representative, Bidder shall pull-back a minimum length that will allow for the bore to take an alternate path. Bidder shall then make an attempt to steer the bore around the obstruction. If the bore again encounters an obstruction, rock shall be deemed encountered.

3.7.2.3 Bidder, Contractor, and Owner shall agree upon the location of the rock and the location shall be marked for future reference by a stake or paint marking.

3.7.2.4 Bidder shall then pull-back all rods currently in the ground in order to swap out the conventional bore head with a specialized rock drilling head.

3.7.2.5 The bore shall then be recommenced and completed with the rock drilling equipment.

3.7.3 When the installation has been achieved, the limits of the rock shall be documented and included on the as-builds.

3.7.4 For the performance of a rock bore, Bidder shall be paid the applicable unit rate for a bore with or without casing to the point that rock was encountered. Bidder shall then be compensated at the specified rock bore unit rate per linear foot from the point that rock was encountered, marked by a stake or paint as stated above, to the exit location when the bore is at the Project specified minimum depth.

3.8 BRIDGE & WALL ATTACHMENT INSTALLATION- Not In this Contract

3.8.1 Bidder shall install hangers and hardware, furnished by Contractor, for the attachment of the conduit to bridges and walls. Hangers, hardware, and location of the conduit shall be as shown on the Contract Drawings.
3.8.2 Conduit used for bridge and wall attachments shall be bulletproof FRE pipe. Conduit shall be supported at intervals shown on the Contract Drawings while not exceeding ten feet (10’) separation between hangers. At no time shall Bidder install the conduit or hardware to be the lowest point on the bridge.

3.8.3 Bidder shall install expansion joints at all structure joints. At no time shall spacing of expansion joints exceed manufacturer recommended spacing. Contractor shall supply all bridge-related materials, as stated above in Section 2.3.

3.8.4 All nuts shall be tightened with a torque wrench to the appropriate torque as specified by the manufacture. Contractor shall provide Bidder with the applicable value prior to commencement of bridgework activities.

3.8.5 Installation and materials shall be in accordance with the jurisdictional authorities. Bidder shall perform the Work in such a manner to avoid disrupting vehicular or pedestrian traffic unless approved by the jurisdictional authorities.

3.8.6 As needed and where indicated on the Contract Drawings, Bidder shall install intermediate pullboxes, furnished by Contractor to assist in cable placement and future maintenance operations. Pullboxes shall be independently supported pursuant to the typical drawings so as to not rely on the conduit for support.

3.8.7 Bidder shall be sure to sweep the conduit gradually for all transitions from bridge to wall attachment and then from wall attachments to buried conduits. The bridge conduit shall be maintained until the point of connecting to conduits installed by other methods at the Project specified minimum trench depth of thirty-six inches (36”) is achieved for the transition.

3.8.8 From the point of grade to the specified depth and to a location where conventional construction methods defined herein may be utilized, Bidder’s operation shall be defined as “Bridge Trench.” More specifically, this unit is defined as locations where additional measures are required due to ground slope or other hindrance not allowing for the standard trenching equipment to be utilized. This may include hand-digging as required.

3.8.9 Conduit bends shall be no less than 36” radius. Prefabricated bends shall not be altered without Contractor approval.

3.8.10 Contractor has elected on many of the structures to utilize a smaller conduit size and installation of a textile innerduct, Maxcell, for cable paths.

3.8.10.1 When transitioning from the bridge (Maxcell) to a trench or plow (1.25” conduits), such transitions shall be made within handholes. Bidder shall extend the bridge conduit, unless Contractor supplies other suitable conduit, from the bridge to the handholes on either side of the bridge as shown in the plan documents.

3.8.10.2 Maxcell shall be installed in accordance with manufacturers specifications.

3.8.11 Payment for bridge and wall attachments shall be pursuant to the unit rates provided in Exhibit A, Attachment I. Quantities shall be measured as follows:
3.8.11.1 Measurement of the “Bridge Attachment” shall be linear feet from bridge headwall to opposite bridge headwall.

3.8.11.2 Measurement of the wall attachment shall be from the headwall until the conduit enters the ground.

3.8.11.3 From the point of entering the ground to where another conventional installation technology can be utilized, the “bridge trench” unit shall apply. On-site Contractor and Bidder personnel shall agree upon the final quantity of such activity.

3.9 RODDING, ROPING, AND CONDUIT PROOFING (New & Existing Conduit)

3.9.1 Bidder shall “proof” the integrity of each existing conduit sections being utilized on the Project while installing a pull line.

3.9.2 Bidder shall blow the slug as stated above in Section 2.8, so as to “proof” and rope the conduit simultaneously. Should a damaged conduit be found, Bidder shall notify the Contractor.

3.9.3 Contractor shall furnish and Bidder shall install a blank duct plug to each innerduct, making sure to tie-off all pull lines.

3.9.4 Bidder shall use caution through the entire rodding, roping and innerduct installation process to avoid damaging any existing conduits, innerducts, cables, or other previously existing plant.

3.10 MANHOLE INSTALLATION

3.10.1 The Bidder shall install manholes at locations as shown on the Contract Drawings and as approved by Contractor. The Bidder shall install manholes to the specifications as depicted on the typical drawings and any applicable jurisdictional authorities' specifications.

3.10.2 Bidder shall place the manholes on a 12” bed material of clean crushed stone. For open bottom manholes, Bidder shall place a Bidder supplied rodent-proof mesh on top of the gravel bedding. Frames and covers shall be installed to match level of existing grade unless otherwise noted and shall be shimmed with either steel or concrete spacers.

3.10.3 Bidder shall use material acceptable to Contractor, Owner, CDOT, and other jurisdictional authorities, and stated in the Contract Drawings, with sufficient in density to shim frames and covers or as necessary to maintain the load rating on the manholes.
3.10.4 The manholes shall not be installed on steep banks or slopes where the cover cannot be leveled within a tolerance of one-inch (1") of drop to twelve inches (12") of grade.

3.10.5 All manhole penetrations shall be made in accordance to the Contract Drawings and sealed with a non-shrink grout. All conduit and duct ends shall be sealed with Contractor supplied duct plugs/caps. Large diameter ducts shall be trimmed neatly inside the manhole. For PVC conduit installation, conduits shall be flush to the interior manhole wall. During installation of HDPE conduits, conduits shall extend a minimum of 12" into the manhole.

3.10.6 Bidder shall install racks, hooks, and apertures on manholes as per the Contract Drawings and manufacturer’s recommendations.

3.11 HANDHOLE INSTALLATION

3.11.1 The Bidder shall install handholes provided by Contractor at the locations depicted on the Contract Drawings.

3.11.2 Bidder shall place the handholes on top of gravel bedding and a Bidder supplied rodent proof wire mesh. The conduits entering and leaving handholes shall do so on opposite sides from each other either through the sidewalls or up through the open bottom of the handhole.

3.11.3 A concrete apron must be monolithically poured around the handhole and fiber optic cable location marker.

3.11.4 Handholes shall be installed such that the top aligns flush with the concrete apron and existing grade unless otherwise noted.

3.11.5 The handholes shall not be installed on steep banks or slopes where the cover cannot be leveled within a tolerance of one-inch (1") of drop to twelve inches (12") of grade. Should installation on an embankment become required, Contractor shall provide further instruction for the installation at that time.

3.11.6 All conduit ends entering the handhole shall be sealed with Contractor supplied duct plugs/caps. Large diameter ducts shall be trimmed neatly inside the handhole. During installation of HDPE conduits, conduits shall extend a minimum of 12" into the handhole.

3.12 ROUTE MARKERS

3.12.1 Bidder shall install Contractor supplied FOC route warning signs along the route for protection of the installed facilities. Bidder shall exercise special caution to locate the cable
route markers to avoid interference with the warning tape, conduits, and any other existing facilities.

3.12.2 Locations of route markers shall be in accordance with the Contract Drawings.

3.12.3 Route markers shall be installed with concrete footing supports per the Contract Drawings.

3.13 FIBER OPTIC CABLE (FOC) INSTALLATION

3.13.1 Bidder shall install fiber optic cable in the conduit system as specified in the Contract Drawings, and in accordance with the manufacturer's recommendations.

3.13.2 Each reel of fiber optic cable will be tested at the factory. Fiber optic reel testing prior to Bidder acceptance of the cable is not required for this project, but is recommended by Contractor. Should Bidder opt to test the fiber reels supplied by Contractor, any damaged or non-conforming fibers shall be identified to Contractor. Bidder assumes responsibility of the fiber cable after taking possession until acceptance by Contractor.

