

# Request for Proposal (RFP)# 21-29 for

Communications Shelter for New River Valley Emergency Communications Regional Authority Issue Date: April 13, 2021

Proposal Due Date and Hour: May 17, 2021 3:00 p.m.

Montgomery County Purchasing Department 755 Roanoke Street, Suite 2C Christiansburg, VA 24073-3179

# **Table of Contents**

1 Ge	neral Instructions	1
1.1	Purpose	1
1.2	Project Overview	
1.3	Procurement/Project Schedule	
	Table 1-1 Procurement/Project Schedule	
1.4	Questions	
1.5	Mandatory Pre-Proposal Conference and Site Visit	
1.6	Answers and Addenda	
1.7	Instructions	
1.8	Mandatory Options	
1.9	Withdrawal of Proposals	
1.10	Proposal Evaluation	
1.11	Intent to Award	
1.12	Public Notice of Award	
1.13	Contract Negotiations	
1.13	Contract Execution	
1.15	RFP Property of NRVECRA	
1.16	Rights to Submitted Material	
1.17	Confidentiality	
1.17	Incurred Costs	
1.19	Proposal Errors and Irregularities	
1.20 1.21	Open Procurement	
	Proposal Surety	
1.22	Contract Security	ວ
		_
2 Ge	neral Terms and Conditions	ხ
2.1	PROPOSER Terms and Conditions	6
2.1 2.2	PROPOSER Terms and Conditions	6
2.1 2.2 2.3	PROPOSER Terms and Conditions  Clarification of Terms  Ethics in Public Contracting	6 6
2.1 2.2 2.3 2.4	PROPOSER Terms and Conditions  Clarification of Terms  Ethics in Public Contracting  Immigration Reform and Control Act of 1986	6 6 6
2.1 2.2 2.3 2.4 2.5	PROPOSER Terms and Conditions  Clarification of Terms  Ethics in Public Contracting  Immigration Reform and Control Act of 1986  Debarment Status	6 6 6
2.1 2.2 2.3 2.4 2.5 2.6	PROPOSER Terms and Conditions  Clarification of Terms  Ethics in Public Contracting  Immigration Reform and Control Act of 1986  Debarment Status  Qualifications of Proposers	6 6 6 6
2.1 2.2 2.3 2.4 2.5 2.6 2.7	PROPOSER Terms and Conditions  Clarification of Terms  Ethics in Public Contracting  Immigration Reform and Control Act of 1986  Debarment Status  Qualifications of Proposers  Applicable Laws and Courts	6 6 6 6 6
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8	PROPOSER Terms and Conditions  Clarification of Terms  Ethics in Public Contracting  Immigration Reform and Control Act of 1986  Debarment Status  Qualifications of Proposers  Applicable Laws and Courts  Antitrust	6 6 6 6 6
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9	PROPOSER Terms and Conditions  Clarification of Terms  Ethics in Public Contracting  Immigration Reform and Control Act of 1986  Debarment Status  Qualifications of Proposers  Applicable Laws and Courts  Antitrust  Changes to the Contract	6 6 6 6 6 6 7
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 2.10	PROPOSER Terms and Conditions Clarification of Terms Ethics in Public Contracting Immigration Reform and Control Act of 1986 Debarment Status Qualifications of Proposers Applicable Laws and Courts Antitrust Changes to the Contract Pricing and Payment	6 6 6 6 6 7 7
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 2.10 2.11	PROPOSER Terms and Conditions  Clarification of Terms  Ethics in Public Contracting  Immigration Reform and Control Act of 1986  Debarment Status  Qualifications of Proposers  Applicable Laws and Courts  Antitrust  Changes to the Contract  Pricing and Payment  Price Guarantee	6 6 6 6 6 7 7
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 2.10 2.11 2.12	PROPOSER Terms and Conditions Clarification of Terms Ethics in Public Contracting Immigration Reform and Control Act of 1986 Debarment Status Qualifications of Proposers Applicable Laws and Courts Antitrust Changes to the Contract Pricing and Payment Price Guarantee Transportation and Packaging	6 6 6 6 6 7 7 7 7
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 2.10 2.11 2.12 2.13	PROPOSER Terms and Conditions Clarification of Terms Ethics in Public Contracting Immigration Reform and Control Act of 1986 Debarment Status Qualifications of Proposers Applicable Laws and Courts Antitrust Changes to the Contract Pricing and Payment Price Guarantee Transportation and Packaging Sales Tax Exemption	6 6 6 6 7 7 7 7 7 9 9 9
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 2.10 2.11 2.12 2.13 2.14	PROPOSER Terms and Conditions  Clarification of Terms  Ethics in Public Contracting  Immigration Reform and Control Act of 1986.  Debarment Status  Qualifications of Proposers  Applicable Laws and Courts.  Antitrust  Changes to the Contract  Pricing and Payment  Price Guarantee  Transportation and Packaging  Sales Tax Exemption  Contractual Claims	66 66 66 77 7 7 9 9 9 9 9
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 2.10 2.11 2.12 2.13 2.14 2.15	PROPOSER Terms and Conditions Clarification of Terms Ethics in Public Contracting Immigration Reform and Control Act of 1986.  Debarment Status Qualifications of Proposers Applicable Laws and Courts. Antitrust Changes to the Contract Pricing and Payment Price Guarantee Transportation and Packaging Sales Tax Exemption Contractual Claims Default	66 66 67 77 7 7 9 9 9 9 9 9 9 9 9 9
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 2.10 2.11 2.12 2.13 2.14 2.15 2.16	PROPOSER Terms and Conditions Clarification of Terms Ethics in Public Contracting Immigration Reform and Control Act of 1986 Debarment Status Qualifications of Proposers Applicable Laws and Courts Antitrust Changes to the Contract Pricing and Payment Price Guarantee Transportation and Packaging Sales Tax Exemption Contractual Claims Default Liquidated Damages	66 66 66 77 7 7 9
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 2.10 2.11 2.12 2.13 2.14 2.15 2.16 2.17	PROPOSER Terms and Conditions Clarification of Terms Ethics in Public Contracting Immigration Reform and Control Act of 1986 Debarment Status Qualifications of Proposers Applicable Laws and Courts Antitrust Changes to the Contract Pricing and Payment Price Guarantee Transportation and Packaging Sales Tax Exemption Contractual Claims Default Liquidated Damages Indemnity	66 66 66 7 7 7 9
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 2.10 2.11 2.12 2.13 2.14 2.15 2.16 2.17 2.18	PROPOSER Terms and Conditions Clarification of Terms Ethics in Public Contracting Immigration Reform and Control Act of 1986.  Debarment Status Qualifications of Proposers Applicable Laws and Courts Antitrust Changes to the Contract Pricing and Payment Price Guarantee Transportation and Packaging Sales Tax Exemption Contractual Claims Default Liquidated Damages Indemnity Liability Insurance	66 66 6 7 7 9 9 9 9 9 9 9 10 10 10 10
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 2.10 2.11 2.12 2.13 2.14 2.15 2.16 2.17 2.18 2.19	PROPOSER Terms and Conditions Clarification of Terms Ethics in Public Contracting Immigration Reform and Control Act of 1986.  Debarment Status Qualifications of Proposers Applicable Laws and Courts. Antitrust Changes to the Contract Pricing and Payment Price Guarantee Transportation and Packaging Sales Tax Exemption Contractual Claims Default Liquidated Damages Indemnity Liability Insurance Assignment	66 66 77 7 9 9 9 9 10 10 11 10 11 10 11 11
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 2.10 2.11 2.12 2.13 2.14 2.15 2.16 2.17 2.18 2.19 2.10	PROPOSER Terms and Conditions Clarification of Terms Ethics in Public Contracting Immigration Reform and Control Act of 1986.  Debarment Status Qualifications of Proposers Applicable Laws and Courts Antitrust Changes to the Contract Pricing and Payment Price Guarantee Transportation and Packaging Sales Tax Exemption Contractual Claims Default Liquidated Damages Indemnity. Liability Insurance Assignment News Release	66 66 67 77 7 9 9 9 9 10 11 11 11 11
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 2.10 2.11 2.12 2.13 2.14 2.15 2.16 2.17 2.18 2.19 2.20 2.21	PROPOSER Terms and Conditions Clarification of Terms Ethics in Public Contracting Immigration Reform and Control Act of 1986.  Debarment Status Qualifications of Proposers Applicable Laws and Courts. Antitrust Changes to the Contract Pricing and Payment Price Guarantee Transportation and Packaging Sales Tax Exemption Contractual Claims Default Liquidated Damages Indemnity Liability Insurance Assignment. News Release Transfer of Title	66 66 66 7 7 9 9 9 9 9 10 11 11 11 11 11 11 11
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 2.10 2.11 2.12 2.13 2.14 2.15 2.16 2.17 2.18 2.19 2.10	PROPOSER Terms and Conditions Clarification of Terms Ethics in Public Contracting Immigration Reform and Control Act of 1986.  Debarment Status Qualifications of Proposers Applicable Laws and Courts Antitrust Changes to the Contract Pricing and Payment Price Guarantee Transportation and Packaging Sales Tax Exemption Contractual Claims Default Liquidated Damages Indemnity. Liability Insurance Assignment News Release	66 66 6 7 7 8 9 9 9 9 9 10 11 11 11 11 11 11 11 11

	2.24	Drug-Fre	e workplace	12
	2.25	EO/AA St	tatement	12
	2.26	Force Ma	ijeure	12
	2.27	Site Visits	S	12
	2.28	CONTRA	CTOR Responsibilities	13
	2.29	Project R	esponsibility	13
	2.30	Property	Damage	13
	2.31		Manual	
	2.32	Preceder	nce of Terms	13
3	Sta	tement o	of Work	14
•				
	3.1		Dia Mandria Tanan O'a	
		•	Price Mountain Tower Site	
	3.2	•	lanagement	
	3.2.	•	ect Manager	
	3.2.		contractors	
	3.2.		ITRACTOR Registration	
	3.2.	-	ect Management Plan	
		3.2.4.1	Project Schedule	
		3.2.4.2 3.2.4.3	Action Item List	
			Submittals	
			Submittal Schedule	
		3.2.4.4	Transmittals Email	
		3.2.4.5		
		3.2.4.6 3.2.4.7	Project Documentation	
		3.2.4. <i>1</i> 3.2.4.8	Punch List	
	3.3	-	and Design	
	3.3.		iled Design Review (DDR)	
	3.3.		iled Design Documentation	
	3.3.		iled Designiled Design	
	3.4		ntation	
	3.4.	•	nits and Licensing	
	3.4.		Illation	
	3.4.		ect Excavations	
	3.4		and the A.D. Person	19
	3.5	•	cceptance	
	3.5.		ections	
	3.5.		Inspection and Shelter Testing	
	3.5.		Shelter Acceptance	
	3.6		ntation	
	3.6.		dard Manuals	
	3.6.		ter As-Built Documentation	
	3.7	Warranty		21
4	Sh.	oltor Boa	uirements	າາ
+	SHE	eilei Keq	uirements	
	4.1		Requirements	
	4.2		es	
	4.2.		native References	
	4.2.		mative References	
	4.3		ications Shelter Requirements	
	4.4	•	Systems	
	4.4.	.1 Man	datory Option: HVAC	25

