



**Solicitation Information**  
28 Feb 05

RFP # B04834

TITLE: High Definition Television Production Facility

Submission Deadline: 24 March 05 @ 2:00 PM (Eastern Time)

**PRE-BID/ PROPOSAL CONFERENCE: Yes    Date: 9 March 05    Time: 1:00 PM**  
**Mandatory : YES**  
**Location: R.I. Public Broadcasting Services, 50 Park Lane, Providence, RI**

Questions concerning this solicitation may also be e-mailed to the Division of Purchases at [questions@purchasing.state.ri.us](mailto:questions@purchasing.state.ri.us) no later than **7 March 05 at 12:00 Noon (ET)**. Questions should be submitted in a *Microsoft Word attachment*. Please reference the RFP / LOI # on all correspondence. Questions received, if any, will be posted on the Internet as an addendum to this solicitation. It is the responsibility of all interested parties to download this information.

**SURETY REQUIRED: Yes (\$25,000)**  
**BOND REQUIRED: Yes**

**Jerome D. Moynihan, C.P.M., CPPO**  
**Administrator of Purchasing Systems**

**Vendors must register on-line at the State Purchasing Website at**  
**[www.purchasing.ri.gov](http://www.purchasing.ri.gov).**

**NOTE TO VENDORS:**

*Offers received without the entire completed three-page RIVP Generated Bidder Certification Form attached may result in disqualification.*

**THIS PAGE IS NOT A BIDDER CERTIFICATION FORM**

## TABLE OF CONTENTS

<b>1. Introduction .....</b>	<b>3</b>
1.1 Other bidding information .....	3
1.2 How WSBE will Judge the Proposals .....	5
<b>2. Project Overview .....</b>	<b>6</b>
<b>3. System Overview .....</b>	<b>6</b>
<b>4. Major Infrastructure Systems.....</b>	<b>7</b>
4.1 Video Switcher .....	7
4.2 Graphics System .....	8
4.3 Camera Systems.....	8
4.4 Audio Production .....	9
4.5 Video Monitoring .....	10
4.6 DVD .....	10
4.7 Microphones.....	10
4.8 Lighting .....	10
4.9 Test Equipment.....	11
<b>5. Other Infrastructure Systems.....</b>	<b>11</b>
5.1 Technical Ground.....	11
5.2 Racks .....	11
5.3 Wiring.....	11
5.4 Equipment.....	12
<b>6. Miscellaneous .....</b>	<b>13</b>
6.1 Workforce.....	13
6.2 Workday.....	13
<b>7. Project Documentation.....</b>	<b>13</b>
7.1 Functional / Block Diagrams.....	13
7.2 Rack and Console Layouts.....	13
7.3 Equipment Instruction Manuals .....	13
7.4 Computerized cable list .....	14
7.5 Custom Equipment and Software Documentation .....	14
<b>8. Summary of Project Activities and Deliverables (required of Systems Integrator by WSBE) .....</b>	<b>14</b>
8.1 Specifications .....	15
8.2 Change Orders and Notices .....	15
8.3 Warranty .....	15
8.4 Documentation .....	15
8.5 Operator and Maintenance Training .....	15

# 1. Introduction

WSBE hereby invites qualified systems integration companies to submit proposals for the detail design, construction, installation, debugging, testing, training, and technical project management of a project to convert WSBE studio facilities to high definition television technology. The Project is to be located at the present site of the WSBE Headquarters in Providence, RI. The company selected to be the Project's "Systems Integrator" shall purchase, supply, and install the needed equipment as agreed and approved by WSBE. The Systems Integrator will be charged with full responsibility for the technical Project. The scope of the project is cameras, switching, audio, graphics and associated monitoring. This RFP is intended to convey the overall sense of the systems desired by WSBE. The companies bidding on this RFP are encouraged to offer solutions based on their experience and knowledge. WSBE is looking for creativity from the Bidders in their responses to this RFP. This solicitation, and subsequent award, is governed by the State's General Conditions of Purchase, available at [www.purchasing.ri.gov](http://www.purchasing.ri.gov).