3.13.3 Bidder shall maintain comprehensible two-way radio communication among crewmembers at all times during fiber optic cable installation.

3.13.4 Contractor is providing Bidder the option to blow, jet, or pull the FOC for installation. Should Bidder choose to install the cable by pulling, and did not install the necessary pull rope/tape under Section 2.8, Bidder shall be responsible for installing pull rope/tape prior to cable installation at no additional cost to Contractor. If Bidder chooses to blow/jet the FOC, the conduit left unoccupied by pull rope/tape, under Section 2.8, shall be utilized.

3.13.5 Bidder shall install the FOC in the most consistent manner throughout the conduit system. This shall include, but is not limited to, installation within the same color of duct throughout the system. Bidder shall be instructed by Contractor as to which color conduit to utilize prior to placement operations.

3.13.6 Bidder is responsible for the protection of FOC until placement of the FOC and written turnover of the FOC back to Contractor for splicing operations. This includes, but is not limited to, storage of the cable prior to installation, overnight protection because the entire reel was not installed prior to stopping work for the day, and during transportation to the jobsite.

3.13.7 For non-splice locations, Bidder shall leave the designated footage of slack coils in each handhole as shown on the Contract Drawings. Cable slack coils shall have a radius no smaller than ten (10) times the outside diameter of the cable unless the manufacturer recommends more stringent guidelines. Bidder shall leave the Contract Drawing specified footage of cable coiled in handholes and manholes that will be utilized for splicing as shown on the Contract Drawings. Additional cable slack may be installed, if specified by Contractor or Owner, to allow
for future or on-going operations and maintenance that may affect the system. All cable slack shall be neatly coiled and secured with black electrical tape.

3.13.8 Bidder shall rack all slack coils to the existing handhole or manhole racking. If no racking is provided or available, the coils shall be placed in the bottom of the handhole. The FOC shall be identified in each manhole/handhole by affixing Contractor supplied cable tags.

3.13.9 Bidder shall avoid bends of small radii and twists that may damage the fiber optic cable. During installation, Bidder shall not bend cable in a radius less than twenty (20) times the outside diameter of the cable. Bidder shall utilize pulleys, sheaves, radius wheels, or other devices to meet this requirement.

3.13.10 Bidder shall not pull the cable with more than six hundred (600) pounds of dynamic tension and shall use a breakaway swivel. Bidder shall use safeguards such as adjustable slip clutch capstan winches or pulling dynamometers. Bidder shall be responsible for proving that all safeguards have been calibrated and demonstrate their functionality.

3.13.11 Bidder shall install the cable into the conduit system in one continuous length as provided on the reel from Contractor. At no time shall Bidder cut the FOC without previous written approval from Contractor.

3.13.12 For returnable reels, Bidder shall return all empty reels to Contractor’s storage facilities. For non-returnable reels, Bidder shall dispose.

3.13.13 No figure eight machines (“endagain”) shall be used to place FOC, midpoint figure eights made during the installation process shall be done by hand.

3.13.14 Bidder shall redline drawings to produce and submit to Contractor as-built drawings of the installed fiber optic cable.

3.13.15 Red-line drawings shall be completed by Bidder. Red line drawings shall include:

3.13.15.1 At EVERY manhole and handhole, verification of the occupied duct by color entering and color exiting with entry and exit directions indicated.

3.13.15.2 At EVERY manhole and handhole, Bidder must write down sequential footage markings for the entry and exit points for each cable. From the sequential markings, the length of slack cable at the specific location shall be noted on the red-line drawings.

3.13.15.3 At EACH cable end, Bidder shall write down the sequential footage markings at the entry point and at the end of the FOC. From the sequential markings, the length of slack cable available for splicing operations at the specific location shall be noted on the red-line drawings.

3.13.16 Payment shall be provided to Bidder for full reels of FOC placed, including slack footage. Contractor assuming responsibility for the installed FOC does not relieve Bidder from any related warranty provisions.
3.14 GROUNDING AND BONDING (Splice Locations)

3.14.1 Bidder furnished ground rods shall be installed at each splice location. The rods shall be installed to leave eight inches (8”) above bottom handhole/manhole grade allowing for connection of the ground wire.

3.14.2 Grounding shall be tested for compliance with the resistance specification of 25 ohms.

3.14.2.1 If a single ground rod does not achieve the specified resistance, additional ground rods shall be installed, adjacent to the first, up to a maximum of three (3) total rods. Should the specification remain unattained, Contractor shall notify immediately for other alternatives to be explored.

3.14.3 The ground rods, to be furnished by Bidder, shall be copper clad steel, ¾” diameter, 8’ long.

3.14.4 Ground wires shall be connected to ground rod by mechanical means or as otherwise specified in the plan documents.

3.15 FIBER OPTIC CABLE (FOC) SPLICING AND ACCEPTANCE TESTING  Not in Contract

3.15.1 All FOC splicing and testing activities on the Project shall be performed by others. Should any test results indicate damage to the fibers from installation, such data shall be shown to Bidder to qualify.

3.15.2 Bidder shall be responsible for repair or replacement of any FOC damage during installation to a maximum length of twelve thousand five hundred linear feet (12,500LF), approximately equal to one half a cable reel length being ordered for the Project. The FOC shall be replaced from the nearest splice location to the next handhole/manhole beyond the damage location to only add a single new splice to the system. Adding an additional handhole/manhole and/or use of existing slack shall not be permitted to fix FOC damage without prior approval from Contractor, CDOT, and/or Owner.

4. SAFETY
4.1 Safety is the foremost concern in any contract operation. Any Bidder performing an unsafe act or operation shall be notified to stop work until the unsafe act or operation is corrected. If unsafe acts or operations continue, it shall result in the termination of the Subcontract. This project encompasses areas that may include both public and private right-of-way. Therefore, in addition to the workmen, consideration must also be made for the general public and for private property.

4.2 Guidelines for health, safety and traffic control standards have been established by various agencies. Bidder shall comply with all Health, Safety and Traffic Control standards and procedures as required by the jurisdictional agencies and regulations as applicable.

4.3 Manhole safety procedures, including testing and monitoring of manhole atmosphere and installing proper manhole barricading, shall be required when accessing utility manholes to perform work under this Subcontract. This includes purging each manhole a minimum of ten (10) minutes prior to entry unless testing of gaseous content proves entering the manhole to be unsafe.

4.4 Any personal injury to Bidder’s employees or agents engaged in work under this Subcontract, which requires the services of a physician or hospitalization, shall be reported at once to a Contractor field representative. Bidder shall also report immediately to Contractor any injury to other person(s) in which circumstances may concern Contractor.

4.5 Weekly Toolbox Safety Meetings shall be conducted by Bidder and attended by all Bidder field personnel and the Contractor field representative(s). The past week and anticipated hazards shall be discussed, with preventive measures outlined. For new types of activities, a hazard analysis (as applicable to present work) shall also be reviewed at this time. Contractor field representatives shall inspect the work sites on a daily basis. Any violations observed shall be immediately brought to the attention of the Bidder’s Supervisor for correction. Contractor shall correct any violations not corrected by the Bidder, and all cost incurred shall be back-charged to the Bidder. Continued violations shall result in termination of the Subcontract. Contractor insists on having a quality, productive, and safe project.

4.6 All personnel in construction areas shall wear hard hats and reflective vests at all times. NO EXCEPTIONS. Appropriate clothing and footwear shall be worn at all times. Clothing with offensive or objectionable printing shall not be permitted.

4.7 Traffic cones, barricades, flagmen, warning signs shall be inspected each day at each site. All open excavations in paved areas shall be covered with a suitable steel plate or patched at the end of the working day, subject to approval by Contractor and the authorities having jurisdiction over this work. All excavations in other areas shall be fenced with safety fencing or otherwise protected as directed by Contractor or governing authority.

4.8 All excavations five feet (5’) or greater in depth shall be protected with either shoring or a trench box, per OSHA regulations. In areas that the Bidder is required to place shoring per OSHA specifications, the Bidder shall incur all cost associated with protection of the site.
4.9 Fire extinguishers shall be provided on vehicles and shall be in good working order at all times, and operators shall be familiar with their use.

4.10 Under no circumstances shall pedestrian traffic be routed or rerouted onto the Roadway or in an area where vehicular traffic is present.