4.4.2 Fire	e Alarm System	25
4.4.3 Ele	ctrical System	25
4.4.3.1	Codes and Standards	25
4.4.3.2	Electrical System Design	25
Figure 4	-1 Typical Shelter One-Line Diagram	26
4.4.3.3	Surge Suppression	26
4.4.3.4	Equipment and Raceways	26
4.4.3.5	Receptacles and Plugs	26
4.4.3.6	Lighting	27
4.5 Entry P	ort Window	27
4.6 Cable L	adder	27
4.7 Ground	ing	27
4.7.1 Co	mmon Ground System	27
4.7.2 Gr	ounding Conductors	27
4.7.2.1	Exterior Grounding Conductors	27
4.7.2.2	Interior Grounding Conductors	28
4.7.2.3	Grounding Conductor Bends	
	punding Equipment	
	nnections	28
	bunding of Shelter	28
4.7.5.1	Exterior Ground Ring	
4.7.5.2	Exterior Ground Bus Bar	
4.7.5.3	Cable Entrance Panel	
4.7.6 Into	erior Grounding System	
4.7.6.1	Single-Point Grounding System	
4.7.6.2	Master Ground Bus Bar	
4.7.6.3	Secondary Ground Bus Bars	
4.7.6.4	Grounding of Surge Suppressors	
4.7.6.5	Interior Grounding Ring	
4.7.6.6	Connections to the Interior Ground Ring	
4.7.6.7	Equipment Grounding Bus	
4.7.6.8	Cable Ladders/Trays	
_	Suppression	
	ctric Service Panelboard Surge Suppression	
	Power In-Line Protection	
4.9 Utilities		31
	sting Utilities	
	rmanent Electric Service	
	tion	
	sign	
	tallation	
	terials	
4.10.4 Co	ncrete Testing	32

**Appendix A Evaluation Criteria Appendix B Price Mountain Deed** Appendix C Bid Bond Form

## 1 General Instructions

## 1.1 Purpose

The New River Valley Emergency Communications Regional Authority (NRVECRA) is requesting proposals for a Communications Shelter as specified herein. PROPOSERS interested in providing the specified goods and services shall submit a Proposal to NRVECRA as instructed herein.

## 1.2 Project Overview

New River Valley Emergency Communications Regional Authority (NRVECRA) is adding a 14 ft X 20 ft communication shelter to their existing Price Mountain site, located at 2080 Oilwell Road on Price Mountain in Montgomery County. The new shelter will contain the Land Mobile Radio (LMR) and microwave equipment for the regional public safety radio system. The lot for the site is a little over 1 acre and has been marked. The deed for the site is included in Appendix B.

## 1.3 Procurement/Project Schedule

The anticipated schedule for this procurement is found in Table 1-1. NRVECRA reserves the right to postpone the date and time for submission of Proposals at any time prior to the Proposal deadline, all changes will be made via the addendum process and posted to the procurement website <a href="https://www.montva.com/departments/purchasing/current-bids-rfps">https://www.montva.com/departments/purchasing/current-bids-rfps</a>.

Scheduled Event	Date
RFP Release	April 13, 2021
Mandatory Site Visit 10:00 AM Mandatory Pre-Proposal Conference 11:30 AM	April 21, 2021
Deadline for PROPOSER Questions	April 23, 2021
Deadline for Proposal Submission	May 17, 2021, 3:00PM
Contract Execution	June 2021
Project Completion	145 days

Table 1-1 Procurement/Project Schedule

#### 1.4 Questions

Questions or comments must be received by the date indicated in Table 1-1. All questions regarding this RFP shall be submitted in writing to:

Heather M. Hall, Purchasing Director, hallhm@montgomerycountyva.gov

Questions not submitted at least three (3) days prior to the mandatory pre-proposal conference may not be fully addressed at the conference.

PROPOSERS shall not communicate with any other representatives of NRVECRA or its member agencies/jurisdiction regarding this RFP unless directed by Heather M. Hall, Purchasing Director.

# 1.5 Mandatory Pre-Proposal Conference and Site Visit

A mandatory site visit will be held on the date and time specified in Table 1-1, at the following location:

2080 Oilwell Road on Price Mountain in Montgomery County, Virginia

A mandatory pre-proposal conference will occur immediately following the mandatory site visit, at the following location:

Public Safety Building, 1 East Main Street, Christiansburg, VA

#### 1.6 Answers and Addenda

NRVECRA will disseminate all questions and answers to all prospective PROPOSERS. Should changes to the RFP become necessary, the changes will be contained in an addendum issued by NRVECRA and provided to all potential PROPOSERS who attended the mandatory pre-proposal conference and mandatory site visit. Receipt of all Addenda must be acknowledged in the Transmittal Letter.

Verbal responses to questions are not official until the questions have been submitted in writing by the prospective PROPOSER and a written response has been distributed by NRVECRA to all potential PROPOSERS who attended the mandatory pre-proposal conference and mandatory site visit.

## 1.7 Instructions

PROPOSERS shall submit a response to the following address:

Heather M. Hall, Purchasing Director, 755 Roanoke Street, Suite 2C, Christiansburg, VA 24073

Proposals are due by the date and time indicated in Table 1-1. Proposals submitted after this deadline will not be accepted. PROPOSERS shall submit the following quantities:

- [one] original paper copy
- [two] paper copies
- [one] electronic copy

Proposals shall describe in detail the PROPOSER's:

- Project Understanding
- Organization Experience five references of similar work
- Project Management Plan
- Implementation Plan shelter design to include figures, tables, photographs, etc.
- Schedule
- Pricing major component line item pricing broken out by goods and services.

NRVECRA reserves the right to decide, on a case by case basis, in its sole discretion, whether to reject a proposal that does not provide the required line item pricing for both goods and services as nonresponsive.

**LATE PROPOSALS:** To be considered for selection, proposals must be received by the Montgomery County Purchasing Department, 755 Roanoke Street, Suite 2C, Christiansburg, Virginia 24073-3179, by the designated date and hour. The official time used in the receipt of proposals is that time on the automatic time stamp machine in the Montgomery County Purchasing Department. Proposals received in the Montgomery County Purchasing Department after the date and hour designated are automatically disqualified and will not be considered. Montgomery County or NRVECRA are not responsible for delays in the delivery of mail by the U.S. Postal

Service, private couriers, or another means of delivery. It is the sole responsibility of the Offeror to ensure that its proposal reaches the Montgomery County Purchasing Department by the designated date and hour.

# 1.8 Mandatory Options

All Mandatory Options described in the Scope of Work or Communications Shelter Requirements sections are required to be proposed. NRVECRA, at their sole discretion, will decide if the Mandatory Option will be included in the contract. The PROPOSER shall provide a price for each Mandatory Option as a separate line item for NRVECRA consideration.

## 1.9 Withdrawal of Proposals

PROPOSERS may withdraw Proposals by written notice sent to Heather M. Hall, Purchasing Director any time prior to the Proposal submission deadline.

# 1.10 Proposal Evaluation

NRVECRA will evaluate PROPOSALS, based upon the evaluation criteria described in Appendix A to determine the most responsive design and best value to the NRVECRA. All Proposals will be ranked based upon best value to NRVECRA.

#### 1.11 Intent to Award

The highest ranked PROPOSER will be notified of the intent to award and begin the process of negotiating a contract.

#### 1.12 Public Notice of Award

Public notice of the purchase order/contract award will be posted on the Public Information Board located in the lobby of the Montgomery County Purchasing Department, 755 Roanoke Street, Suite 2C, Christiansburg, Virginia. Award information may also be obtained by contacting the buyer whose name appears on the solicitation.

## 1.13 Contract Negotiations

NRVECRA will negotiate with the highest ranked PROPOSER. If NRVECRA determines that negotiations have reached an impasse, NRVECRA at its discretion may terminate negotiations with the selected PROPOSER and commence negotiations with the second highest-ranked PROPOSER.

#### 1.14 Contract Execution

Upon the successful completion of contract negotiations, NRVECRA will prepare and submit a final negotiated contract to the awarded PROPOSER at the address provided in the Proposal. The awarded PROPOSER shall execute the contract within 7 days after the receipt of the contract.

## 1.15 RFP Property of NRVECRA

This RFP in its entirety is the property of NRVECRA. The PROPOSER shall not copy or disseminate any portion of these specifications without express written authorization of NRVECRA except as necessary in the preparation of the Proposal. Any authorized copies of these specifications or portions thereof shall include a similar paragraph prohibiting further copying or dissemination.

# 1.16 Rights to Submitted Material

All materials submitted by the PROPOSER in response to this RFP shall become the property of NRVECRA.

## 1.17 Confidentiality

Proposals will not be opened publicly. All Proposals shall be kept confidential and not disclosed to competing PROPOSERS or any outside individuals until the evaluation process is finished.

If a PROPOSER believes that any portion of its Proposal contains proprietary information exempt from public disclosure, the PROPOSER shall clearly identify such portions in its Proposal and NRVECRA will make a determination as to the validity of the non-disclosure claim. Identifying the Proposal as trade secret, confidential or otherwise exempt from disclosure is not acceptable.

NRVECRA shall not be liable for disclosure of any proprietary information that is not clearly identified as such in the Proposal.

#### 1.18 Incurred Costs

NRVECRA shall not be liable for any costs incurred by the PROPOSER in preparing, submitting, or presenting Proposals; or in anticipation of being awarded the contract under this RFP.

Claims for additional compensation or additional time for completion which are based on lack of knowledge or lack of understanding of any part of the RFP shall not be permitted.

# 1.19 Proposal Errors and Irregularities

NRVECRA reserves the right to waive minor errors or irregularities in any Proposal if it appears to NRVECRA that such errors or irregularities were inadvertent. Any such errors or irregularities shall be corrected in the Proposal prior to contract execution. **Proposals with major irregularities may be considered inadequate and may be rejected immediately.** 

## 1.20 Open Procurement

NRVECRA reserves the right to accept or reject any or all Proposals. NRVECRA may allow a PROPOSER the opportunity to clarify its Proposal prior to rejection.

NRVECRA may reject any or all Proposals in whole or in part and may cancel this RFP or procurement at any time when the rejection or cancellation is in the best interest of, and as determined by NRVECRA. NRVECRA is not liable to any PROPOSER for any loss or expense caused by or resulting from the rejection or cancellation of this RFP, Proposal, or award. All timely submitted Proposals will become property of NRVECRA.

## 1.21 Proposal Surety

The Proposal shall be accompanied by a Proposal deposit in the form of a bid bond. The amount of the deposit shall be five (5) percent of the base Proposal price. A PROPOSER must complete, sign, and submit the bid bond form located in Appendix C.

#### 5

# 1.22 Contract Security

A Performance Bond and a Labor and Material Payment Bond, each in a sum equal to 100% of the negotiated price and duly executed by the successful PROPOSER as principal and by a surety company qualified to do business under the laws of Virginia and satisfactory to NRVECRA, as surety, will be required for the faithful performance of the contract, the payment from labor and materials, and for the guarantee and maintenance of the work. The successful PROPOSER shall furnish the Performance and Labor and Material Payment Bonds with the executed contract.

# 2 General Terms and Conditions

#### 2.1 PROPOSER Terms and Conditions

PROPOSER may provide additional terms and conditions for consideration by NRVECRA. Proposed terms and conditions may not conflict, restate, or otherwise alter the terms and conditions as set forth in Section 2 of this RFP. PROPOSER agrees that the terms and conditions contained in NRVECRA 's RFP prevail over contrary terms and conditions contained in the Offeror's response.