## 1.1 Other bidding information

Each bidding company is required to submit its proposal in hard copy form, including all the material listed by the due date to the following:

Responses (**an original plus four copies**) should be mailed or hand-delivered in a sealed envelope marked "RFP # B04834 – High Definition Television Production Facility" to:

<b>By Courier:</b>	<b>By Mail:</b>
<i>RI Dept. of Administration</i> Division of Purchases, 2 <sup>nd</sup> floor One Capitol Hill Providence, RI 02908-5855	<i>R.I. Department of Administration</i> Division of Purchases P.O. Box 6528 Providence, RI 02940-6528

NOTE: Proposals received after the above-referenced due date and time will not be considered. Proposals misdirected to other State locations or which are otherwise not presented in the Division of Purchases by the scheduled due date and time will be determined to be late and will not be considered. Proposals faxed or emailed to the Division of Purchases will not be considered. The official time clock is located in the reception area of the Division of Purchases

Questions may be submitted by e-mail, in accordance with the terms expressed on page one of this solicitation.

A **mandatory** bidder's conference will be held at WSBE, in accordance with the terms expressed on page one of this solicitation.

Proposals must include the following:

1. A completed and signed R.I.V.I.P. generated bidder certification cover form (downloaded from the R.I. Division of Purchases Internet home page at: <http://www.purchasing.ri.gov>);
2. A signed Cost Proposal reflecting the fee proposed for this scope of service, and a listing of equipment and costs proposed.
3. A completed and signed W-9 taxpayer certification form. *The form is downloadable at [www.purchasing.state.ri.us](http://www.purchasing.state.ri.us).*
4. A Technical Proposal describing the background, qualification, and experience with and for similar programs, as well as the work plan or approach proposed for this requirement.
5. One copy of the offeror's complete response to this solicitation is requested in an electronic format, CDROM or disk, in Microsoft Office or PDF file formats
6. Bid surety, in the amount of \$25,000

All respondents must comply with all federal, state, and local laws and regulations governing this scope of work.

INSTRUCTIONS AND NOTIFICATIONS TO OFFERORS:

- Potential offerors are advised to review all sections of this Request carefully, and to follow instructions completely, as failure to make a complete submission as described elsewhere herein may result in rejection of the proposal.
- Alternative approaches and/or methodologies to accomplish the desired or intended results of this procurement are solicited. However, proposals which depart from or materially alter the terms, requirements, or scope of work defined by this Request will be rejected as being non-responsive.
- All costs associated with developing or submitting a proposal in response to this Request, or to provide oral or written clarification of its content, shall be borne by the offeror. The State assumes no responsibility for these costs.
- Proposals are considered to be irrevocable for a period of not less than sixty (60) days following the opening date, and may not be withdrawn, except with the express written permission of the State Purchasing Agent.

- All pricing submitted will be considered to be firm and fixed unless otherwise indicated herein.
- Proposals misdirected to other State locations or which are otherwise not present in the Division of Purchases at the time of opening for any cause will be determined to be late and will not be considered. The “Official” time clock is in the reception area of the Division of Purchases.
- In accordance with Title 7, Chapter 1.1 of the General Laws of Rhode Island, no foreign corporation shall have the right to transact business in the state until it shall have procured a Certificate of Authority to do so from the Rhode Island Secretary of State (401-222-3040). This will be a requirement only of the successful bidder (s).
- Offerors are advised that all materials submitted to the State of Rhode Island for consideration in response to this Request for Proposals will be considered to be public records, as defined in Title 38 Chapter 2 of the Rhode Island General Laws, without exception, and will be released for inspection immediately upon request, once an award has been made.
- It is intended that an award pursuant to this Request will be made to a prime contractor, who will assume responsibility for all aspects of the work. Joint venture and cooperative proposals will not be considered, but subcontracts are permitted, provided that their use is clearly indicated in the offeror's proposal, and the subcontractor(s) proposed to be used are identified in the proposal.
- The State of Rhode Island has a goal of ten per cent (10%) participation by MBE's in all State procurements. For further information, visit the web site [www.rimbe.org](http://www.rimbe.org). To speak with an M.B.E. Officer, call (401) 222-6253.
- Interested parties are instructed to peruse the Division of Purchases web site on a regular basis, as additional information relating to this solicitation may be released in the form of an addendum to this RFP / LOI

### **1.2 How State will Judge the Proposals**

- a) understanding of WSBE system requirements (0-10 points)
- b) proven ability to perform work(0-10 points)
- c) proposal costs including cost saving options (0-40points)\*
- d) design flexibility (0-20 points)
- e) future expansion opportunities (0-20 points)

\*[calculated as (lowest responsive cost proposal divided by this cost proposal) X \_\_\_ points]

Notwithstanding the above, the State reserves the right to award on the basis of cost alone and to act in its best interest.