5. CONTRACT DRAWINGS

5.1. The following Contract Drawings are provided for Bidder reference with respect to the proposed alignment of the I-25 backbone system facilities and typicals depicting construction practices:

- Title Sheet: Department of Transportation State of Colorado, State Highway I-25, Adams, Broomfield, Weld, and Larimer Counties; North I-25 Communications Backbone
- Standard Plans List
- General Notes
- Stormwater Management Plan
- Marker Details
- Pull box and trench details
- Structure Mounted Conduit Details Not in Contract
- Aerial plans of conduit alignment, handhole/manhole placement

The complete set of drawings can be downloaded from the EAGLE-Net Alliance homepage (Open Requests section) by visiting [http://www.co-eaglenet.net/](http://www.co-eaglenet.net/).

5.1.1. Additional Contract Drawings continue to be under development. Drawing packages shall be finalized for each individual bridge crossing depicting the placement of attachments, expansion joints, and the transitions from the bridge to underground. This work will be released under a separate RFP.
**ATTACHMENT B**

**PRIME CONTRACT FLOW-DOWNS**

Some flow-down provisions from the contract between EAGLE-Net Alliance and the National Telecommunications and Information Administration (NTIA) for the design and deployment of a new middle-mile fiber optic network in Colorado have been integrated herein to these Contract Documents; however, insofar as other sections may also govern Work being specifically performed by Bidder, all such sections shall also be adhered to as if fully written into these documents. The Work comprised within this RFP is part of the larger Colorado Community Anchors Broadband Consortium. This project was awarded by the NTIA during round 2 of the American Recovery and Reinvestment Act (ARRA) Broadband Stimulus Funding to fulfill the requirements of the Broadband Technology Opportunities Grant.
**ATTACHMENT C**

**BIDDER’S PRICING SHEET**

<table>
<thead>
<tr>
<th>Work Description*</th>
<th>Est Qty.</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Furnish, install, and remove environmental BMPs per Stormwater Management Plan and Contract Drawings</td>
<td>1</td>
<td>LS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install 36” x 36” x 36” inside diameter concrete manholes</td>
<td>78</td>
<td>EA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install 24” x 36” x 18” handholes, route marker adjacent to handhole, and form/pour concrete</td>
<td>251</td>
<td>EA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install 48” x 30” x 36” handholes, route marker adjacent to handhole, and form/pour concrete</td>
<td>132</td>
<td>EA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install location marker FOC dome-type 72”, 3” x 6”, not adjacent to handholes or manholes</td>
<td>50</td>
<td>EA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plow (3) 2” HDPE Ducts and (3) 1.25” HDPE Ducts</td>
<td>356,560</td>
<td>LF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trench (3) 2” HDPE Ducts and (3) 1.25” HDPE Ducts</td>
<td>TBD</td>
<td>LF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slick bore (3) 2” HDPE Ducts and (3) 1.25” HDPE Ducts</td>
<td>25,890</td>
<td>LF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install 168 count FOC in New/existing Conduit and Handholes/manholes</td>
<td>439,250</td>
<td>LF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install 96 count FOC in New/existing Conduit and Handholes/manholes</td>
<td>439,250</td>
<td>LF</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL BID**

*MHT and restoration included within applicable work descriptions.

Respondent Company Name: ________________________________

Company Minority Affiliation (MBE, WBE, SBA, etc.): ___________________

Mailing Address:_____________________________________

City:______________________________________________

State:___________ Zip Code:________

Primary Contact Name:_________________________________

Primary Contact E-mail:______________________________

Authorized Signatory:_________________________________

Provide positive statement that Bidder has reviewed the Performance and Payment bond, insurance, and G4S Technology standard subcontract requirements and is willing to comply:

__________________________________________________________________________
## ATTACHMENT D

### BIDDER’S CAPABILITIES MATRIX

<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
<th>Production Per Crewday</th>
<th>Qty of crews to be deployed</th>
<th>Performed by Bidder or Subcontractor?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Plow (3) 2” HDPE and (3) 1.25” HDPE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Directional Bore (3) 2” HDPE and (3) 1.25” HDPE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Trench (3) 2” HDPE and (3) 1.25” HDPE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Install FOC in Conduit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Install Handholes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Install Manholes</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ATTACHMENT E

SAMPLE PERFORMANCE AND PAYMENT BOND AND INSURANCE REQUIREMENTS

PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, that we ____________________________

as Principal, and ____________________________

as Surety, are held and firmly bound unto ____________________________

(hereinafter called the Contractor) in the penal sum of ____________________________

Dollars ($_________________________ ) for which payment well and truly to be made we do bind ourselves, our heirs, executors, administrators, and assigns, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that:

WHEREAS, the Principal entered into a certain Subcontract hereto attached and made a part hereof, with the Contractor, dated ____________________________ for ____________________________

_________________________________________ as part of the performance of a contract between

the Contractor and ____________________________ (hereinafter called the Owner) dated ____________________________

for ____________________________

which contract and the specifications therefor shall be deemed a part hereof as fully as if set out herein.

NOW, THEREFORE, if the said Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of said Subcontract during the original term of said Subcontract and any extensions thereof that may be granted by the Contractor, with or without notice to the Surety, and during the life of any guaranty required under the Subcontract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of any and all duly authorized additions to and modifications of said Subcontract that may hereafter be made, notice of which additions and modifications to the Surety being hereby waived, and shall promptly make payment to all persons supplying the Principal with labor and materials in the prosecution of the work provided for in said Subcontract, and any and all duly authorized additions to and modifications of said Subcontract that may hereafter be made, and shall promptly pay all other obligations incurred by the Principal in connection with such work, then this obligation to be void; otherwise to remain in full force and effect.

The foregoing obligation is subject to the following conditions which are hereby agreed to by the Principal and the Surety:
(a) Unless the Surety has notified the Contractor in writing of a prior claim by the Surety to any sums earned by the Principal under said Subcontract, upon completion of all work to be performed by the Principal under said Subcontract, the Contractor may, at its option and without notice to the Surety, pay to the Principal any sums earned by the Principal under said Subcontract, including any retained percentage thereon, prior to the time of final approval and acceptance of the Principal's work and materials by the Owner; and in the event of any such payment to the Principal herein, all of the terms, conditions and obligations of such Subcontract and of this bond shall remain in full force and effect until the final approval and acceptance of the Principal's work and materials by the Owner and until the expiration of any guaranty required under said Subcontract.

(b) Upon final approval and acceptance of Principal's work and materials by the Owner, the Contractor may make final payment to the Principal of any sum or sums then due to the Principal under said Subcontract, including any retained percentage thereon, without notice to or consent by the Surety, unless prior to such payment by the Contractor, the Surety gives written notice to the Contractor of any prior claim that the Surety may have to such funds or any part thereof.

IN WITNESS WHEREOF, the above bound parties have executed this instrument under their several seals this __________ day of __________, 20___, the name and corporate seal of each corporate party being affixed hereto and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

ATTEST:

__________________________
Principal

__________________________
Address

__________________________
(Affix Corporate Seal)

__________________________
By _______________________
Name _______________________
Its _______________________

ATTEST:

__________________________
Corporate Surety

__________________________
Address

__________________________
(Affix Corporate Seal)

__________________________
By* _______________________
Name _______________________
Its _______________________

*Bond must be executed by an Officer of the Bonding Company or by a duly authorized Attorney-in-Fact. If executed by an Attorney-in-Fact, a properly notarized power of attorney from the Bonding Company showing such authority must be attached hereto.
**ACORD™ SAMPLE CERTIFICATE OF LIABILITY INSURANCE**

**SUBCONTRACTOR’S INSURANCE COMPANY’S NAME**

**STREET ADDRESS**

**INSURED**

**SUBCONTRACTOR’S COMPANY NAME**

**STREET ADDRESS**

**CITY, STATE ZIP CODE**

---

**COVERAGES**

The policies of insurance listed below have been issued to the insured named above for the policy period indicated, notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain. The insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies. Aggregate limits shown may have been reduced by paid claims.