#### 2.2 Clarification of Terms

If any prospective Offeror has questions about the specifications or other solicitation documents, the prospective Offeror should contact the buyer whose name appears on the face of the solicitation no later than five working days before the due date. Any revisions to the solicitation will be made only by addendum issued by the buyer.

## 2.3 Ethics in Public Contracting

By submitting their proposals, PROPOSERS certify that their proposals are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other bidder, supplier, manufacturer or subcontractor in connection with their bid, and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised unless consideration of substantially equal or greater value was exchanged.

## 2.4 Immigration Reform and Control Act of 1986

By submitting their proposals, the Offerors certify that they do not and will not during the performance of this contract employ illegal alien workers or otherwise violate the provisions of the federal Immigration Reform and Control Act of 1986.

#### 2.5 Debarment Status

By submitting their proposals, PROPOSERS certify that they are not currently debarred by the Commonwealth of Virginia from submitting bids or proposals on contracts for the type of goods and/or services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.

## 2.6 Qualifications of Proposers

NRVECRA may make such reasonable investigations as deemed proper and necessary to determine the ability of the PROPOSERS to perform the work/furnish the item(s) and the PROPOSER shall furnish to NRVECRA all such information and data for this purpose as may be requested. NRVECRA reserves the right to inspect PROPOSER'S physical facilities prior to award to satisfy questions regarding the PROPOSER'S capabilities. NRVECRA further reserves the right to reject any proposal if the evidence submitted by, or investigations of, such Offeror fails to satisfy NRVECRA that such PROPOSER is properly qualified to carry out the obligations of the contract and to complete the work/furnish the item(s) contemplated therein.

## 2.7 Applicable Laws and Courts

This solicitation and any resulting contract shall be governed in all respects by the laws of the Commonwealth of Virginia and any litigation with respect thereto shall be brought in the courts of the Commonwealth. The CONTRACTOR shall comply with applicable federal, state and local laws and regulations.

## 2.8 Antitrust

By entering into a contract, the CONTRACTOR conveys, sells, assigns, and transfers to NRVECRA and the Commonwealth of Virginia all rights, title and interest in and to all causes of the action it may now have or hereafter acquire under the antitrust laws of the United States and the Commonwealth of Virginia, relating to the particular goods or services purchased or acquired by NRVECRA and the Commonwealth of Virginia under said contract.

# 2.9 Changes to the Contract

Changes can be made to the Contract in any of the following ways:

- A. The parties may agree in writing to modify the scope of the contract. An increase or decrease in the price of the contract resulting from such modification shall be agreed to by the parties as a part of their written agreement to modify the scope of the contract.
- B. NRVECRA may order changes within the general scope of the contract at any time by written notice to the CONTRACTOR. Changes within the scope of the contract include, but are not limited to things such as the method of packing or shipment and the place of delivery or installation. The CONTRACTOR shall comply with the notice upon receipt. The CONTRACTOR shall be compensated for any additional costs incurred as the result of such order and shall give NRVECRA a credit for any savings. Said compensation shall be determined by one of the following methods:
  - 1) By mutual agreement between the parties in writing; or
  - 2) By agreeing upon a unit price or using a unit price set forth in the contract, if the work to be done can be expressed in units, and the CONTRACTOR accounts for the number of units of work performed, subject to NRVECRA's right to audit the Contractors records and/or to determine the correct number of units independently; or
  - 3) By ordering the CONTRACTOR to proceed with the work and to keep a record of all costs incurred and savings realized. A markup for overhead and profit may be allowed if provided by the contract. The same markup shall be used for determining a decrease in price as the result of savings realized. The CONTRACTOR shall present NRVECRA with all vouchers and records of expenses incurred and savings realized. NRVECRA shall have the right to audit the records of the CONTRACTOR as it deems necessary to determine costs or savings. Any claim for an adjustment in price under this provision must be asserted by written notice to NRVECRA within thirty (30) days from the date of receipt of the written order from NRVECRA. If the parties fail to agree on an amount of adjustment, the question of an increase or decrease in the contract price or time for performance shall be resolved in accordance with the procedures for resolving disputes provided by the Disputes Clause of this contract or, if there is none, in accordance with the disputes provisions of the Agency Procurement and Surplus Property Manual. Neither the existence of a claim or a dispute resolution process, litigation or any other provision of this contract shall excuse the CONTRACTOR from promptly complying with the changes ordered by NRVECRA or with the performance of the contract generally.

## 2.10 Pricing and Payment

#### A. TO PRIME CONTRACTOR:

- 1) Payment milestones will be agreed upon prior to contract execution.
- 2) The CONTRACTOR may bill monthly with an invoice and attach the required Application for Payment. Invoices for items ordered, delivered and accepted shall be submitted by the CONTRACTOR directly to

the payment address shown on the purchase order/contract. All invoices shall show the Montgomery County or state contract number and/or purchase order number; social security number (for individual contractors) or the federal employer identification number (for proprietorships, partnerships, and corporations).

- 3) Any payment terms requiring payment in less than 45 days will be regarded as requiring payment 45 days after invoice or delivery, whichever occurs last. This shall not affect offers of discounts for payment in less than 45 days, however.
- 4) All goods or services provided under this contract or purchase order, that are to be paid for with public funds, shall be billed by the CONTRACTOR at the contract price, regardless of which public agency is being billed.
- 5) The following shall be deemed to be the date of payment: the date of postmark in all cases where payment is made by mail, or the date of offset when offset proceedings have been instituted as authorized under the Virginia Debt Collection Act.
- 6) Unreasonable Charges. Under certain emergency procurements and for most time and material purchases, final job costs cannot be accurately determined at the time orders are placed. In such cases, contractors should be put on notice that final payment in full is contingent on a determination of reasonableness with respect to all invoiced charges. Charges which appear to be unreasonable will be researched and challenged, and that portion of the invoice held in abeyance until a settlement can be reached. Upon determining that invoiced charges are not reasonable, the Commonwealth shall promptly notify the contractor, in writing, as to those charges which it considers unreasonable and the basis for the determination. A CONTRACTOR may not institute legal action unless a settlement cannot be reached within thirty (30) days of notification. The provisions of this section do not relieve an agency of its prompt payment obligations with respect to those charges which are not in dispute (*Code of Virginia*, § 2.2-4363).

#### B. TO SUBCONTRACTORS:

- 1) A CONTRACTOR awarded a contract under this solicitation is hereby obligated:
  - a) To pay the subcontractor(s) within seven (7) days of the contractor's receipt of payment from the Commonwealth for the proportionate share of the payment received for work performed by the subcontractor(s) under the contract; or
  - b) To notify NRVECRA and the subcontractor(s), in writing, of the CONTRACTOR'S intention to withhold payment and the reason.

The CONTRACTOR is obligated to pay the subcontractor(s) interest at the rate of one percent per month (unless otherwise provided under the terms of the contract) on all amounts owed by the CONTRACTOR that remain unpaid seven (7) days following receipt of payment from the Commonwealth, except for amounts withheld as stated in b. above. The date of mailing of any payment by U.S. Mail is deemed to be payment to the addressee. These provisions apply to each sub-tier contractor performing under the primary contract. A CONTRACTOR'S obligation to pay an interest charge to a subcontractor may not be construed to be an obligation of the Commonwealth.

#### 2.11 Price Guarantee

The CONTRACTOR shall guarantee the quoted prices for all equipment and services purchased under the contract (including prices quoted for optional items), and all additional equipment purchased prior to final system acceptance, shall remain valid for a period of one year.

## 2.12 Transportation and Packaging

By submitting their proposals, all Offerors certify and warrant that the price(s) offered are for FOB Destination and include only the actual freight rate costs at the lowest and best rate and is based upon the actual weight of the goods to be shipped. Except as otherwise specified herein, standard commercial packaging, packing and shipping containers shall be used. All shipping containers shall be legibly marked or labeled on the outside with purchase order number, commodity description, and quantity.

## 2.13 Sales Tax Exemption

Sales to NRVECRA and the Commonwealth of Virginia are normally exempt from State sales tax, State sales and use tax certificates of exemption, Form ST-12, will be issued upon request. Deliveries against the contract shall be free of Federal excise and transportation taxes. The Commonwealth's excise tax exemption registration number is 54-73-0076K.

## 2.14 Contractual Claims

Contractual claims, whether for money or other relief, shall be submitted in writing to NRVECRA, no later than 60 calendar days after final payment; however, written notice of the CONTRACTOR's intention to file such claim shall have been given at the time of the occurrence or beginning of the work upon which the claim is based. The NRVECRA shall issue a decision regarding such claim, in writing, no later than 60 calendar days subsequent to notification to the NRVECRA. A CONTRACTOR may not institute legal action prior to receipt of NRVECRA's decision on the claim, unless that office fails to render such decision within sixty (60) days. Failure of the NRVECRA to render a decision within sixty (60) days shall not result in the CONTRACTOR being awarded the relief claimed or in any other relief or penalty. The sole remedy for the NRVECRA's failure to render a decision within sixty (60) shall be the CONTRACTOR'S right to institute immediate legal action. The decision of the NRVECRA shall be final and conclusive unless the CONTRACTOR, within six (6) months of the date of the final decision on the claim, institutes legal action as provided in the Code of Virginia, Section 2.2-4364.

For good cause and as consideration for executing this contract, the PROPOSER acting herein by and through the person signing this Proposal on behalf of the PROPOSER as duly authorized agent, hereby conveys, sells, assigns, and transfers to NRVECRA all rights, title and interest in and to all causes of action it may now or hereafter acquire under the anti-trust laws of the United States and the State of Virginia, relating to the particular goods or services purchased or acquired by the NRVECRA.

#### 2.15 Default

In case of failure to deliver goods or services in accordance with the contract terms and conditions, NRVECRA, after due oral or written notice, may procure them from other sources and hold the CONTRACTOR responsible for any resulting additional purchase and administrative costs. This remedy shall be in addition to any other remedies which NRVECRA may have.

## 2.16 Liquidated Damages

For each and every day the installation of the agreed upon equipment shall fail to be complete beyond the date set for completion of installation and any extensions granted under the contract, the CONTRACTOR shall pay to NRVECRA the total amount of all costs resulting from the delay as liquidated damages and not as a penalty. Liquidated damages may be deducted by NRVECRA from any money due or to become due to the CONTRACTOR as compensation under the contract. Liquidated Damages shall not exceed 5 percent of the total amount of the contract per incident/delay. The total of Liquidated Damages shall not exceed the total cost of the contract.

# 2.17 Indemnity

The CONTRACTOR shall indemnify and save harmless Montgomery County and NRVECRA, its officials and employees from all losses, claims, demands, payments, suits, actions, recoveries, and judgments of every nature and description brought or recoverable against NRVECRA, or by reason of any act or omission of the CONTRACTOR, its agent, or its employees, in the execution of the work, or in consequence of any negligence or carelessness in guarding the same, including all liability for, or growing out of any infringement of letter patent or copyright of the United States, in respect to the normal use of the proposed and installed system. NRVECRA will promptly give the CONTRACTOR notice of any such claim.