Proposals found to be technically or substantially non-responsive at any point in the evaluation process will be rejected and not considered further.

The State may, at its sole option, elect to require presentation(s) by offerors clearly in consideration for award.

The Technical Review Committee will present written findings, including the results of all evaluations, to the State's Architect/Engineer and Consultant Services Selection Committee, which may recommend up to three finalists to the Director of the Department of Administration, who will make the final selection for this requirement. *When a final decision has been made, a notice will be posted on the internet.*

## **2. Project Overview**

WSBE is located in Providence, Rhode Island, is operated by Rhode Island Public Telecommunications Authority. The Rhode Island Public Telecommunications Authority is a State of Rhode Island Agency. WSBE operates public television stations, NTSC Channel 36 and DT Channel 21.

WSBE will continue to originate programming locally as well as broadcast over-the-satellite delivered DTV signals from PBS in Alexandria, VA. The PBS programming is generally four channels of standard definition television. PBS also regularly schedules HDTV programs over the same satellite.

While the FCC DTV mandate affects only the actual transmission signal, the ongoing emergence of digital equipment as the new defacto standard and the age of WSBE's present baseband transmission and production equipment indicates that an upgrade of that equipment is justified as well.

A goal of this project is to design and install the production facility with minimum disruption to WSBE's production. WSBE may also choose to install some of its new equipment on a temporary basis pending final installation by the Systems Integrator.

Finally, it must be noted that WSBE has a limited budget and its facilities must be planned accordingly. Design emphasis must be placed on functionality and economy.

## **3. System Overview**

WSBE plans to produce HDTV and SDTV programs in both 4:3 and 16:9 formats.

The new facilities must interface to the existing composite analog portions of the WSBE facility. The transition from the existing system to the new systems may be accomplished in steps.

The Systems Integrator shall have responsibility for all phases of the Project including the detail design, construction, installation, debugging, testing, training, and technical Project management. The Systems Integrator shall meet with WSBE as required for the purpose of reviewing and obtaining approval of system defining drawings and plans and reviewing progress.

## **4. Major Infrastructure Systems**

The preliminary requirements for the major subsystems that shall be addressed in this project have been outlined in the previous overviews. In general the scope of this project is to provide a state of the art HDTV and SDTV production capability and associated support and monitoring equipment for WSBE.

### **4.1 Video Switcher**

A studio production switcher shall be provided. This switcher shall support multiple serial digital video formats that include 480i (SD 525), 720p and 1080i high definition standards that are applied to any input. The switcher shall be provided with an expandable chassis capable of supporting up to 96 inputs and 48 outputs and shall be populated with 16 input and 16 output channels. Input and output expansion shall be accomplished by inserting plug-in boards to support additional inputs or outputs. The switcher shall be provided with redundant or N+1 power supplies.

The switcher shall be provided with two mix effects banks that will each have built-in, multi-definition 3D dual channel digital video effects generators capable of size manipulation, positioning and warp effects. Other effects shall include a positional light source, defocus, mosaic, posterization, colorization, strobes and more. The DVE shall be capable of recording and storing complex sequences of keystrokes for keyframe animations for later recall. Traditional 2D effects such as split frames, center inserts of circles, squares or other shapes with size and positioning control shall also be supplied. Each effect bank shall be provided with chroma key capability. Each effect bank shall be provided with two keyers each and shall have matte fill, key invert, pattern mask, box mask, garbage mask, self-key, linear key and pre-set pattern keys. Each keyer shall provide selectable borders. A full-featured down-stream keyer shall also be provided.

The switcher shall be provided with a three channel video still store. This still store shall have at least 256mb of RAM and shall be backed by a system hard drive to provide additional storage.