---

**INSR** | **TYPE OF INSURANCE** | **TYPE OF INSURANCE POLICY NUMBER** | **POLICY EFFECTIVE DATE** | **POLICY EXPIRATION DATE** | **LIMITS** |
---|---|---|---|---|---|
**A** | GENERAL LIABILITY | # __________ | (MM/DD/YY) | (MM/DD/YY) | GENERAL AGGREGATE |
| | | | | | PRODUCTS-COMD/OP AGG |
| | | | | | PERSONAL & ADV INJURY |
| | | | | | EACH OCCURRENCE |
| | | | | | FIRE DAMAGE (Any one fire) |
| | | | | | MED EXP (Any one person) |
| **B** | AUTOMOBILE LIABILITY | # __________ | (MM/DD/YY) | (MM/DD/YY) | COMBINED SINGLE LIMIT |
| | | | | | (Ea accident) |
| | | | | | BODILY INJURY (Per person) |
| | | | | | BODILY INJURY (Per accident) |
| | | | | | PROPERTY DAMAGE |
| | | | | | (Per accident) |
| **B** | GARAGE LIABILITY | # __________ | (MM/DD/YY) | (MM/DD/YY) | AUTO ONLY-EA ACCIDENT |
| | | | | | OTHER THAN AUTO ONLY: |
| | | | | | EACH ACCIDENT |
| | | | | | AGGREGATE |
| **A** | EXCESS LIABILITY | # __________ | (MM/DD/YY) | (MM/DD/YY) | EACH OCCURRENCE |
| | | | | | AGGREGATE |
| **C** | WORKERS COMPENSATION AND EMPLOYERS’ LIABILITY | # __________ | (MM/DD/YY) | (MM/DD/YY) | WC STATUTORY LIMITS |
| | | | | | OTHER -
| | | | | | E.L. EACH ACCIDENT |
| | | | | | E.L. DISEASE = EA EMPLOYEE |
| | | | | | E.L. DISEASE = POLICY LIMIT |
| **D** | OTHER | # __________ | (MM/DD/YY) | (MM/DD/YY) | $ |

**DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS**

---

**CERTIFICATE HOLDER**

**CANCELLATION**

*THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN. THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES, AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.*
This SUBCONTRACT AGREEMENT (hereinafter, “Subcontract”), entered into this ______ day of __________________, 20___,
by and between

__________________________________________________________
(Address)

__________________________________________________________
Telephone: ( ) ________________________________  
Fax: ( ) ________________________________
(hereinafter, “Subcontractor”)  and

__________________________________________________________
(Address)

__________________________________________________________
Telephone: ( ) ________________________________  
Fax: ( ) ________________________________
(hereinafter, “Contractor”)  

WHEREAS, Contractor has entered into a contract dated the _______ day of ________________________,  
_________ (“Prime Contract”) with ________________________________ (hereinafter, “Owner”) to __________________
at ____________________________________________________________________________ (the “Project”); and

WHEREAS, Subcontractor desires to perform a portion of such Prime Contract for the sum of ________________________________ Dollars (U.S.) ($________________________) (the “Contract Price”);
IN WITNESS WHEREOF, the parties hereto have executed this Subcontract by their proper officers or duly authorized agents.

Subcontractor | Contractor
--- | ---
By: | By: |
Name: | Name: |
Title: | Title: |
Date: | Date: |

NOW, THEREFORE, it is agreed as follows:

SECTION 1. THE WORK. Subcontractor agrees to furnish all supervision, labor, tools, equipment, materials, and supplies necessary to perform, and to perform, the work (hereinafter called the "Work") described in Exhibit A, "Scope of Work," as an independent contractor under the general direction of Contractor and in accordance with the terms and conditions of the Contract Documents (as hereinafter defined).

Subcontractor will perform the Work in a high quality, professional, and workmanlike manner. Materials furnished but not installed by Subcontractor shall be delivered F.O.B. job site unless otherwise specified by Contractor.

SECTION 2. CONTRACT DOCUMENTS. The "Contract Documents" for this Subcontract shall mean and consist of:
(a) this Subcontract including Exhibit A, "Scope of Work," and any other Exhibits attached thereto;
(b) those portions of the Prime Contract (including attachments and amendments thereto) specified in Exhibit B attached to this Subcontract;
(c) the Project Schedule (as hereinafter defined) as may be amended from time to time, any subsequent modifications or revisions of, and any other documents listed or referred to in, those portions of the Prime Contract made a part of the Contract Documents;
(d) Any other document(s) specified in Exhibit C attached to this Subcontract.

In the event of a conflict between the Contract Documents, the conflict shall be resolved by consulting the above listed Contract Documents in the order listed above; document (a) shall control over all other listed documents, document (b) shall control over all other documents except document (a), etc. Nonetheless, in the event of a conflict within a Contract Document, or in the event of a conflict pertaining to the order of precedence or any other conflict within the Contract Documents, then Contractor shall have the right to reasonably determine which provision applies. Subcontractor is bound to Contractor by the Contract Documents and, to the extent the terms of the Prime Contract apply to the Work of Subcontractor, then Subcontractor shall assume toward Contractor all the same obligations and responsibilities that Contractor assumes toward Owner and with respect to all prior payments made by Owner.

Subcontractor shall bind its lower tier subcontractors to the performance obligations and responsibilities which Subcontractor assumes toward Contractor.

SECTION 3. PAYMENT.
(a) For the performance of this Subcontract as specified herein, Contractor agrees to pay Subcontractor the Contract Price subject to additions and deductions for changes agreed upon or determined, as hereinafter provided. Payment shall be made at the following times and in the following manner:
1. Within fifteen (15) days after the 10th day of each month, Subcontractor shall submit to Contractor an application for payment in a form acceptable to Contractor detailing that portion of the Work for which payment is being requested. The application for payment shall constitute a representation by Subcontractor that the portion of the Work for which payment is requested has been fully and faithfully completed in accordance with the Contract Documents and that Subcontractor is entitled to payment of the amount requested. Contractor shall then evaluate the application for payment and either approve the application or, in writing to Subcontractor, why the application is being rejected. Within ten (10) days of Contractor's receipt of payment from Owner for Work completed by Subcontractor and approved by Contractor, Contractor shall make payment to the amount of ninety percent (90%) of Subcontractor's application for payment.

(b) Subcontractor shall promptly pay its subcontractors and material suppliers who supplied the labor and/or materials for the Work upon receipt of payment from Contractor, out of the amount paid to Subcontractor on account of such subcontractor’s or material supplier’s work or material, the amount to which said subcontractor or material supplier is entitled in accordance with the terms of Subcontractor's contract with such subcontractor or material supplier. Subcontractor shall, by appropriate agreement with each subcontractor, require each subcontractor to make payments to its subcontractors and material suppliers in similar manner.

(c) Within fifteen (15) days after Subcontractor’s receipt of payment from Contractor, upon Contractor's request Subcontractor shall deliver to Contractor notarized releases and waivers of lien, in a form acceptable to Contractor and Owner, for Subcontractor and its subcontractors, material suppliers and labor suppliers for and with respect to, and to the extent of, the payment so made. Subcontractor acknowledges that Contractor shall have the right to refuse any application for payment unless such notarized releases and waivers of lien have been delivered to Contractor with respect to all prior payments made by Contractor.

(d) By submitting an application for payment, Subcontractor warrants that: (1) title to the Work, materials and equipment covered by an application for payment will pass to Owner either by incorporation in the construction or upon receipt of payment by Subcontractor; whichever occurs first; (2) the Work, materials and equipment covered by previous applications for payment are free and clear of liens, claims, security interests or encumbrances (hereinafter referred to as "Liens"); and (3) no Work, materials or equipment covered by an application for payment and acquired by Subcontractor or any other person performing work at the site are subject to agreements under which an interest therein or Lien thereon is retained by the seller or otherwise imposed by Subcontractor or such other person.

(e) The remaining ten percent (10%) of the Contract Price will be retained by Contractor until all the requirements incident to final payment set forth herein have been satisfied.