The successful PROPOSER shall assume all risk and bear any loss or injury to the property or persons occasioned by neglect or accident during the progress of work until the same shall be completed and accepted. The CONTRACTOR shall also assume all blame or loss by reason of neglect or violation by CONTRACTOR of any state or federal law, NRVECRA or Virginia code, or municipal rule regulation, or order. The CONTRACTOR shall give to the proper authorities all required notices relating to the work and shall be responsible for ensuring all official construction permits and licenses are obtained prior to the beginning of work, and for paying all proper fees. NRVECRA will sign permit requests as required and as submitted by the CONTRACTOR. The CONTRACTOR shall make good any injury that may have occurred to any adjoining building, structure, or utility in consequence of this work.

## 2.18 Liability Insurance

The successful PROPOSER shall carry public liability insurance in the amounts specified below, including the contractual liability assumed by the CONTRACTOR, and shall deliver a Certificate of Insurance to NRVECRA with a 30 calendar day cancellation notice provision from carriers acceptable to NRVECRA and licensed to do business in Virginia. The certificate shall be delivered in conjunction with delivery of the executed contract to NRVECRA.

A. Worker's Compensation and Employer's Liability

Coverage A - Statutory Requirements

Coverage B - \$100,000 per Occurrence

Coverage C - \$100,000 Accident and/or Disease

All States Endorsement

B. Automobile Liability, Including Owner, Non-Owner and Hired Car Coverage

\$1,000,000 per accident to include Bodily Injury & Property Damage

C. Commercial General Liability

\$1,000,000 per occurrence / \$2,000,000 aggregate

Commercial General Liability is to include bodily injury and property damage, personal injury, advertising injury, contractual liability, and products and completed operations coverage. NRVECRA, their officers, employees, agents, and volunteers must be named as additional insureds and be so endorsed on the policy, as evidenced by the certificate of insurance.

D. Professional Liability (Errors and Omissions)

\$2,000,000 limit per claim and aggregate

# 2.19 Assignment

Assignment by the successful PROPOSER to any third party of any contract based on this RFP or any monies due shall be absolutely prohibited and will not be recognized by NRVECRA unless approved by NRVECRA in writing. Approval will not be unreasonably withheld.

#### 2.20 News Release

The PROPOSER shall at no time make any news or advertising releases pertaining to this RFP for any purpose without the prior written approval of Heather M. Hall, Purchasing Director and then only in coordination with the NRVECRA.

#### 2.21 Transfer of Title

The CONTRACTOR shall assume full financial responsibility until the project is complete and accepted by the NRVECRA. Under no circumstances, shall any warranty begin until final acceptance of the project by NRVECRA.

#### 2.22 Non-Discrimination of Contractors

An offeror or a contractor shall not be discriminated against in the solicitation or award of this contract because of race, religion, color, sex, national origin, age, or disability or against faith-based organizations. If the award of this contract is made to a faith-based organization and an individual, who applies for or receives goods, services, or disbursements provided pursuant to this contract objects to the religious character of the faith-based organization from which the individual receives or would receive the goods, services, or disbursements, the public body shall offer the individual, within a reasonable period of time after the date of his objection, access to equivalent goods, services, or disbursements from an alternative provider.

## 2.23 Non-Discrimination in Employment

By submitting their proposals, Offerors certify to the Commonwealth that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Contracting Act of 1975, as amended, where applicable, the Virginians With Disabilities Act, the Americans With Disabilities Act, and Section 2.2-4311 of the Virginia Public Procurement Act. If the award is made to a faith-based organization, the organization shall not discriminate against any recipient of goods, services, or disbursements made pursuant to the contract on the basis of the recipient's religion, religious belief, refusal to participate in a religious practice, or on the basis of race, age, color, gender or national origin and shall be subject to the same rules as other organizations that contract with public bodies to account for the use of the funds provided; however, if the faith-based organization segregates public funds into separate accounts, only the accounts and programs funded with public funds shall be subject to audit by the public body. (Code of Virginia, § 2.2-4343.1 E).

In every contract over \$10,000 the provisions in A. below apply:

A. During the performance of this contract, the CONTRACTOR agrees as follows:

- 1) The CONTRACTOR will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provision of this nondiscrimination clause.
- 2) The CONTRACTOR, in all solicitations or advertisements for employees placed by or on behalf of the

Contractor, will state that such CONTRACTOR is an equal opportunity employer.

3) Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this Section.

The CONTRACTOR will include the provisions of A. above in every subcontract or purchase order over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

## 2.24 Drug-Free workplace

In every contract over \$10,000 the following provisions apply: During the performance of this contract, the CONTRACTOR agrees to (i) provide a drug-free workplace for the Contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the CONTRACTOR that the CONTRACTOR maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific contract awarded to a CONTRACTOR the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.

#### 2.25 EO/AA Statement

NRVECRA, an equal opportunity, affirmative action institution covered by presidential executive order 11246 as amended, advises all contractors, subcontractors, vendors and suppliers that direct receipt of federal funds may require appropriate action on their part.

## 2.26 Force Majeure

Neither party will be liable to the other for any failure or delay in rendering performance arising out of causes beyond its reasonable control and without its fault or negligence. Such causes may include, but are not limited to, acts of God or the public enemy, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes and unusually severe weather; but the failure or delay must be beyond reasonable control and without fault or negligence. If the CONTRACTOR's failure to perform is caused by the default of a subcontractor, and if such default arises out of causes beyond the reasonable control of both the CONTRACTOR and subcontractor, and without the fault or negligence of either of them, the CONTRACTOR shall not be liable for any excess costs for failure to perform, unless the equipment or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the PROPOSER to meet the required delivery schedule. Dates or time of performance will be extended to the extent of delays excused by this section, provided that the party whose performance is affected notifies the other promptly of the existence and nature of such delay.

#### 2.27 Site Visits

Ignorance of site conditions shall not relieve the CONTRACTOR of any liability or obligations under the contract.

## 2.28 CONTRACTOR Responsibilities

The CONTRACTOR shall assume total responsibility for delivery, installation, acceptance, of goods and services offered in the Proposal, whether the PROPOSER is the manufacturer, producer, author, or supplier of them.

The CONTRACTOR shall be the sole point of contact regarding all contractual matters, including the service, and payment of any and all charges resulting from installation and all other services performed. Failure to meet these obligations shall result in the cancellation of any contracts.

## 2.29 Project Responsibility

The PROPOSER shall be responsible for verifying the completeness and suitability of all work or equipment proposed for this project. The CONTRACTOR shall provide any additional equipment or labor required in order to meet these specifications, without claim for additional payment.

# 2.30 Property Damage

The CONTRACTOR shall be responsible for any loss or damage to property caused by their operations or personnel. Damages will be settled with the owner of the property by the CONTRACTOR in the company of an agent of the NRVECRA. The CONTRACTOR shall submit a signed damage release for all sites concerned within 30 days after the recommendation of cutover.

#### 2.31 Vendor's Manual

This contract is subject to the provisions of the Commonwealth of Virginia Vendor's Manual and any revisions thereto, which are hereby incorporated into this contract in their entirety. A copy of the manual is available from the Division of Purchases and Supply in Richmond, VA www.dgs.state.va.us/dps

## 2.32 Precedence of Terms

Paragraphs 2.2, 2.3, 2.4, 2.5, 2.7, 2.8, 2.10, 2.22, 2.23, and 2.31 of these General Terms and Conditions shall apply in all instances. In the event there is a conflict between any of the other General Terms and Conditions and any Special Terms and Conditions in this solicitation, the Special Terms and Conditions shall apply.

## 3 Statement of Work

The statement of work applies to all equipment and services specified in this RFP Document.

## 3.1 Scope

NRVECRA is adding a communication shelter to their existing Price Mountain site, shown in Figure 3-1. The communication shelter being added can be either a new or refurbished 14 ft x 20 ft communication shelter. If a refurbished shelter is proposed the shelter must meet the specifications in this document. The CONTRACTOR shall:

- Furnish and install a 14 ft x 20 ft communication shelter
- Design and install a foundation suitable for the communication shelter
- File for, and obtain all required building, construction, and zoning permits needed to install the new communication shelter
- Connect commercial electrical power to the communication shelter
- Relocate the existing ATS and standby generator cabling, including alarms, from the existing shelter to the added communication shelter
- Provide grounding for the shelter per Motorola R56 Standards and Guidelines for Communication Sites
- Install external ground ring around the communication shelter and connect the external ground ring to the tower ground ring at two points, per Motorola R56 Standards and Guidelines for Communication Sites
- Ground the shelter to the external ground ring, per Motorola R56 Standards and Guidelines for Communication Sites
- Connect the external bus bar to the external ground ring, per Motorola R56 Standards and Guidelines for Communication Sites
- Coordinate with the Tower Contractor installing the new tower at the site on the ice bridge location, transmission line window location and grounding



Figure 3-1 Price Mountain Tower Site

# 3.2 Project Management

The CONTRACTOR shall have experience, in the Commonwealth of Virginia, with projects of similar size and scope for a new shelter.

#### 3.2.1 Project Manager

The CONTRACTOR shall designate a single project manager to supervise and coordinate the CONTRACTOR's work. The project manager shall direct the CONTRACTOR's personnel and subcontractors in the project and assist in resolving project problems.

The CONTRACTOR shall provide the project manager's contact information after NRVECRA issues the notice to proceed (NTP). The contact information shall include the following:

- Name
- Mailing address
- Shipping address
- Office phone number
- Cell phone number
- Email address

## 3.2.2 Subcontractors

The CONTRACTOR shall notify the NRVECRA of any subcontractor(s) to be used to perform tasks and/or provide equipment on the project. NRVECRA has the right to reject proposed subcontractors.

## 3.2.3 CONTRACTOR Registration

The CONTRACTOR (or its subcontractors) shall be licensed at the time of the submission of the Proposal and must remain licensed through the completion of the work.

## 3.2.4 Project Management Plan

#### 3.2.4.1 Project Schedule

The CONTRACTOR shall maintain a master project schedule for the design, construct, deliver, install, remediate, and acceptance for the Shelter. Provide schedule updates to NRVECRA monthly, or more frequently as needed, to address changing circumstances.

The project schedule shall provide a breakdown of each task, including the following details:

- Start and end dates
- Predecessors and successors
- · Responsible party or parties
- Percentage completed
- Critical path

The CONTRACTOR shall update the project schedule monthly to reflect actual task completion dates.

#### 3.2.4.2 Action Item List

The CONTRACTOR shall develop and maintain an action item list. The action item list shall include the following items:

- Item Number
- Date Identified
- Description of the Item
- Responsible Party
- Resolution
- Date Resolved

#### 3.2.4.3 Submittals

The CONTRACTOR shall provide project submittals according to the submittal schedule. A preliminary submittal schedule is found in Table 3-1 (calendar days unless specifically listed business days).