The switcher will be provided with complete mnemonic display and operational tally indication of sources called via a Utah router. All input sources on the program and M/E busses shall have mnemonic displays associated with the input. There shall also be mnemonic display of Macro names.

The switcher shall be provided with the ability to control WSBE's Omneon server.

The switcher shall be provided with complete operating and maintenance manuals. Operational training with a maintenance overview shall be provided in the WSBE facility.

**OPTIONS:** Provide pricing of clip store and play capability. This playback may be standard definition only, include HD capability if available.

Additionally, provide input expansion capability to a total of 32 inputs. If the switcher timing reference is supplied through the input card, please provide that card as a redundant option.

## **4.2 Graphics System**

Vendor is to provide a HD upgrade and integration to the production switcher of an existing PixelPower character generator.

## **4.3 Camera Systems**

WSBE-TV seeks bids on high definition studio cameras. This package shall be supplied with complete interface to the existing WSBE-TV production facility including intercom and tally connections. Vendor is to provide camera support equipment as specified.

WSBE-TV seeks two "hard" cameras and one "soft" camera provided with a small lens that could be used for EFP, but supplied with a studio "sled" for additional studio features. The cameras shall have 2/3 inch FIT CCD imaging sensors. The cameras shall provide both format requirements of HDTV (1080i/720p) and SDTV (480i/480p) but cameras shall be native to 1080i. The CCD output should be able to be switched between interlace and progressive scan modes. The signal shall be converted in the CCU to provide the different HD output formats.

The cameras shall be provided with a "master set-up unit" that provides operational adjustments to the camera system such as, but not limited to, iris, black level, gamma level, shutter speed, camera gain, detail, white and black balance control. If a monitoring switcher for camera preview is not part of this unit, vendor shall provide access to the routing switcher for quality control monitoring. The camera control units shall provide a HD output, a separate SD output and analog outputs for video monitoring. Cameras shall also be provided with joy stick style controllers if the vendor locates video shading away from the CCU's and master set-up unit.

The hard cameras shall be provided with a zoom lens from the same manufacturer who provided the optical block for the camera. The lens shall have a servo zoom control, a built in X2 extender and shall have a minimum of 22X zoom ratio. The lens provided for the soft camera shall also be a 22x zoom ratio, but shall be supplied with servo zoom and focus.

Cameras shall be provided with 16x9, minimum 7 inch monochrome viewfinders. Viewfinders shall have adjustable hoods to minimize glare. The cameras shall have switch able safe area, center of box and adjustable shot framing displays on the viewfinder.

The vendor shall convert the existing Mohawk TRI 8000 triax with mating connectors matching the supplied equipment. If the existing triax cannot be used with the proposed cameras, the vendor shall include 100m of triaxial cable with connectors per camera.

Cameras shall be provided with double ear operator headsets to provide director cue and program audio. Another double ear headset shall be provided at the camera control position.

#### **4.3.1 Camera Support**

The vendor shall provide overhaul and repair service to bring two existing Vinton Mk 5 pan and tilt heads and two Vinton Tern pedestals back to factory specifications. For estimate purposes, assume gas cylinders and seals are operational, anticipated service includes re-torque hardware, check tires and steering belts. Head service to include checking of bearing, replacement of friction leathers, replacement of locking bars and studs. While these are being serviced, vendor shall supply WSBE with temporary loaner camera support. Proposed cameras shall be capable of accepting the existing mounting wedge plate or new mounting shall be provided.

One complete camera support system compatible with the existing studio camera supports and capable of the weight requirement shall be provided with the soft camera and sled system.

Vendor shall also supply a camera jib capable of supporting the small format HD camera without the "sled". The jib shall be provided to place the camera lens a minimum of 12 feet above the floor. This jib shall also have full remote pan and tilt functionality and be capable of achieving a 70 degree downward angle for camera shots. This jib shall be provided with control extensions for zoom and focus control of the lens provided with the camera and shall require only one operator to control all functions. It shall be complete with any necessary stand, dolly, counter-weights, monitor stand and boom extensions.

#### **4.4 Audio Production**

WSBE-TV seeks to provide basic Dolby 5.1 production capabilities to our production facility. While most heavy audio mixing will be completed in our post-production suites, we seek an entry level audio console that will provide multiple AES/EBU pairs to drive a Dolby E encoder which shall be provided.