(f) Subject to the conditions herein stated, final payment constituting the entire unpaid balance due shall be paid by Contractor to Subcontractor within thirty (30) days after Contractor’s receipt of Subcontractor’s final application for payment (including any and all waivers and releases upon final payment required hereunder), and receipt by Contractor of final payment from Owner, and further provided the Work has been completed, accepted by Owner and Contractor, and the Subcontract fully performed. Subcontractor understands and agrees that Owner’s payment to Contractor may and will affect the timing of Contractor’s progress and final payments to Subcontractor, and may result in postponing or delaying payment to Subcontractor; however, this covenant to defer or postpone payment shall not in any way affect, modify, release, or waive Subcontractor’s rights with respect to mechanic’s liens, stop notices, applicable bonds or other legal rights. If Owner delays in making payment to Contractor, or refuses to make payment to Contractor, from which payment to Subcontractor is to be made, Contractor and its sureties, (where applicable), shall have a reasonable time to make payment to Subcontractor of any amounts actually due and owing to Subcontractor. A “reasonable time” shall be determined according to the relevant circumstances, but in no event shall be less than the time Contractor, Contractor’s sureties and Subcontractor require to pursue to conclusion their legal remedies against Owner to obtain payment.
(g) Neither final payment nor amounts retained shall become due until Subcontractor submits to Contractor (1) an affidavit that payroll, taxes, insurance, materials, and other indebtedness connected with the Project for which Owner or Contractor's property might be liable have been paid or otherwise satisfied; (2) consent of surety, if any, to final payment; (3) certified payroll records if required pursuant to the Contract Documents, and (4) if required by Owner or Contractor, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens to the extent and in such form as may be designated by Owner or Contractor. If a subcontractor or materialman to Subcontractor refuses to furnish such release or waiver required by Owner or Contractor, Subcontractor shall furnish a bond satisfactory to Owner to indemnify Owner for any such lien. If such lien remains unsatisfied after payments are made, Subcontractor shall reimburse Owner or Contractor for monies that are required to discharge the lien, including all costs and reasonable attorneys' fees.

(h) In addition to the requirements set forth in this section, and without limitation upon the right of Owner or Contractor to require other documents, it is specifically understood that final payment will not be made to Subcontractor until it has furnished Contractor with all of the following documents:
1. all "as-built" maintenance instructions or other documentation required by the Contract Documents or reasonably required by Owner;
2. any special guarantees or warranties required by the Contract Documents;
3. certificates of inspection and approval with respect to the Work that may be required by governmental authorities as a condition for the issuance of a certificate of occupancy for the Project;
4. an affidavit, in a form approved by Contractor, stating that the Work has been fully completed in compliance with the Contract Documents, that all subcontractors, laborers and material suppliers who supplied the labor and materials for the Work have been paid in full, that Subcontractor has complied with all prevailing wage obligations, and that any liens that have been filed have been discharged of record or waived;
5. notarized releases and waivers of lien from subcontractors, material suppliers and all labor suppliers for all labor and material provided in connection with the performance of the Work.

(i) The making of any partial and/or final payment shall not constitute a waiver of claims by Owner or Contractor arising from (1) unreleased liens; (2) faulty or defective Work; (3) failure of the Work to comply with the requirements of the Contract Documents; or (4) terms of special warranties required by the Contract Documents.

(j) Acceptance of final payment shall constitute a waiver of all claims by Subcontractor except those previously made in writing and identified by Contractor as unsettled at the time of final application for payment.

(k) Contractor may deduct from any amounts due to or become due to Subcontractor any sum or sums owed by Subcontractor or Subcontractor's affiliates to or on account of any of the Work of any other party; or at any time after execution of this Subcontract, or in the event of the assertion by any other party of any claim or lien against Contractor or the Project arising out of Subcontractor's performance of the Work under this Subcontract, Contractor shall have the right to retain out of any payments due to or to become due to Subcontractor, an amount sufficient to completely protect Contractor from any and all loss, damage, or expense therefrom, until the situation has been satisfactorily remedied or adjusted by Subcontractor.

SECTION 4. BONDING

(a) Subcontractor shall furnish a Performance and Payment Bond in an amount equal to the full Contract Price within ten (10) days after the prescribed forms are presented to Subcontractor. Such bond shall be in a form furnished by, and with a surety satisfactory to, Owner and Contractor. Premium for such bond shall be paid by Subcontractor unless otherwise agreed upon in writing by the parties hereto. Should Subcontractor fail to provide a bond as described herein, Contractor may elect to terminate this Subcontract for default and proceed in accordance with Section 7(b) hereof.

(b) By signing this Subcontract, Subcontractor certifies that it has the necessary bonding capacity and has made arrangements for furnishing said Performance and Payment Bond to Contractor prior to beginning performance of the Work and that the time required to prepare and furnish said bond will not delay the start of the Work. Should Subcontractor proceed with the Work without first furnishing said Performance and Payment Bond, whether or not such performance was permitted or encouraged by Contractor's authorized representative, Subcontractor shall be deemed to have waived its right to payment and agrees to look to Contractor for payment of the amount due hereunder only upon furnishing said bond or, if Subcontractor has completed the entire Work by the time said bond is furnished, the furnishing of the releases described in Section 13. The furnishing of said bond by Subcontractor is a condition precedent to Contractor's right to receive payment for the Work performed hereunder. The waiver of payment under this provision shall not constitute an excuse or reason for nonperformance of this Subcontract by Subcontractor.

SECTION 5. CHANGES

Contractor may at any time by written order of Contractor's authorized representative, without notice to Subcontractor's sureties, and without nullifying this Subcontract, make changes in, additions to and deletions from the Work to be performed under this Subcontract, and Subcontractor shall promptly proceed with the performance of this Subcontract as so changed. Proposed adjustments in the Contract Price or Project Schedule, if any, resulting from such changes shall be set forth in Contractor's written change order. No such adjustments shall be made for any changes performed by Subcontractor that have not been ordered by Contractor in writing. If Subcontractor disputes Contractor's proposed adjustment of the Contract Price or Project Schedule, Contractor and Subcontractor shall negotiate in good faith regarding the appropriate adjustment, provided that such dispute and negotiation shall not relieve Subcontractor of its duty to promptly proceed with the performance of this Subcontract, as changed.

SECTION 6. PROJECT SCHEDULE

The purpose of the Work and, as directed by Contractor and in accordance with the conditions set forth in Section 7 of this Subcontract. To assist Contractor in preparing a Project Schedule for the purposes of scheduling the Work, Subcontractor shall provide Contractor with any requested scheduling information for the Work. The Project Schedule, including the Work of Subcontractor, shall then be prepared by Contractor and may be revised by Contractor as necessary while the Work progresses without additional compensation unless allowed and paid for by Owner. Contractor will make a good faith effort to obtain Owner's consent consistent with the terms of the Prime Contract.

SECTION 7. PROSECUTION OF WORK

(a) Subcontractor shall furnish all labor, supervision, tools, equipment, materials and supplies necessary for the performance of this Subcontract in a proper, efficient, and workmanlike manner. Subcontractor shall prosecute the Work undertaken in a prompt and diligent manner whenever such Work, or any part of it, becomes available, or at such time or times as Contractor may direct, and so as to facilitate the general progress of the entire construction, and shall not, by delay or otherwise, interfere with or hinder the work of Contractor or any other subcontractor. Any materials that are to be furnished by Subcontractor hereunder shall be furnished in sufficient time to enable Subcontractor to perform and complete the Work within the time or times provided for herein. The time of performance of the Work by Subcontractor is of the essence, and Subcontractor agrees to reimburse Contractor for any liquidated or actual damages, evidenced in writing, that may be assessed by Owner against and collected from Contractor or other damages suffered by Contractor as and to the extent such damages are attributable to or caused by, in whole or in part, Subcontractor's failure to perform the Work required by this Subcontract within the time specified or in the manner provided for herein. The payment of such damages shall not release Subcontractor from its obligation to otherwise fully perform this Subcontract. Upon written request by Contractor, Subcontractor shall furnish to Contractor such evidence as Contractor may require relating to Subcontractor's ability to perform this Subcontract in the manner and within the time specified herein.

(b) In the event Subcontractor fails to comply or becomes unable to comply with the provisions herein governing character or time of performance, including but not limited to payment for all materials furnished and Work and labor performed under this Subcontract, and the failure is not corrected within two (2) days after receipt of written request by Contractor to Subcontractor, Contractor, by subcontract or otherwise, may, without prejudice to any other right or remedy, terminate this Subcontract and take over and complete the performance of this Subcontract directly, by subcontract or otherwise, at the expense of Subcontractor, or without terminating the Subcontract, take over the Work or any portion thereof and furnish such materials and/or employ such workers as may be necessary to remedy the situation at the expense of Subcontractor. If Contractor takes over the Work or terminates this Subcontract pursuant to this section, it is specifically agreed that Contractor may, in addition to any other rights it may have, take possession of the premises and of all materials, tools and equipment of Subcontractor at the Project site for the
purpose of completing the Work covered by this Subcontract, provided that Contractor will reimburse Subcontractor for the reasonable rental rates for all such tools and equipment used and return all such tools and equipment to Subcontractor upon completion of the Work.