NRVECRA will expect the submittal schedule to identify deliverables submitted timely and complete. The schedule will include the following for each item:

- Contract reference
- Document description
- Scheduled submittal date
- Actual submittal date
- Approval date
- Notes

RFP Section	Submittal	Scheduled Delivery Date
3.2.1	Project Manager's contact information	within 5 days after NTP
3.3.1	Detailed Design Review (DDR)	within 30 days after NTP
3.3.2	Detailed Design Documentation	at the DDR
4.4.3	Electrical System – general design with one-line diagram	at the DDR
3.3.2	Approved DDR	After receiving the PROJECT TEAM's last comments, revisions, and approved by NRVECRA
4.7	Grounding Plan Documentation	at the DDR
4.10.1	Design Foundations	at the DDR
4.4	Building Drawings including Floor Plans	30 days prior to building delivery
4.4	Building Systems – Smoke alarm, electrical & lighting (design documentation	30 days prior to building delivery
3.7.1	Standard Manuals	Upon completion of the shelter
3.7.2	Shelter As-Built Documentation	Upon completion of the shelter

Table 3-1 Submittal Schedule

#### 3.2.4.4 Transmittals

The CONTRACTOR shall assign a unique transmittal identification number to each submittal listed in Table 3-1 and to other significant project-related documentation, such as important memoranda, reports and change order requests. The transmittal ID number shall consist of an identifier for the sending party and a consecutive serial number for the transmittal. Each transmittal shall include the following information:

- Transmittal ID number
- Date
- Sender
- Organization
- Recipient(s)
- Subject
- · List of documents delivered

The CONTRACTOR shall maintain a log of its transmittals and provide to NRVECRA.

#### 3.2.4.5 Email

Electronic mail may be used for the development of decisions and documentation, and transmission of files. Actual decisions and documentation transmittals shall be transmitted in signed PDF form.

## 3.2.4.6 Project Documentation

The CONTRACTOR shall provide and maintain all the project documentation, sharing with NRVECRA from the beginning to the end of Shelter Acceptance. At the end of the project, the CONTRACTOR will hand-off to NRVECRA for future maintenance.

Documentation shall be provided in both hard and soft copy. USB drive or DVD/CD-ROM copies are preferable and shall be supplied without copy protection. When submitted for approval or information, documents shall be clearly marked with the name of project, date, and other tracking information, e.g., contract information, site name and/or drawing/document number. The CONTRACTOR may develop a Web-based "cloud drive" to safely store and share documents, drawings, and photos with NRVECRA.

## 3.2.4.7 Change Orders

The CONTRACTOR shall submit change order requests to the NRVECRA' Project Manager that modifies quantity, equipment, services, schedule, cost, or operations. A separate change order for each request shall include:

- Customer name
- Project number and title
- Issue date
- Tracking number
- CONTRACTOR name
- Reason for change
- Description of change
- Cost impact
- Schedule impact
- Operational impact

No changes to the work shall commence until the change order request has been approved by NRVECRA **in writing**.

#### 3.2.4.8 Punch List

The CONTRACTOR shall establish and maintain a punch list for inspections and acceptance tests. The list will be published monthly to include a sequential punch list item number, site reference, date identified, description of the item, resolution date, and notes. NRVECRA will be responsible to review and approve the resolution of each item.

## 3.3 Planning and Design

The CONTRACTOR shall design, engineer, supply all materials, deliver, install, test, and warranty the shelter required by the technical specifications.

#### 3.3.1 Detailed Design Review (DDR)

The CONTRACTOR shall conduct the Detailed Design Review (DDR) at a location provided by NRVECRA.

Provide an agenda at least 10 business days prior to the DDR.

- Project Schedule
- Shelter Design
  - Building / Shelter Plans
  - Foundation Design (if a new shelter)
  - Floor plans and Dimensions
  - Electrical System
  - Grounding and Surge Protection
  - HVAC

- Fire detection

#### 3.3.2 Detailed Design Documentation

The CONTRACTOR shall prepare and submit the detailed design documentation to NRVECRA with at least two (2) paper copy and one (1) electronic copy prior to ordering any items. Each paper copy shall be provided in an appropriate ring binder and include large-scale drawings. All copies shall be provided not less than five (5) business days prior to the DDR.

NRVECRA will return comments within 5 business days after the DDR. CONTRACTOR shall make appropriate changes within 5 business days after receiving NRVECRA's comments. Once NRVECRA is satisfied with the resolution of all comments, NRVECRA will approve the Design.

## 3.3.3 Detailed Design

The CONTRACTOR shall provide the detailed design information for the new shelter, but is not limited to the following:

- Space
  - Floor Plans
  - Clearances
- Electrical
  - Power
  - Voltage
- Physical Security
- Grounding and Surge Protection

## 3.4 Implementation

## 3.4.1 Permits and Licensing

The CONTRACTOR is responsible to obtain the appropriate federal, state, and local permits and licenses necessary for the construction, delivery, and/or remediation the shelter. The CONTRACTOR shall pay all fees and costs associated with obtaining all approvals, permits and licenses.

## 3.4.2 Installation

The CONTRACTOR shall install all systems and equipment required by this specification.

The CONTRACTOR shall leave all sites in a neat, presentable condition throughout the project. The CONTRACTOR shall remove all rubbish, temporary structures, and equipment generated or used by the CONTRACTOR after installation and prior to acceptance.

## 3.4.3 Inspect Excavations

The CONTRACTOR shall notify NRVECRA of any excavation at a site 15 days prior to completion of the excavation. NRVECRA reserves the right to inspect excavations, rock, socket, and reinforcement placement.

## 3.4.4 Shipment and Delivery

NRVECRA will authorize the CONTRACTOR to ship and install the shelter at the site after the DDR.

# 3.5 Shelter Acceptance

#### 3.5.1 Inspections

NRVECRA will conduct multiple inspections during installation of the communication shelter, including the foundation and excavation. Deficiencies identified by inspections will be recorded as punch-list items.

#### 3.5.2 Final Inspection and Shelter Testing

The CONTRACTOR shall notify NRVECRA when the shelter is complete and ready for inspection. All shelter, commercial power, surge suppression, grounding, and construction shall be installed in a neat and workman-like fashion in compliance with applicable standards.

The CONTRACTOR shall conduct tests for all facility operations at the shelter, including testing the electrical system, lighting, receptacles & plugs, smoke alarm system, minor and major alarms, etc. NRVECRA will inspect the site, witness testing operations, and update the project punch-list.

If testing cannot be completed during the agreed upon scheduled visit, due to site or equipment incompleteness, all costs for additional testing, including those incurred by NRVECRA for its personnel, and other CONTRACTORs, and any direct expenses (including travel, lodging, meals, etc.), shall be borne by the CONTRACTOR.

## 3.5.3 Final Shelter Acceptance

NRVECRA will provide "Final Shelter Acceptance" when the shelter construction has completed, all punch-list items are resolved and approved, all submittals (including as-built documentation, maintenance & operational manuals, etc.) are delivered and accepted, and all services have been satisfactorily performed. All remaining monies will be released to the CONTRACTOR, and the project will be closed.

#### 3.6 Documentation

#### 3.6.1 Standard Manuals

The CONTRACTOR shall provide operational and maintenance manuals for each model of major equipment with shipment.

Manuals shall be complete, self-contained and of the same revision level as the equipment provided.

The CONTRACTOR shall provide to NRVECRA an electronic subscription to the latest equipment manuals and technical service bulletins for a period of five years after system acceptance.

## 3.6.2 Shelter As-Built Documentation

The CONTRACTOR shall submit two (2) draft paper copies of all shelter as-built documentation to NRVECRA for review and approval.

Shelter construction as-built drawings include, but are not limited to, the following:

- Floor plans
- Site grounding drawings
- Building elevation detail drawings with foundations
- Building layout drawings
- AC electrical distribution drawings

- Utility connection details
- Foundation details for shelter
- Shelter lighting details
- Smoke alarm system drawings
- Equipment shelter plans: providing AC distribution, lighting, grounding, and cable ladder details

The CONTRACTOR shall provide the final shelter as-built documentation:

- Two sets in paper copy, including large-scale drawings
- One set in electronic copy as PDF files

# 3.7 Warranty

The CONTRACTOR shall warrant 5 years for the new shelter, including its foundation, grounding system, and electrical system.

The CONTRACTOR shall repair, replace, or otherwise correct defective shelter, foundation, electrical system, or grounding during the warranty period at no cost to NRVECRA.

# 4 Shelter Requirements

## 4.1 General Requirements

The new or refurbished shelter shall be of proven design to withstand severe weather including lightning, wind, flooding, ice and snow accumulation, wildfires, and earthquakes.

Facilities shall protect the communications system from the public and shall protect the public from potentially hazardous parts or emissions of the communications system.

Facilities shall be designed and installed in accordance with applicable current codes, ordinances and regulations imposed by authorities having jurisdiction; these current standards; and the communications equipment manufacturer's design and installation current revision standards. Where there is a conflict between requirements, the more stringent requirement shall apply.

#### 4.2 References

#### 4.2.1 Normative References

The following documents, either in whole or in part, are referenced in this physical facilities specification:

American Association of State and Highway Transportation Officials (AASHTO)

AASHTO HB, Standard Specifications for Highway Bridges

American Concrete Institute (ACI)

- ACI 301-05, Specifications for Structural Concrete
- ACI 302.1R-04, Guide for Concrete Floor and Slab Construction
- ACI 318-08, Building Code Requirements for Structural Concrete and Commentary

American National Standards Institute (ANSI)

 ANSI J-STD-607-A-2002, Commercial Building Grounding (Earthing) and Bonding Requirements for Telecommunications.

American Society for Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE)

ASHRAE Handbook—Fundamentals

American Society of Safety Engineers

ANSI/ASSE Z359, Fall Protection Code

#### **ASTM International**

- ASTM A 615-08a, Standard Specifications for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
- ASTM C 31-08a, Practice for Making and Curing Concrete Test Specimens in the Field
- ASTM C 33-01a, Standard Specifications for Concrete Aggregates
- ASTM C 39-05e1, Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
- ASTM C150-00, Standard Specification for Portland Cement
- ASTM D 420-98, Standard Guide to Site Characterization for Engineering Design and Construction Purposes
- ASTM D1556-07, Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method

- ASTM D 1557-07, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000-ft-lbf/ft3 (2,700 kN-m/m3))
- ASTM D 2487-06e1, Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
- ASTM D 6938-08a, Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
- ASTM G 57-06, Standard Test Method for Field Measurement of Soil Resistivity Using the Wenner Four-Electrode Method

## Electronics Industry Alliance (EIA)

• EIA/ECA-310-E, Cabinets, Racks, Panels and Associated Equipment

## Federal Aviation Administration (FAA)

- Advisory Circular 70/7460-1K, Obstruction Marking and Lighting
- Advisory Circular 150/5245-43F, Specification for Obstruction Lighting Equipment

#### Federal Communications Commission (FCC)

- Code of Federal Regulations, Title 47, Telecommunications (47 CFR)
- Office of Engineering and Technology (OET) Bulletin 65, Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields

## Institute of Electrical and Electronics Engineers (IEEE)

- IEEE Std. 81-1983, IEEE Guide for Measuring Earth Resistivity, Ground Impedance and Earth Surface Potentials of a Ground System
- ANSI/IEEE Std. 81.2-1991, IEEE Guide to Measurement of Impedance and Safety Characteristics of Large, Extended or Interconnected Grounding Systems

## National Electrical Contractors Association (NECA)

NECA 1, Standard Practices for Good Workmanship in Electrical Contracting

#### National Fire Protection Association (NFPA)

- NFPA 70, National Electrical Code
- NFPA 72, National Fire Alarm Code
- NFPA 101, Life Safety Code
- NFPA 110, Standard for Emergency and Standby Power Systems
- NFPA 111, Standard on Stored Electrical Energy Emergency and Standby Power Systems
- NFPA 780, Standard for the Installation of Lightning Protection Systems
- NFPA 2001, Standard on Clean Agent Fire Extinguishing Systems