Unit provided shall have twelve (12) microphone inputs with phantom power, 12 additional line level inputs. There shall be redundant power supplies.

Vendor is to include input and output modules as necessary for the designed audio system.

A Sony DMX-R100 or equivalent is specified.

Vendor is also to supply audio monitoring for production and audio control rooms and may utilize existing equipment in the design, supplanting with new equipment as necessary.

The vendor is to recommend and provide, using current technology, a means of recording and transferring audio files between control rooms, edit suites and broadcast servers.

#### **4.5 Video Monitoring**

Vendor shall supply two broadcast quality monitors for line and preview functions in the control room. These monitors shall be capable of either SDI or HD display, depending on the format of the production. There shall also be waveform monitoring provided for SD and HD signals at the production console. Black and white monitors shall be provided where necessary.

There shall be a separate video quality control monitoring position. This area, to be determined by WSBE and a system integrator, shall have the camera master set-up units and/or joystick control located there. A standards quality video monitor capable of displaying both SD and HD signals, waveform and vector displays, a switcher (independent or part of the router) for camera video matching and waveform preview and studio output monitoring with audio shall be part of the QC area.

#### **4.6 DVD**

The vendor is to recommend authoring software and DVD burner with pricing.

#### **4.7 Microphones**

Vendor shall supply 6 Sony ECM 55B and 4 Sony ECM 66B microphones with windscreens and tie clips.

#### **4.8 Lighting**

Vendor shall provide six (6) florescent studio lighting fixtures. Units shall have four (4) biax style florescent lamps, CRI>95, Tungsten color temperature. Units shall be capable of being dimmed by existing conventional studio dimming circuits. Units shall be provided with C-clamp, yoke, safety cable, filter frames, medium egg crate diffusers and two-pin and ground 20 amp connectors wired to conventional code. Six (6) spare lamps shall also be provided.

De Sisti De Lux 4 fixtures are specified.

Vendor shall also prove four (4) ellipsoidal instruments. Each instrument shall have shutters to control or crop any pattern display and shall be provided with a 26 degrees focusable lens. Units shall be supplied with black finish, two-pin and ground 20 amp connector, 400CC C-clamp, 400SC safety cable, 400PH-A size A pattern holder, 400PH-B size B pattern holder, 400PH-G glass pattern holder and HPL575 globes.

ETC Source Four 26° Ellipsoidal lighting fixtures are specified.

#### **4.9 Test Equipment**

Vendor is requested to recommend and supply sufficient test equipment to maintain the system.

### **5. Other Infrastructure Systems**

#### **5.1 Technical Ground**

The Systems Integrator shall connect all new equipment to the existing "star" WSBE technical isolated ground system.

#### **5.2 Racks**

WSBE currently uses racks with custom wood and laminate trim and desires that all new racks be of the same look and have matching wood and laminate trim fixtures. WSBE has space for some of the new equipment in the existing rack infrastructure. The Systems Integrator however shall provide a sufficient number of additional racks to house the additional equipment.

##### **5.2.1 Rack Layout**

The Systems Integrator will be required to lay out racks in a logical fashion taking into account ergonomics, cooling, appearance, and consistency. The goal shall be to leave an average of 25% free or expansion space in each rack.

#### **5.3 Wiring**

##### **5.3.1 Electrical Codes**

All cables, wire, and conduit must meet all national and local electrical codes.

##### **5.3.2 Cable Routing**

Signal cables and ac conduit are to be run in planned, defined paths (no "cross country - shortest route paths" unless signal timing and equalization considerations dictate). It is expected that all cabling will be under the raised computer floor with an 1 inch slab to computer floor top. There are 10 inch by 10 inch deep floor trenches outside technical areas.

### **5.3.3 Cable types**

The Systems Integrator shall be required to specify the brand and type of audio and video cables (differentiate between digital and analog if applicable) to be used. The Systems Integrator shall also be required to identify the brand and type of time code, computer LAN, and miscellaneous control wire. For the purpose of responding to this RFP a brief synopsis of cable types is required.