(c) Subcontractor shall keep on the Project site during the progress of the Work a competent superintendent, acceptable to Owner and Contractor, who shall be the authorized representative of Subcontractor. Directions and communications to such superintendent from Contractor in connection with the Work shall be treated as directions and communications to Subcontractor.

(d) It is acknowledged that if Subcontractor becomes insolvent, or institutes or has instituted against it bankruptcy proceedings, or makes a general assignment for the benefit of creditors, or if a receiver is appointed for the benefit of its creditors, or if a receiver is appointed on account of its insolvency, such event or events could impair or frustrate Subcontractor's performance of this Subcontract. Accordingly, it is agreed that upon occurrence of any such event, Contractor shall be entitled to request of Subcontractor or its receiver or court-appointed successor adequate assurances of future performance. Pending receipt of adequate assurances of future performance and actual performance in accordance therewith, Contractor shall be entitled to take over the Work pursuant to the provisions of subsection 7(b) above without further notice to Subcontractor.

(e) Subcontractor agrees that Contractor may, upon five (5) days written notice to Subcontractor, terminate this Subcontract in whole or in part for Contractor's convenience. Subcontractor's remedy for termination for convenience is limited to the following:

1. Subcontractor shall be entitled to be paid, pursuant to the prices set forth in the Schedule of Values referred to in Section 3(a)1 hereof, for all Work properly performed prior to termination;
2. Partial payment shall be made for lump sum items of Work on the basis of percent complete of such items at the time of termination;
3. Subcontractor shall be reimbursed for reasonable close-out costs; and
4. Subcontractor shall not be entitled to any compensation for loss of anticipated profits or unallocated overhead.

(f) If the Prime Contract is terminated for the convenience of Owner, the termination settlement under this Subcontract shall be as provided in the Contract Documents. Subcontractor shall not be entitled to receive any greater amount than Contractor may, on behalf of Subcontractor, recover from Owner for such termination.

SECTION 8. WARRANTY. Subcontractor warrants and guarantees to Owner and Contractor the Work covered by this Subcontract for a period of time specified in the Contract Documents, but for not less than a period of one (1) year from the date Owner accepts such Work. Any defective Work or Work failing to conform to the Contract Documents which is rejected by Owner within one (1) year of Owner's acceptance of the Work performed by Subcontractor hereunder (whether such defects are observed before or after Owner's acceptance of the Work) shall be promptly corrected by Subcontractor; however, the foregoing shall not be construed to establish a period of limitation with respect to Subcontractor's other obligations under this Subcontract and the foregoing relates only to the specific obligation of Subcontractor to correct the Work and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish Subcontractor's liability with respect to Subcontractor's obligations other than correction of the Work.

SECTION 9. DELAYS. In the event Subcontractor's performance of this Subcontract is delayed or interfered with by acts of Owner, Contractor and/or other subcontractors, Subcontractor may request an extension of the time for the performance of same, as hereafter provided, but Subcontractor shall not be entitled to any increase in the Contract Price or to damages or additional compensation as a consequence of such delays or interference unless such delay or interference was caused solely by Contractor and/or other subcontractors and continues for more than sixty (60) days. In that event, and in only that event, Subcontractor shall be entitled to recover only such direct costs as it may have incurred as a result of the delay or interference and Subcontractor shall not be entitled to recover any amount as compensation for overhead or lost profits as a result of such delay. If the delay or interference was caused by Owner, Subcontractor shall, in no event, receive a greater time extension or increase in the Contract Price than is recovered by Contractor on Subcontractor's behalf. In no event shall Subcontractor be entitled to receive an extension of time or additional monies as herein provided for any cause whatever, unless Subcontractor shall have made written request to Contractor for such extension or monies within forty-eight (48) hours after the occurrence of the event which serves as the basis for Subcontractor's claim.

SECTION 10. LABOR. If by reason of strikes, picketing or disputes of any nature between Subcontractor and any individual, group, or organization, Subcontractor should be persistently, repeatedly, or for a period of five (5) consecutive days, unable to supply enough properly skilled workers or proper materials to perform the Work, Contractor may terminate this Subcontract for default and proceed in accordance with Section 7(b) hereof.

SECTION 11. INSURANCE. Prior to commencement of the Work, Subcontractor shall procure and maintain with insurers acceptable to Contractor the following minimum insurance protecting Subcontractor, Owner, and Contractor against liability from damages because of injuries, including death, suffered by their employees or by persons on the Work site while on the Project premises, and liability from damages to property arising from and growing out of Subcontractor's operations, including its subcontractors’ operations, and its subcontractors’ supplies and operations, in connection with the performance of this Subcontract. Policies of insurance shall be issued by a responsible carrier or carriers authorized to do business in the state(s) where the Work is performed. If the Contract Documents require larger limits or additional coverage or both, Contractor reserves the right to require Subcontractor to provide, at Subcontractor's expense, such larger limits or additional coverage or both.

(a) Coverage: Commercial General Liability including: Premises Operations, XCU, Contractual Liability, Broad Form Property Damage and Independent Contractors. Limits: $2,000,000 General Aggregate; $1,000,000 Products/Completed Operations Aggregate; $1,000,000 Combined Single Limit Each Occurrence. This policy shall be endorsed to have the General Aggregate apply on a "Per Project Basis." This policy shall be the "Occurrence" form.

(b) Coverage: Comprehensive Automobile Liability (including Owned, Hired and Non-owned Vehicles). Limits: $1,000,000 Combined Single Limit Each Occurrence.

(c) Coverage: Workers Compensation, in state(s) of operation and where applicable, U.S. Longshoremen's and Harbor Workers Compensation Act and Jones Act coverage. Limits: Statutory requirements.

(d) Coverage: Employers' Liability. Limits: $1,000,000 Each Accident/Occurrence/Disease.

(e) Coverage: Excess or Umbrella Liability. Limits: $2,000,000 Each Occurrence.

Owner, Contractor and all other participants required to be insured by the Contract Documents shall be listed by endorsement as additional insureds on Subcontractor's Commercial General Liability, Comprehensive General Liability, Commercial Automobile Liability, and Excess or Umbrella Liability policies. Subcontractor's insurance carrier shall waive all rights of subrogation against Contractor and Owner under Subcontractor's Commercial General Liability, Comprehensive Automobile Liability, and Excess or Umbrella Liability policies. Subcontractor's insurance is understood to be primary with respect to the interests of the additional insureds and any other insurance maintained by these additional insureds is excess and not contributory with Subcontractor's insurance. The maintenance of insurance by Subcontractor and the limits of coverage required shall in no way limit or affect the extent of Subcontractor's liability.

Subcontractor shall disclose to Contractor, and Contractor shall approve of, any retention amounts contained in Subcontractor's insurance policies prior to execution of this Subcontract. Such approved retention amounts shall then be properly indicated on Subcontractor's certificates of insurance.
SECTION 12. INDEMNIFICATION. Subcontractor further specifically obligates itself to Contractor, Owner and any other party required to be indemnified under the Contract Documents, jointly and separately, in the following respects:
(a) To defend and indemnify them against and save them harmless from any and all claims, suits, liabilities, expenses or damages for any alleged or actual infringement or violation of any copyright, patent or registered trademark, arising in connection with this Subcontract and anything done by Subcontractor hereunder;
(b) To defend and indemnify them against and save them harmless from any and all claims, suits or liabilities for damage to property including loss of use thereof, injuries to persons, including death, and from any other claims, suits or liabilities (hereinafter “Claims”) on account of acts or omissions of Subcontractor, or any of its subcontractors, suppliers, officers, agents, employees or servants. Subcontractor’s obligation hereunder shall not be limited by the provisions of any Workers Compensation act or similar statute;
(c) To pay for all materials furnished and Work and labor performed under this Subcontract, and to satisfy Contractor thereupon whenever demand is made, and to defend and indemnify Contractor, Owner and other indemnified parties against and save them and the Project harmless from any and all claims, suits, or liens thereof;
(d) To defend and indemnify them against and save them harmless from any and all losses, damages, costs, expenses and attorneys’ fees suffered or incurred on account of any breach of the aforesaid obligations and covenants, and any other provision or covenant of this Subcontract.
Notwithstanding the above, Contractor, at its sole discretion, reserves the right to defend any one or all of the following: Owner, other indemnified parties, Contractor’s surety and itself. Such election to defend by Contractor shall not in any way limit Subcontractor’s indemnification and hold harmless obligations provided herein. Subcontractor shall not be obligated under this Subcontract to indemnify any party for damages or liability arising out of that party’s sole negligence or willful misconduct. The indemnification specified herein shall survive termination or closeout of the Subcontract and is in addition to any other rights or remedies that Contractor may have under law or this Subcontract.