## Telecommunications Industry Association (TIA)

• TIA-222, Structural Standard for Antenna Supporting Structures

#### Underwriters Laboratories (UL)

- UL 467, Grounding and Bonding Equipment
- UL 752, Standard for Bullet-Resisting Equipment
- UL 1449, Standard for Surge-Protective Devices
- UL 1778, Uninterruptible Power Systems

#### 4.2.2 Informative References

The following references provide additional useful information but are not included in this document:

Alliance for Telecommunications Industry Solutions (ATIS)

- ATIS 0600311, DC Power Systems Telecommunications Environment Protection
- ATIS 0600313, Electrical Protection for Telecommunications Central Offices and Similar Type Facilities
- ATIS 0600316, Electrical Protection of Telecommunications Outside Plant
- ATIS 0600318, Electrical Protection Applied to Telecommunications Network Plant at Entrances to Customer Structures or Buildings
- ATIS 0600330, Valve-Regulated Lead-Acid Batteries Used in the Telecommunications Environment
- ATIS 0600334, Electrical Protection of Communications Towers and Associated Structures

American Society of Civil Engineers (ASCE)

ASCE 7, Minimum Design Loads for Buildings and Other Structures

Illuminating Engineering Society (IESNA)

• IESNA HB, Lighting Handbook Reference & Application

Institute of Electrical and Electronics Engineers (IEEE)

- IEEE C2, National Electrical Safety Code (NESC)
- IEEE Std. 142, Grounding of Industrial and Commercial Power Systems

International Code Council

International Building Code

Telecommunications Industry Association (TIA)

- TIA-568-C.0, Generic Telecommunications Cabling for Customer Premises
- TIA-568-C.1, Commercial Building Telecommunications Cabling Standard
- TIA-568-B.2, Commercial Building Telecommunications Cabling Standard, Part 2: Balanced Twisted-Pair Cabling Components
- TIA-568-C.3, Optical Fiber Cabling Components Standard
- TIA-569-B, Commercial Building Standard for Telecommunications Pathways and Spaces

## 4.3 Communications Shelter Requirements

The shelter shall be either a new or refurbished prefabricated shelter that meets industry standards and the specifications stated herein. Shelters shall be weatherproof and insulated as required by local climate. The roof shall be designed to survive the impact of falling ice. Floors shall be designed to support at least 300 pounds per square foot. All building penetrations shall be sealed.

The Communication Shelter shall be provided with the items listed below and in the following sections:

- 200-amp electrical panel, 240/120-volt Single phase
- Overhead LED Lighting
- Overhead electrical outlets to power the equipment racks
- Intrusion alarm sensors, on all exterior doors, which can be connected to the alarm reporting system. All building alarm connections are to be terminated at a building alarm bus using Type 66 connector blocks

# 4.4 Building Systems

#### 4.4.1 Mandatory Option: HVAC

Shelter shall be equipped with two 2.5 ton Mini-Split Heat Pumps, 17.50 SEER, 9.85 EER. The wall mounted air handler shall be 30,000 BTU units with Digital wi-fi Thermostats, capable of lead lag control. Pads for the outdoor units shall be included.

Mandatory Options described are required to be proposed. NRVECRA, at their sole discretion, will decide if the Mandatory Option will be included in the contract. The PROPOSER shall provide a price for each Mandatory Option as a separate line item for NRVECRA consideration.

## 4.4.2 Fire Alarm System

Shelters shall be equipped with a fire & smoke alarm system. The fire & smoke alarm system shall meet the requirements of NFPA 72.

#### 4.4.3 Electrical System

#### 4.4.3.1 Codes and Standards

Electrical and cabling work for each shelter shall conform to all local codes, NFPA 70, NFPA 101, ANSI C2 and local utility company standards.

Where a product is commercially available as a UL-listed device, a UL-listed device shall be used.

## 4.4.3.2 Electrical System Design

The general design of the electrical system shall be in accordance with the one-line diagram shown in Figure 4-1 below.

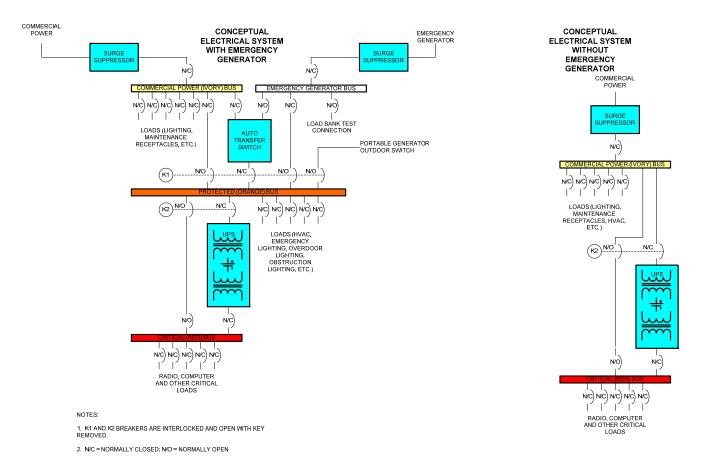


Figure 4-1 Typical Shelter One-Line Diagram

#### 4.4.3.3 Surge Suppression

The service entrance and the emergency generator output shall each have independent, appropriately designed surge suppression devices installed. These units shall have contact alarm and visual indication for device failure.

## 4.4.3.4 Equipment and Raceways

Minimum conduit size shall be 3/4 in and all except underground conduit shall be of metal with a zinc coating (EMT or heavier construction). Conduits exposed to the outside shall be rigid, not EMT. Underground conduit shall be 2 in or larger rigid PVC with a minimum of 20 percent excess capacity over code limits, or spare underground conduits shall be included.

## 4.4.3.5 Receptacles and Plugs

Shelters shall be equipped with one 20-amp double duplex receptacle every 10 feet or closer as required by local codes, around the interior perimeter of each shelter. One exterior 20-amp GFCI receptacle on its own circuit shall be installed on the service bus. Where power cords are plugged into overhead receptacles, twist lock components shall be used.

## 4.4.3.6 Lighting

Shelter interior lighting shall be provided by LED lighting to a level of 50 foot-candles at a working plane of 30 inches above the floor.

Exterior LED lighting is to be mounted on exterior wall at each exterior door. This light should be equipped with a photocell for dusk-to-dawn operation.

## 4.5 Entry Port Window

There shall be one transmission line entry port window with 12 ports in a three by four configuration.

#### 4.6 Cable Ladder

Overhead cable ladder shall be a minimum of 18 inches wide, installed above the location for the equipment racks and leading to the transmission line entry port window.

## 4.7 Grounding

All site grounding and lightning protection shall be in accordance with the National Electric Code and the grounding and surge protection requirements of Motorola R56 – Standards and Guidelines for Communication Sites.

## 4.7.1 Common Ground System

There shall be only one common ground system at a communications facility. Grounds for all systems and equipment (including electric service, telephone service, water pipes, etc.) and all metal objects at a site shall be interconnected to equalize voltage rise among all conducting objects at the communications site.

The ground system shall be designed to achieve an overall resistance of 5 ohms or less from any point in the ground system to ground.

#### 4.7.2 Grounding Conductors

All grounding conductor sizes specified are minimum sizes. Flat metal straps or bars may be used in place of wire where the cross-sectional area of the strap or bar meets or exceeds the cross-sectional area of the specified wire.

Grounding-conductor insulation shall be green, green with a yellow stripe or marked with green tape or adhesive labels or otherwise colored green at termination points.

Grounding conductors shall be supported or secured at intervals of 3 ft or less.

Grounding conductors shall not be run in metal conduit unless the wire is permanently bonded at both ends of the conduit. PVC conduit is preferred.

#### 4.7.2.1 Exterior Grounding Conductors

Unless otherwise stated, exterior grounding conductors shall be solid or stranded, bare copper. Solid conductors are preferred.

Conductors installed below grade or partially below grade shall be #2 AWG solid. Below-grade conductors larger than #2 AWG may be stranded. If below-grade conductors are stranded, tinned copper conductors are recommended.

Unless otherwise stated, exterior conductors installed entirely above grade shall be #6 AWG. Insulated conductors are preferred for above-grade conductors.

Conductors bonded to galvanized steel shall be tinned, bare copper.

#### 4.7.2.2 Interior Grounding Conductors

Interior grounding conductors shall be tinned or untinned stranded copper wire. Interior grounding conductors shall be insulated unless otherwise specified.

## 4.7.2.3 Grounding Conductor Bends

Grounding conductor lengths shall be kept as short as possible with the minimum number of bends. Conductor bends shall exceed an 8-in radius with an included angle of at least 90 degrees. Bends made at connection points shall turn in the direction of earth ground.

## 4.7.3 Grounding Equipment

Where a product is commercially available as a UL-listed device, a UL-listed device shall be used.

#### 4.7.4 Connections

Below-grade connections to the grounding electrode system shall be made by exothermic welding or irreversible high-compression connectors.

All other above-grade connections shall be made using exothermic welding, lugs, compression connectors, clamps, or other approved means. Connectors shall be designed for the size and type of grounding conductor(s), the surface being grounded, and the metals being bonded. An anti-oxidation compound shall be applied to the surfaces of all mechanical connections. Exothermic welding or irreversible high-compression connectors are preferred.

Where lugs are used, two-hole lugs are preferred. Lugs may not be stacked; each lug shall be in direct contact with the surface to which it is being bonded.

The removal of galvanization for the purpose of grounding is strictly prohibited.

When making connections between dissimilar metals, precautions must be taken to prevent deterioration of grounding surfaces or protective surfaces.

## 4.7.5 Grounding of Shelter

## 4.7.5.1 Exterior Ground Ring

An exterior ground ring (EGR) shall be installed around the perimeter of each dedicated communications building or shelter. The EGR shall incorporate one ground rod at each corner of the building. As necessary, additional ground rods shall be added so that the maximum distance between rods is less than the sum of the length of the ground rods. A ground rod shall be installed directly below the transmission line entrance to the building.

#### 4.7.5.2 Exterior Ground Bus Bar

An exterior ground bus bar (EGB) shall be mounted on the exterior of the building below the cable entrance panel. The EGB shall be solid copper at least 2 in wide and 0.25 in thick mounted on 2-in insulators. The length of the EGB and the number of conductor mounting holes are determined by the expected current and future number of conductors to be attached.

The EGB shall be bonded to the grounding electrode system by a #2 AWG wire. A larger size wire or copper straps are preferred.

As an option, the EGB may be eliminated where a cable entrance panel is installed that includes integrated coaxial ground clamps.

#### 4.7.5.3 Cable Entrance Panel

The cable entrance panel shall be bonded to the EGB by a #2 AWG wire.

#### 4.7.6 Interior Grounding System

#### 4.7.6.1 Single-Point Grounding System

Communications buildings, shelters or equipment rooms shall have a single-point grounding system. All equipment and metallic objects shall be connected to the exterior grounding system at a single location.

To facilitate creation of a single-point ground, transmission lines, electric service, telephone circuits, etc. shall enter the communications building or shelter near one another and the master ground bus bar.

#### 4.7.6.2 Master Ground Bus Bar

A master ground bus bar (MGB) shall be installed below the cable entry panel. The MGB shall serve as the single-point ground connection for all internal communications system equipment.