### **5.3.4 Cable Identification**

All cables must be identified in English with protected labels at both ends. Bidders must briefly describe the labeling and color-coding scheme they use. The cable labels shall be printed on Hellermann Tyton thermal transfer labels utilizing a TT210SM or TT310SM type printer. The label program shall be similar to Hellermann Tyton Tag Print such that it fully support the label type.

### **5.3.5 Connectors and Hardware**

All digital video connectors, jackfields, and other hardware must have a 75 ohm characteristic impedance.

## **5.4 Equipment**

### **5.4.1 Established companies, WSBE right of refusal**

The Systems Integrator shall purchase equipment only from established companies. WSBE reserves the right to reject equipment choices based on its experience and the reputation of the equipment and/or manufacturer.

### **5.4.2 Spare parts and support**

Bidders shall choose equipment that will be supported for a minimum of 3 years, guaranteed by the manufacturer or the Bidder.

### **5.4.3 Meet all electrical codes**

The equipment chosen shall meet all applicable national and local electrical codes.

### **5.4.4 Custom Equipment and Software**

The Systems Integrator will make every effort to avoid custom equipment and software using standard items wherever possible.

Where custom equipment and/or software is absolutely required the Systems Integrator shall be required to prepare a full specification for WSBE's review and comment.

### **5.4.5 Spares**

The Systems Integrator shall be required to recommend spare equipment, modules, and components. For the purpose of responding to this RFP each Bidder is required to simply recommend an overall percentage of the overall equipment cost and a strategy they shall follow in developing the spares package.

## **6. Miscellaneous**

### **6.1 Workforce**

The composition of the total workforce to be supplied by the Systems Integrator is subject to the approval of WSBE. Subject to operational requirements which take precedence, two WSBE technicians may be assigned to participate in the on-site installation, testing, and debugging of the system. However, responsibility for the completion and proper operation of the system rests with the Systems Integrator.

WSBE maintains a smoke, alcohol and drug free environment. The Systems Integrator work force must comply with WSBE policies and abide by the workplace rules. WSBE will ask to have any offending person to be removed from the premises and the project.

### **6.2 Workday**

When on site at WSBE, the Systems Integrator shall schedule its workforce for Mondays to Fridays between 7:00AM and 6:00PM. In the event that evening or weekend work is necessary in WSBE, the Systems Integrator shall coordinate their needs with Mr. Dexter Merry or his designee.

## **7. Project Documentation**

This section refers to the minimum deliverable documentation during and at the conclusion of the actual Project. Paper hard copy and PC Compatible software usable with Autodesk AutoCAD Lt 2000 for Windows and Microsoft 2000 Access, Excel, PowerPoint, 'Project' and Word are required.

### **7.1 Functional / Block Diagrams**

- a) Audio, video, time code, computer networks, data, control, etc.
- b) Overall macro view, entire facility on one sheet showing major system interconnection for each system listed in a) above.
- c) Detailed by individual areas for each system listed in a) above.

### **7.2 Rack and Console Layouts**

- a) Sight line evaluations if applicable
- b) Equipment Layout with all major elements identified
- c) Module locations within a rack frame may be in separate details
- d) Jackfield layout and wiring
- e) Wiring Diagrams

### **7.3 Equipment Instruction Manuals**

The Systems Integrator shall turn over to WSBE all equipment instruction manuals with a formal list. It is recognized that some items of equipment currently come standard with an operator's manual without maintenance information. Wherever available, the Systems Integrator shall propose as an option any maintenance manuals including block diagrams, schematics, board layouts, parts lists, theory of operation, installation and setup instructions.

#### **7.4 Computerized cable list**

A listing of all cables in Project organized in a systematic fashion matching actual cables. Each cable listing shall contain:

- a) Cable Number matching that found on the cable labels.
- b) Cable manufacturer, type and color.
- c) Connector Type
- d) Pin-out detail number.
- e) Cable Function
- f) From and To points
- g) Cable length (and a note if it is timed or a critical length)

#### **7.5 Custom Equipment and Software Documentation**

While the use of custom equipment is strongly discouraged, it is recognized that its use may be unavoidable. In the event custom equipment is used, then documentation with front and rear panel layout; schematic and wiring diagrams, and text is required. The text shall include all the normal sections found in the instruction book of quality equipment including theory of operation, installation instructions, operating instructions, and a parts list. Custom software must be accompanied by installation and operating instructions.