SECTION 13. LIENS AND CLAIMS. Without limiting the generality of other provisions in this Subcontract, Subcontractor shall, and as when requested by Contractor, furnish evidence satisfactory to Contractor that all amounts due for labor and materials furnished by Subcontractor in connection with performance of this Subcontract have been paid, including union health, welfare, and pension fund payments and payroll taxes. Such evidence shall be furnished in such form and manner as shall be requested by Contractor. All statements relative thereto shall, if required by Contractor, be made by sworn affidavit. Subcontractor shall furnish to Contractor releases of bond rights and lien rights by persons who have furnished labor, material or other things in the performance of this Subcontract, it being agreed that payment of money otherwise due Subcontractor need not be made by Contractor until such releases are furnished. Subcontractor waives any and all rights it may have to file liens against property, real or personal, of Owner and Contractor.

Without limiting the generality of other provisions in this Subcontract, in the event a claim of lien or other encumbrance is filed against Owner’s property by any of Subcontractor’s employees, subcontractors or material suppliers, then in such event, Subcontractor agrees that within five (5) days after Contractor has notified Subcontractor of the filing of such claim of lien or other encumbrance, Subcontractor shall do whatever is necessary to cause the satisfaction or removal of said claim of lien or encumbrance, whether by transferring such claim to or encumbrance to bond or otherwise. In the event such claim or encumbrance is not satisfied or removed within said five (5) day period, Subcontractor agrees that Contractor is authorized to pay such claim or encumbrance and to charge to Subcontractor the amount paid, plus reasonable attorneys’ fees and costs, from sums remaining due to Subcontractor. In the event the amount of the lien or encumbrance exceeds the amount due to Subcontractor, Subcontractor agrees to reimburse Contractor such amount plus reasonable attorneys’ fees and costs, within ten (10) days after demand is made therefor.

SECTION 14. POSSESSION PRIOR TO COMPLETION. Whenever it may be useful or necessary for Owner or Contractor to do so, Owner or Contractor shall be permitted to occupy and/or use any portion of the Work which has been either partially or fully completed by Subcontractor before any final inspection and acceptance thereof by Owner permitted by the Contract Documents, but such use and/or occupation shall not relieve Subcontractor of its guarantee of said Work nor of its obligation to make good at its own expense any defect in the Work.

SECTION 15. SITE CONDITIONS. Subcontractor has inspected the Project site and is familiar with the conditions of the Project site and agrees that no claim shall be made whatsoever for causes, damages or expenses as a result of the conditions of the Project site.

SECTION 16. APPROVALS. Subcontractor shall prepare and submit to Contractor all required shop drawings, submittal data, catalogs, and samples required by the Contract Documents for the Work, or that are necessary for satisfactory performance of the Work. Such items will be submitted as and when required by Contractor. Approval of such items by Contractor or Owner (or by any other person whose approval is required or permitted under the Contract Documents) will not relieve Subcontractor of its obligation to perform the Work in strict accordance with the Contract Documents. All drawings of Subcontractor shall be submitted through Contractor for approval by Owner or Owner’s Representative and all other communications between Subcontractor and Owner or Owner’s Representative with respect to the Work shall be transmitted through Contractor.

SECTION 17. OTHER CONTRACTS. It is understood and agreed that the Work provided for in this Subcontract constitutes only a part of the work being performed for Owner by Contractor and other subcontractors, suppliers, or contractors. Subcontractor, therefore, agrees to perform the Work in such a manner that it will not injure, damage, or delay any other work performed by Contractor or any other subcontractor, supplier, or contractor, and further agrees to pay or reimburse Contractor for any additional costs, damages or delays that may be caused to such other work, by Subcontractor or by its agents or employees.

SECTION 18. INDEPENDENT CONTRACTOR. Subcontractor and Contractor, expressly intending that no employment, agency, partnership or joint venture relationship is created by this Subcontract, hereby agree as follows:
(a) Neither Subcontractor nor anyone employed by or acting on behalf of Subcontractor shall ever be or be construed as an employee or agent of Contractor and Subcontractor shall act at all times as an independent contractor hereunder;
(b) Subcontractor shall provide the tools, materials and equipment needed to perform the Work; and
(c) Subcontractor shall be free to contract with and provide services to parties other than Contractor during the term hereof.

SECTION 19. COMPLIANCE WITH LAW. Subcontractor agrees to obtain and pay for all permits, licenses and official inspections necessary for the Work, and to comply with all laws, ordinances and regulations bearing on the Work and conduct thereof. Subcontractor acknowledges that it is knowledgeable and aware of all existing and potential restrictions and/or conditions, including but not limited to noise abatement and traffic control, which may limit or restrict construction methods and/or hours of Work.

SECTION 20. SAFETY. (a) Subcontractor shall take all reasonable safety precautions pertaining to the Work and the conduct thereof. Without limiting the generality of the foregoing, Subcontractor shall comply with all applicable laws, ordinances, rules, regulations and orders issued by any public or governmental agency, body or authority, whether federal, state, local or otherwise, including, but not limited to, occupational safety, health and environmental legislation and, in addition, the safety measures called for by Contractor.
(b) Any Subcontractor performing an unsafe or illegal act or operation shall be notified to stop work until the operation is corrected. If such acts or operations continue, it shall result in the termination of the Subcontract. This project encompasses areas that may include both public and private property. Therefore, in addition to the works, consideration must also be made for the general public and for private property.
(c) Any personal injury to Subcontractor’s employees or agents engaged in work under this Subcontract, or to other persons, which requires the services of a physician or hospitalization, shall be reported at once to Contractor.

SECTION 21. PROTECTION OF WORK. Subcontractor specifically agrees that it is responsible for the protection of the Work until final completion and acceptance thereof by Contractor and Subcontractor will make good or replace, at no expense to Contractor or Owner, any damage to the Work which occurs prior to such final acceptance.
SECTION 22. DISPUTE RESOLUTION PROCESS.
(a) Any controversy or claim between Contractor and Subcontractor arising out of or related to this Subcontract, or the breach thereof, involving the acts or omissions of Owner or Owner's Representative, shall be settled according to any dispute resolution procedures set forth in the Prime Contract, and Subcontractor agrees to be bound by such procedures.
(b) As a condition precedent to the right to recover on any claim or defense, Subcontractor shall furnish all notices and information within the time frames applicable to the Prime Contract to ensure the Prime Contractor to timely make a claim or a defense of Subcontractor.
(c) Subcontractor shall have the right to participate in the assertion or defense of claims related to its Work in the dispute resolution procedures set forth in the Contract Documents and shall be bound by the outcome thereof.
(d) In the event of any dispute resolution procedures with Owner undertaken by Contractor in accordance with the Contract Documents, Contractor shall pay Subcontractor the amount of the claim or a proportionate share of any recovery due to Contractor involving the Work and pay Contractor its proportionate share of the expenses and attorneys' fees incurred in defending such Owner claim against Contractor.
(e) Completion of the dispute resolution procedure set forth in this Subcontract and the Contract Documents shall be a condition precedent to the right of Subcontractor to commence or continue any legal action against Contractor.
(f) Payment by Owner, or other responsible party, to Contractor shall be a condition precedent to the obligation of Contractor to pay Subcontractor for any Work, claim, or damage.
(g) Subcontractor hereby agrees to indemnify Contractor from and against any and all costs, including attorneys' fees, of defending a claim by Owner or any other party in the dispute resolution procedure set forth in the Contract Documents if such claim relates to or arises from the Work or from Subcontractor's acts, errors or omissions.
(h) Subcontractor shall be bound by Contractor's determination, made in good faith, as to apportionment of any amounts received from Owner for claimants, including Contractor and other subcontractors, whose work is affected by any act or omission of Owner or Owner's Representative.
(i) Subcontractor agrees to continue performance of the Work and shall proceed in accordance with the directives of Contractor in the event of a dispute or controversy, provided that Contractor shall continue to make payments as provided herein for that part of the Work which is not in dispute. Failure to so proceed shall constitute a material breach of this Subcontract, regardless of the ultimate decision on the dispute, it being understood and agreed that any controversy between the parties shall not be deemed a basis to delay or suspend the Work, unless directed otherwise by Contractor.

SECTION 23. ATTORNEYS’ FEES. In the event either party institutes suit in court against the other party or against the surety of such party, in connection with any dispute or matter arising under this Subcontract, the prevailing party shall be entitled to recover reasonable attorneys' fees in addition to any other relief granted by the Court.