The MGB shall be solid copper at least 2 in wide and 0.25 in thick mounted on 2-in insulators. The length of the MGB and the number of conductor mounting holes are determined by the expected current and future number of conductors to be attached.

The MGB shall be bonded to the EGR by a #2 AWG wire. The grounding conductor shall extend downward from the MGB and exit the building at a 45-degree angle. The grounding conductor shall be run in flexible non-metallic conduit from the point it passes into the wall until in runs below ground.

#### 4.7.6.3 Secondary Ground Bus Bars

Secondary ground bus bars (SGBs) may be installed in the same room or in other rooms as needed to simplify connections to the MGB. Equipment may be bonded to the SGB rather than directly to the MGB. The SGB shall be at least 2 in wide and 0.25 in thick mounted on 2-in insulators. The SGB shall be bonded to the MGB by a #2 AWG wire.

## 4.7.6.4 Grounding of Surge Suppressors

Each coaxial surge suppressor installed at the cable entry point shall be bonded to the MGB by a #6 AWG wire.

As an option, a secondary ground bus bar (SGB) may be installed below transmission lines in order to facilitate grounding of multiple surge suppressors. The SGB shall be bonded to the MGB by a #2 AWG wire.

Some cable entry panels may include an integrated surge-suppressor SGB. This SGB is bonded directly to the EGR through the cable entry panel, so bonding to the MGB is unnecessary.

#### 4.7.6.5 Interior Grounding Ring

An interior grounding ring (IGR, often called a halo ground) shall be installed around the perimeter of the equipment room. The IGR shall be mounted on 2-in insulators approximately 1 ft below the ceiling or 8 ft above floor level, whichever is lower. The IGR shall consist of two #2 AWG wires of approximately equal length. There shall be a gap between the two conductors of at least 4 in at the opposite end of the room from the MGB.

## 4.7.6.6 Connections to the Interior Ground Ring

Items mounted along the perimeter of the equipment room, including the following, shall be bonded to the IGR by a #12 AWG wire:

- Electrical panelboards and transient-voltage surge suppressors (TVSSs)
- Telephone terminal block enclosures and surge suppressors
- Emergency generators (if located indoors)
- Metal battery racks
- Doors
- Door frames
- Ventilation ducts
- Water pipes
- · Electrical conduits
- Any significant metal object within 6 ft of any other grounded object

## 4.7.6.7 Equipment Grounding Bus

An equipment grounding bus (EGB) consists of a conductor bonded to the MGB or SGB and radiating outward to equipment locations. The EGB typically runs within cable tray. The EGB may have multiple taps to branch to multiple rows of equipment racks or cabinets. The EGB conductors shall be #2 AWG wire. EGB conductors shall be routed to minimize the distance from the equipment to the MGB or SGB.

#### 4.7.6.8 Cable Ladders/Trays

Cable trays shall be connected to the MGB by a #2 AWG copper wire. Cable tray sections shall be bonded together by #6 AWG copper wires.

## 4.8 Surge Suppression

All power and communications circuits entering and exiting the communications shelter or room shall be protected by the application of appropriate surge protective devices (SPDs) employing metal-oxide varistors (MOVs) or silicon avalanche diodes (SADs).

#### 4.8.1 Electric Service Panelboard Surge Suppression

A Type 1 transient voltage surge suppressor (TVSS) shall be placed on the source side of service entrance panels, and on the load side of transfer switches or distribution panels. The suppressor shall be installed in parallel via a circuit breaker sized according to the manufacturer's recommendation (typically 60-amp) rated for the interrupting current of the panel. The lead lengths from the protective devices shall be as short as possible. The TVSS enclosure shall be grounded to the IGR with #6 AWG wire. A remote status indicator must be available.

#### 4.8.2 AC Power In-Line Protection

When the above TVSSs are used, no additional TVSSs are required on site. If main/branch panel TVSS is not available, each AC utility power line shall be equipped with a two-way surge protector.

## 4.9 Utilities

#### 4.9.1 Existing Utilities

Location of all existing utilities shall be verified before site work begins. Existing utilities must be protected during site work.

#### 4.9.2 Permanent Electric Service

Permanent electric service must be coordinated and obtained through the local electric utility. Underground service is preferred. As much as possible, building or shelter electric service entrance should be located near coaxial cable and telephone service entrances. The electric service ground shall be bonded to the site grounding system.

#### 4.10 Foundation

Concrete foundation for the shelter shall be designed and installed in accordance with ACI 318, ACI 301 and ACI 302 and other applicable standards of ACI.

#### 4.10.1 **Design**

Foundation designs shall be based on the geotechnical conditions at the site. The foundation engineering design documentation shall be prepared and sealed by a professional engineer.

#### 4.10.2 Installation

Forms shall be used to ensure proper pouring and forming of foundations. Forms shall be true, rigid, and strong enough to carry loads to which they will be subjected. Steel reinforcement, anchor bolts and other embedded items shall be held rigidly in place during pouring and curing of concrete. Concrete shall be vibrated during pours to eliminate air pockets. Care shall be taken to ensure that concrete does not freeze before curing.

#### 4.10.3 Materials

Cement shall meet the requirements of ASTM C150. Aggregates shall meet the requirements of ASTM C33. Reinforcing steel shall meet the requirements for Grade 60 reinforcing steel as defined in ASTM A615. Minimum compressive strength of concrete shall be 3000 psf at 28 days or higher as specified by foundation design documentation.

## 4.10.4 Concrete Testing

During concrete pours, four test cylinders shall be poured in accordance with ASTM C31 for each 25-cubic yd concrete poured. Concrete tests and test reports shall be in accordance with ASTM C39. If tests indicate that concrete strength is not adequate, the concrete shall be removed and replaced.

# Appendix A - Evaluation Criteria

Proposals will be evaluated based on the categories below. Each Proposal may receive up to 100 points, allocated as described below. The Proposal receiving the highest total score will be the recommended Proposal. The final evaluation and recommendation will be made in concert with NRVECRA.

Category	Point Allocation
Organization Experience	20
Project Management Plan	10
Implementation Plan	25
Schedule	10
Pricing	
Goods	15
Services	20
Total Points Possible	100

# **Grounds for Rejection**

A proposal may be rejected for any of the following reasons:

- Failure to provide a complete proposal, based upon the requirements of RFP.
- The proposed design is incomplete.
- The mandatory options are not proposed.
- The PROPOSER'S schedule is unrealistic. A schedule may be deemed unrealistic if *important tasks or milestones are omitted* or if insufficient time is allocated to tasks.
- Pricing is not broken out by major component line items for both goods and services

#### **Final Selection**

NRVECRA reserves the right to waive any informalities or irregularities. NRVECRA may cancel the RFP at any time prior to opening proposals. NRVECRA may reject all Proposals, or any portion thereof, if it is deemed in the best interest of NRVECRA.

New River Valley Emergency Communications Regional Authority
Peturned County allow
Room 213

THIS DEED, made and entered into this 15th day of May , 1984, by and between THE CHESAPEAKE & POTOMAC TELEPHONE COMPANY OF VIRGINIA, a Virginia corporation, party of the first part, and THE BOARD OF SUPERVISORS OF MONTGOMERY COUNTY, VIRGINIA, party of the second part.

#### WITNESSETH:

THAT WHEREAS, the party of the second part desires to purchase the hereinafter described tract of land in order to erect thereon an antenna mast and transmission building for use by the Town of Blacksburg and the Sheriff's Department of Montgomery County for their respective radio equipment; and

WHEREAS, the party of the first part agrees to sell said tract of land to the party of the second part, but only upon the conditions hereinafter stated;

NOW, THEREFORE, WITNESSETH that for and in consideration of the sum of Ten Dollars (\$10.00), cash in hand paid, and other good and valuable consideration, the receipt of all of which is hereby expressly acknowledged, the party of the first part does hereby bargain, sell, grant and convey, subject to such matters as are set out herein, with General Warranty and English Covenants of Title unto the party of the second part the following tract and right-of-way situate in the Price's Fork Magisterial District of Montgomery County, Virginia, and more particularly designated and described as follows, to-wit:

JEBO & ROSENTHAL ATTORNEYS AT LAW BOX 1089 RADFORD, VA. 24141-0088

BEGINNING at a point designated as "ROD FND.," which point is the southeastern corner of the property herein conveyed and which point is on the northern boundary of a 15 foot Foad, as shown on the hereinafter described plat; thence with the northern boundary of said soil road N 71° 18' 17" W 89.30 feet, N 64° 36' 43" W 74.95 feet, and N 57° 56' 32" W 22.01

Sec. 26.

216

feet to a point designated as "ROD SET"; thence N 08° 41' 57" E 217.08 feet to a point designated as "ROD SET"; thence S 81° 18' 03" E 179.94 feet to a point in the western boundary of property owned by Brush Mountain Coal Co., which point is designated as "ROD FND."; thence with the western boundary of property owned by Brush Mountain Coal Co. S 08° 41' 57" W 262.83 feet to the point of BEGINNING, and containing 1.008 acres as shown on that certain plat entitled "Plat Showing 1.008 Acres Surveyed for Louis Barber, Sheriff of Montgomery County, Virginia, Located in Price's Fork Magisterial District, Montgomery County, Virginia," prepared by Anderson & Associates, Inc., designated as Job No. 3788, dated February 28, 1984, and updated March 1, 1984, which plat is attached hereto and expressly made a part hereof;

TOGETHER WITH, as a perpetual easement appurtenant to the hereinabove described tract, the right of ingress and egress over an existing road from the Price Mountain-Christiansburg Road (Virginia State Route No. 657) through lands of Brush Mountain Coal Co. and the party of the first part to the property herein conveyed (the road continuing onto the old well site and known as the Well Site Road).

SAVING AND EXCEPTING, HOWEVER, the mineral rights under the aforesaid property, which mineral rights have been reserved unto Brush Mountain Coal Co. in the deed described immediately below.

AND BEING a part of the same property conveyed to the party of the first part by deed from Brush Mountain Coal Company, a Virginia corporation, dated February 19, 1964, and recorded March 17, 1964, in the Clerk's Office of the Circuit Court of Montgomery County, Virginia, in Deed Book 248, page 449.

This conveyance is made subject to all recorded easements, conditions, restrictions and agreements as they may lawfully apply to the real estate hereby conveyed or any part thereof, and specifically to that certain agreement dated March 16, 1984, among the Town of Blacksburg, a Municipal corporation, Board of Supervisors of Montgomery County, Virginia, Louis E. Barber, Sheriff of Montgomery County, Virginia, and C & P Telephone Company of Virginia, which agreement is on file with the Town of Blacksburg and the Board of Supervisors of Montgomery County.

JEBO &
ROSENTHAL
ATTORNEYS AT LAW
BOX 1099
RADFORD, VA. 24141-0089

The party of the first part presently has located adjacent to the property herein conveyed a tower for the transmission of

B-3

microwaves. As further consideration for the conveyance herein, and as a condition of the sale, the intended use of the site by the party of the second part for a radio microwave tower shall not at any time, either now or in the future, obstruct, impair or interfere with The Chesapeake & Potomac Telephone Company's microwave transmission tower routes as shown on the attached plat, which plat is expressly made a part hereof, nor shall the intended use of the site by the party of the second part for a radio microwave tower cause any objectionable interference to or from any other equipment located in or on The Chesapeake & Potomac Telephone Company's microwave transmission tower. These conditions and restrictions upon the property herein conveyed shall run with the land and shall be binding upon the party of the second part, its grantees, successors and assigns.