The Systems Integrator must provide software support for a minimum of five years from the date of acceptance. The software support must include any modifications needed to the operating system and drivers to keep the equipment compatible with the overall system.

### **8. Summary of Project Activities and Deliverables (required of Systems Integrator by WSBE)**

The list below includes five lines (a-e) relating to documentation at various stages in the Project. Section 7, Project Documentation, lists the types of drawings required.

- a) Detailed Design
- b) Construction Drawings
- c) Installation Drawings
- d) As built Drawings
- e) Equipment list to be procured and billed to WSBE
- f) Equipment ordering, expediting, storage until needed
- g) Computerized asset record of all equipment including rack or console location at WSBE, manufacturer, model number, serial number, and cost of all items valued over \$1,000.
- h) Construction of consoles and racks
- i) Installation of systems
- j) Debugging of all systems
- k) Testing and adjusting systems to meet operating requirements
- l) System training
- m) Project management
- n) Coordination and updating WSBE management, meetings at least every month.

### **8.1 Specifications**

The Systems Integrator must meet agreed system specifications set by themselves and WSBE. Manufacturer and FCC Specifications, and industry organization standards and practices will be used as guidelines.

### **8.2 Change Orders and Notices**

All Change Orders and legal notices will be required in writing.

### **8.3 Warranty**

The Systems Integrator shall warrant the systems and supplied equipment for one year following WSBE's acceptance of the facility. The Systems Integrator shall also warrant its workmanship on construction and installation work for one year after WSBE's final acceptance of facility. These warranties shall be at no cost to WSBE.

### **8.4 Documentation**

The Systems Integrator shall supply all drawings on AutoCAD Lt 2000 readable files and on two hard copies. The Systems Integrator shall also provide two hard copies of the cable pulls and the cable software database. The Systems Integrator shall turn over to WSBE all equipment instruction manuals with a formal list. The Systems Integrator shall create, and turn over to WSBE, a computerized asset record of all equipment including rack or console location, manufacturer, model number, serial number, and cost of all equipment assets valued over \$1,000.00.

### **8.5 Operator and Maintenance Training**

The Systems Integrator shall provide overall system operational and maintenance training at WSBE. They shall also arrange for equipment manufacturers to provide training on their equipment at WSBE. WSBE will pay reasonable travel expenses for the manufacturers. WSBE will not pay for any costs involved in debugging a vendor's hardware or software.

### **8.6 Insurance and Bonding Requirements**

8.6.1 The successful Bidder shall provide evidence of and keep in force, at its sole cost and expense, the following coverage's, naming WSBE as an additional insured:

8.6.2 It is understood and agreed that the following shall be additional insureds: WSBE, its elected and appointed officials, employees, volunteers, boards, commissions, and authorities, including board members, employees, and volunteers.

8.6.3 This coverage shall be primary to the additional insured, and not contributing with any other insurance or similar protection available to the additional insured, whether said other available coverage be primary, contributing or excess.

8.6.4 Commercial General Liability Insurance including coverage for General Aggregate Limit of at least \$5,000,000, Products/Completed Operations Aggregate Limit of at least \$2,000,000, Personal Injury and Each Occurrence Limit in the amount of at Least \$1,000,000.

8.6.5 Comprehensive Automobile Liability Insurance, including hired and nonowned vehicles, if any, in the amount of at least \$2,000,000 covering personal injury, bodily injury and property damage.

8.6.6 Workers' Compensation Insurance with statutory limits and employer's liability coverage of at least \$1,000,000.

8.6.7 Certificates of insurance policies shall be filed with WSBE immediately prior to issuance of a purchase order. The Certificates of insurance shall contain a provision that coverage afforded under the policies will not be canceled, modified or allowed to expire until at least 30 days prior written notice has been given to WSBE.

**Bid security.** – A Bidder surety, in the amount of \$25,000, must accompany each bid. Security shall be a bond provided by a surety company authorized to do business in this state, or the equivalent in cash, in a form satisfactory to the state.

**The successful vendor will also be required to furnish both a performance bond and a labor and payment bond in the amount of \$1,000,000 price”.**