SECTION 24. TAXES. Subcontractor shall pay all taxes, licenses and fees of every nature which may be imposed or charged by any governmental authority upon the labor, materials or other things used in the performance of the Work or upon the transaction between Contractor and Subcontractor.

SECTION 25. CONTRACTOR'S EQUIPMENT. In the event that Subcontractor by rental, loan or otherwise, makes use of any equipment furnished by Contractor or owned by Contractor, such equipment, whether furnished by Contractor for use in connection with this Subcontract, then the cost of handling, storing and installing such materials shall be considered as included in the Contract Price. Subcontractor shall be and become responsible for all such materials upon delivery to it, whether delivered F.O.B. point of origin or F.O.B. job site (except that any transportation charges paid by Subcontractor, in the event of delivery F.O.B. point of origin, shall be reimbursable to Subcontractor) and shall pay all demurrage and storage charges which accrue after delivery. Furnished material lost or damaged after delivery, from any cause whatsoever, shall be replaced by or at the expense of Subcontractor. Subcontractor shall, within twenty-four (24) hours after delivery of furnished material, inspect the same and immediately report the发现, in writing to Contractor, any shortages, damages or defects therein which are reasonably observable by proper inspection. Failure to inspect or report as specified shall be treated as unqualified acceptance by Subcontractor of the materials involved.

SECTION 26. FURNISHED MATERIAL. Subcontractor agrees to indemnify Contractor from and against any and all costs, including attorneys' fees, of defending a claim by Owner or any other party in the dispute resolution procedure set forth in the Contract Documents if such claim relates to or arises from the Work or from Subcontractor's acts, errors or omissions.

SECTION 27. EMPLOYEE QUALIFICATION. All Subcontractor employees shall have the skill and experience required to perform the Work assigned to them. If any person employed by Subcontractor or any of its subcontractors is performing the Work in an improper, uncooperative or incompetent manner which affects the progress of the Work, then at the written request of Contractor, Subcontractor shall immediately remove such person and such person shall not be re-employed on the Project without the prior written approval of Contractor.

SECTION 28. ASSIGNMENT. Subcontractor shall obtain the written consent of Contractor prior to assigning or subcontracting any of the Work, in whole or in part. Subcontractor may then assign or subcontract the Work or any portion thereof only after providing adequate assurances to Contractor that all its labor, suppliers, and other creditors for the Work will be paid and upon obtaining the consent of Contractor's surety and the approval of the assignees or orderors provided by Contractor.

SECTION 29. EQUAL OPPORTUNITY. Without limiting the generality of other provisions in this Subcontract, if the Contract Documents contain any provision which prohibits discrimination on the basis of race, color, religion, sex, or national origin, or if any law, regulation or order has any application thereto and is applicable to this Subcontract, then Subcontractor hereby agrees to comply with such provision, law, regulation or order. In the event that any such provision, law, regulation or order conflicts with the physical attachment of specific items to this Subcontract, then such attachments shall be furnished by Contractor and shall be considered a part of this Subcontract by reference thereto or shall be physically attached thereto as called for by Contractor.

The parties hereby incorporate the requirements of 41 CFR §§ 60-1.4(a)(7), 60-250.5(a), and 60-741.5, if applicable.

SECTION 30. PRIOR UNDERSTANDING OR REPRESENTATIONS. Contractor assumes no responsibility for any understandings or representations made by any of its officers or agents prior to the execution of this Subcontract, unless such understandings or representations by Contractor are expressly stated in this Subcontract.

SECTION 31. SEVERABILITY AND WAIVER. The partial or complete invalidity of one or more provisions of this Subcontract shall not affect the validity or continuing force and effect of any other provision. The failure of either party to insist, in any one or more instances, upon the performance of any of the terms, covenants or conditions of this Subcontract, or to exercise any right herein, shall not be construed as a waiver or relinquishment of such term, covenant, condition or right as respects further performance.

SECTION 32. CAPTIONS. The captions at the beginning of each Section of this Subcontract are for convenience only and are to be given no weight in construing the provisions of this Subcontract.

SECTION 33. NOTICES. All notices shall be in writing addressed to the parties at the addresses set out in this Subcontract unless subsequently changed by written notice to the other party and shall be considered as delivered on the third business day after the date of mailing if sent certified mail or by a recognized overnight delivery service, in all other cases, including any electronic medium or personal delivery.

SECTION 34. PUBLICITY. Unless written consent of Contractor shall be first obtained, Subcontractor shall not in any manner, disclose, advertise, publish or release for publication any statement mentioning Contractor, its affiliates or Owner, or the fact Subcontractor is furnishing, or has furnished, or has contracted to furnish the Work hereunder to Contractor, its affiliates or Owner. Subcontractor shall impose such restrictions on all its subcontractors, suppliers of any tier, provided that the foregoing shall not affect disclosure made pursuant to governmental or judicial requirement or order, but then only after affording a reasonable opportunity for review and approval of such disclosure, which approval shall not be unreasonably
SECTION 36. CONFIDENTIALITY. This Section shall cover (i) any and all information in any form, whether tangible, intangible, oral or written provided to Subcontractor by Contractor in connection with the Work; (ii) the substance of any discussions regarding the Work; and (iii) any and all notes, summaries or any other compilations containing any Information or Discussions (together, the "Confidential Information").

Subcontractor will, and will cause its employees, and any other person or entity who is provided the Confidential Information to preserve the confidentiality of such. Without limitation, except as otherwise provided herein, Subcontractor shall not (i) copy, reproduce, distribute or disclose to any of its employees or agents any of the Confidential Information; or any facts related thereto; (ii) permit any third party to have access to such Confidential Information; or (iii) use such Confidential Information for any purpose other than in connection with the evaluation, negotiation and performance of the Work. Without limitation, Subcontractor shall (i) keep all information which is in a tangible or written form in a secure and safe place, (ii) cause or permit such information to be removed only by persons authorized to have access to the Confidential Information under the terms of this Subcontract and (iii) promptly return the Confidential Information to Contractor upon Contractor's request.

Subcontractor may transmit the Confidential Information to its employees, agents, consultants and attorneys provided such employees, agents, consultants and attorneys (i) need to know the Confidential Information for purposes of evaluating, negotiating and performing the Work and (ii) are informed of this Subcontract.

Contractor shall be the sole owner of all Confidential Information. Subcontractor acknowledges and agrees that such Confidential Information is proprietary to Contractor and a valuable trade secret of Contractor, and that disclosure or unauthorized use of the Confidential Information would cause irreparable harm and loss to Contractor.

Subcontractor understands that because of the unique nature of the Confidential Information, in addition to Contractor's other available remedies, Contractor shall be entitled to injunctive and other extraordinary relief in enforcing this provision. Subcontractor agrees to be responsible for all costs, including reasonable attorneys' fees, incurred by Contractor, in any successful action to enforce the terms of this provision.

In the event that Subcontractor or any other party who has received Confidential Information through Subcontractor is requested in any proceeding to disclose any Confidential Information, Subcontractor will give Contractor prompt notice of such request for the purpose of allowing Contractor to decide whether to seek an appropriate protective order. If, in the absence of a protective order, Subcontractor or any other party is nonetheless advised by counsel in writing that disclosure of the Confidential Information is required, Subcontractor or such other party may disclose such Confidential Information without liability hereunder.

This provision shall not restrict the release of any Confidential Information which falls into any of the following categories:
(a) Any information which has come within the public domain, except that which has come in the public domain through Subcontractor's breach of this provision; or
(b) Information which was readily and lawfully available to Subcontractor on a non-confidential basis prior to its disclosure hereunder to Subcontractor; or
(c) Information independently developed by Subcontractor.

Subcontractor understands, acknowledges and agrees that Contractor is not making any representation or warranty, express or implied, as to the accuracy or completeness of the Confidential Information, and Contractor, including its respective officers, directors, employees, advisors and agents will have no liability to Subcontractor or any other party resulting from Subcontractor's use of the Confidential Information.

SECTION 37. GOVERNING LAW. This Subcontract shall be governed by the law of the State of Nebraska (other than its choice or conflict of laws provisions). Any dispute arising directly or indirectly from this Subcontract shall be resolved solely and exclusively in a state or federal court located in Douglas County, Nebraska.

SECTION 38. ADDITIONAL PROVISIONS. (Attach additional pages if necessary.)