The hereinabove referred to plat of the 1.008 acres hereby conveyed locates the proposed communication tower to be constructed by the party of the second part. The party of the first part does hereby approve of the proposed location of the communication tower as shown on said plat. The party of the first part reserves the right to approve any change in the location of the proposed communication tower, and further reserves the right to approve the construction of any additional communication towers that may be placed upon the property by the party of the second part, its grantees, successors or assigns, the purpose of such reservation being to assure the party of the first part that there will not be, at any time, any interference with the microwave transmission tower routes of the party of the first part.

JEBO &
ROSENTHAL
ATTORNEYS AT LAW
BOX 1089
NADSORD, VA. 24141-0089

WITNESS the signatures and seals of the parties hereto.

THE CHESAPEAKE & POTOMAC TELEPHONE COMPANY OF VIRGINIA

By: Wath I Dare

Vice President - Operations Title

-3-

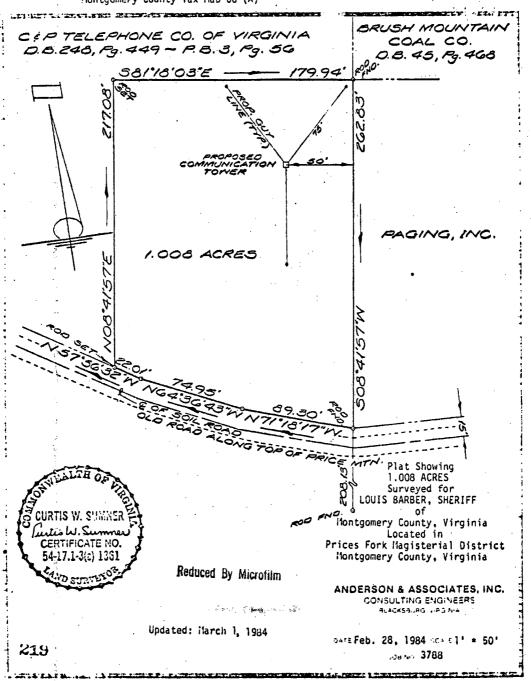
217

BOARD OF SUPERVISORS OF MONTGOMERY Betty 8./Thomas County Administrator The foregoing Deed was acknowledged before me this 15 Th , 1984, by W. S. Daron Vice President-Operations , of The Chesapeake & Potomac Telephone Company of Virginia, a Virginia corporation. commission expires: / STATE OF VIRGINIA City/County of Montgomery, to-wit: The foregoing Deed was acknowledged before me this  $24^{T_{k}}$ \_, 1984, by Betty S. Thomas, County Administrator of Montgomery County, Virginia. My commission expires: VIRGINIA: In the Office of the Circuit Court of Montgomery County 24 thay of May 19 84 The foregoing instrument was this day presented in said Office and with certificate annexed admitted to record at 4:25 o'clock P.M. The taxes imposed by Sec. 58-54.1 of the Code of Virginia in the amount of have been paid to this office.

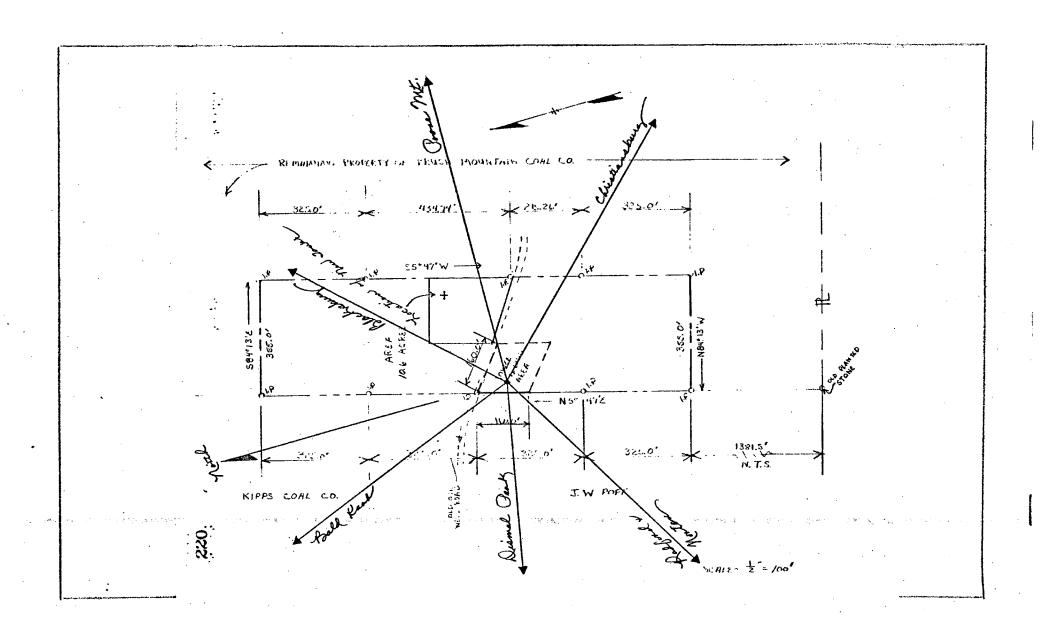
JEBO &
ROSENTHAL
ATTORNEYS AT LAW
BOX 1089
RADFORD, VA. 24141-004

# Reduced By Microfilm

References: DB 248 P. 499; PB 3 P. 56; Anderson & Associates, Inc. JN 1795, JN 2163 and JN 1184 ilontgomery County Tax Map 66 (A)



Reduced By Microtilm



#### CERTIFICATE OF TITLE

FOR

#### COUNTY OF MONTGOMERY, COMMONWEALTH OF VIRGINIA

April 30 , 1984

At the request of the County of Montgomery, Commonwealth of Virginia, and pursuant to Section 15.1-285 of the Code of Virginia, 1950, as amended, I have examined the title to the following parcel hereinafter described for the purpose of the purchase of said property with all appurtenances thereunto belonging, by the County of Montgomery from the Chesapeake & Potomac Telephone Company of Virginia, a Virginia corporation.

This certain tract or parcel of land situated, lying and being in the County of Montgomery, Price's Fork Magisterial District and more particularly described as follows:

BEGINNING at a point designated as "ROD FND.," which point is the southeastern corner of the property herein conveyed and which point is on the northern boundary of a 15 foot soil road, as shown on the hereinafter described plat; thence with the northern boundary of said soil road N 71° 18' 17" W 89.30 feet, N 64° 36' 43" W74.95 feet, and N 57° 56' 32" W 22.01 feet to a point designated as "ROD SET"; thence N 08° 41' 57" E 217.08 feet to a point designated as "ROD SET"; thence S 81° 18' 03" E 179.94 feet to a point in the western boundary of property owned by Brush Mountain Coal Co., which point is designated as "ROD FND."; thence with the western boundary of property owned by Brush Mountain Coal Co. S 08° 41' 57" W 262.83 feet to the point of BEGINNING, and containing 1.008 acres as shown on that certain plat entitled "Plat Showing 1.008 Acres Surveyed for Louis Barber, Sheriff of Montgomery County, Virginia, Located in Price's Fork Magisterial District, Montgomery County, Virginia," prepared by Anderson & Associates, Inc., designated as Job No. 3788, dated February 28, 1984, and updated March 1, 1984, which plat is attached hereto and expressly made a part hereof;

TOGETHER WITH, as a perpetual easement appurtenant to the hereinabove described tract, the right of ingress and egress over an existing road from the Price Mountain-Christiansburg Road (Virginia State Route No. 657) through lands of Brush Mountain Coal Co. and the party of the first part to the property herein conveyed (the road continuing onto the old well site and known as the Well Site Road).

SAVING AND EXCEPTING, HOWEVER, the mineral rights under the aforesaid property, which mineral rights have been reserved unto Brush Mountain Coal Co. in the deed described immediately below.

AND BEING a part of the same property conveyed to the party of the first part by deed from Brush Mountain Coal Company, a Virginia corporation, dated February 19, 1964, and recorded March 17, 1964, in the Clerk's Office of the Circuit Court of Montgomery County, Virginia, in Deed Book 248, page 449.

222

Insofar as the records of the Clerk's Office of the Circuit Court for Montgomery County, Virginia, are propertly kept and indexed, and subject to any discrepancies that would be disclosed by a present survey of the property, I am of the opinion that the Chesapeake & Potomac Telephone Company of Virginia is the fee simple owner of the property under examination, and can convey a good and marketable title to the real estate described above, subject to the reservation of mineral rights.

Respectfully submitted,

Paul M. Mahoney County Attorney

C-1

# COMMONWEALTH OF VIRGINIA STANDARD BID BOND

KNOW ALL MEN BY THESE PRESENTS:	That
	, the Contractor ("Principal")
whose principal place of business is located at _	
	and
	("Surety") whose address for
delivery of 'Notices' is located at	
are	held and firmly bound unto the Commonwealth
of Virginia,	, the
Owner ("Obligee") in the amount of five percent the payment whereof, Principal and Surety bind administrators, successors and assigns, jointly ar	themselves, their heirs, executors,
WHEREAS, the Principal has submitted a bid for	or

NOW, THEREFORE, the conditions of this obligation are as follows. This Bid Bond shall guarantee that the Principal will not withdraw his bid during the period of thirty (30) days following the opening of bids; that if his bid is accepted, Principal will enter into a formal contract with the Owner in accordance with the Contract Between Owner and Contractor, included as a part of the Invitation for Bids (IFB Documents); that Principal will submit a properly executed and authorized Standard Performance Bond and Standard Labor and Material Payment Bond on the forms included in the IFB documents; and that in the event of the withdrawal of said bid within said period, or failure to enter into said contract and give said bonds within ten (10) days after Principal has received notice of acceptance of his bid, Principal and Surety shall be jointly and severally liable to the Owner for the difference between the amount specified in said bid and such larger amount for which the Owner may contract with another party to perform the work covered by said bid, up to the amount of the bid guarantee. This amount represents the damage to the Owner of account of the default of the bidder in any particular thereof.

~		4	
Signed and sealed this	· · · · · · · · · · · · · · · · · · ·		
			(SEAL
	D	Contractor /	•
Witness	l itle: _		(27.7)
	-	C	
		Sure	
			ney-in-Fact
		Typed Name:	
AFFIDAVIT AN	D ACKNOWI	LEDGEMENT OF ATTO	RNEY-IN-FACT
COMMONWEALTH OF VIRO			
(or, alternatively, Commonweal			)
CITY (or) COUNTY (Strike on			
I, the undersigned notary public name is signed to the foregoing			
Bid Amount and which names t		• `	
			y appeared before me today in
the above jurisdiction and made			appeared before the today in
·		·	
corporation which is the Surety			
Surety's behalf the foregoing be		•	
above Surety, he acknowledged	_		
has further certified that her/his			•
been revoked.	, virginia ili De	, есц воок	rage, and has not
		1 C	20
Given under my hand this		day of	, 20
Notary Registration No			
		Notary Publi My commi	ssion expires:

<sup>&</sup>lt;sup>1</sup> Pursuant to §47.1-15(3) of the Code of Virginia, as amended, the notarial certificate wording must be contained on the same page as the signature being notarized.